



Received: June 08, 2024

Revised: June 23, 2024

Accepted: August 15, 2024

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DESCRIPTIVE OF QUANTITATIVE DATA | SUPPLEMENTARY

The Influence of Social Media Marketing on the Decision to Use Grab Online Transportation Services among Students

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Abstract: This study aims to determine the effect of social media marketing on decisions to use Grab online transportation services for students of Universitas HKBP Nommensen Medan. The type of research used in this research is a quantitative approach. The population in this study were all students of Universitas HKBP Nommensen Medan who had used grab online transportation services whose population size was unknown. Based on the Lemeshow formula, the sample used in this study was 96 respondents who were taken randomly to represent each faculty. The results showed that Social Media Marketing significantly influences service usage decisions, this is shown in the partial test results (t test) t-value 8.632 > t-table 0.2006 and a significance value of 0.000 < 0.05. The Coefficient of Determination (R²) is obtained at 0.442, meaning that the Service Usage Decision variable can be explained by the Social Media Marketing variable by 44.2% and the remaining 55.8% is influenced by other variables outside of this research variable, such as Service Quality, Price, and so on. The conclusion in this study is that Social Media Marketing has a positive and significant effect on the Decision to Use Grab Online Transportation Services for Students of Universitas HKBP Nommensen Medan.

Keywords: Social Media Marketing, Service Usage Decision.

1. INTRODUCTION

Currently, information technology is developing very rapidly. Currently, more and more information is being developed regarding technology and science in general, especially information and information related to technology, such as the Internet. The Internet is a global computer network that connects all computers around the world. Fast internet technology is available to individuals through various media, playing an important role in communication and information exchange. The internet is growing rapidly to reach a very large scale and can be accessed by the entire community. The increasing use of Internet technology has led to an increase in the use of social media, and as the need for the Internet increases, people increasingly perceive it as a means to fulfill their needs, the most common of which is online shopping, and purchasing activity. Mass media has an interactive nature that allows people to communicate not only through written words, but also with real people. With the increasingly rapid development of technology, online media is increasingly useful as a means of selling goods or services. It is often called electronic commerce or electronic commerce and is defined as the buying, selling and trading of goods and services through electronic systems such as computers, television and radio. E-commerce also includes marketing aspects. According to Purwaningsih on the website <https://www.kajianpustaka.com> E-Commerce is a sale and purchase agreement between the buyer and the seller electronically which usually uses a personal computer network. In this case, consumers use web browsers to place orders and provide information with forms of payment such as credit cards, digital cash or electronic checks.

E-marketing is a combination of modern communication technology and traditional marketing principles that are usually applied by marketers. E-marketing can also be defined as electronic marketing via the Internet. This marketing system can reach very wide areas, even the whole world, and can also be carried out 24 hours a day. Companies can market their products just by connecting to the Internet. One of the trends in the world of marketing communications is social media. Social media is a means of communication on the Internet that allows users to present themselves, communicate, collaborate and interact with other users and create virtual social relationships. Social media makes it easier for people to share and access information. Social media is considered a new marketing tool to promote products or services. Marketing is considered one of the most important



areas of business. The increasing number of social media users can be an opportunity for business people to use it to offer products or services and strengthen the products they promote and attract consumers to fulfill their needs and desires. Social media is used as a marketing tool in implementing marketing strategies.

2. LITERATURE REVIEW

Marketing is one of the main activities carried out by a company in order to achieve its goals, namely maintaining survival, developing and making a profit. According to Kotler and Keller in the book Kartika Yuliantari, et al (2019) the definition of marketing is "meeting needs in a profitable way". Meanwhile, according to the American Marketing Association, quoted by Kotler and Keller in Kartika Yuliantari, et al (2019:), marketing is an organizational function and a series of processes for creating, communicating and providing value to customers and for managing customer relationships in a profitable way. organization and its stakeholders. Kotler and Armstrong in Kartika Yuliantari, et al (2019:1) they conclude that marketing is a social and managerial process that enables individuals and groups to obtain what they need and want by creating, offering and freely exchanging valuable products and services with other parties. other. W. J Stanton in Mursid (2019:26) believes that marketing includes the entire system related to business activities, which aims to plan, determine prices, promote and distribute goods or services that will satisfy buyers' needs, both actual and anticipated. potential. Based on these definitions, it can be concluded that marketing has a broader meaning than sales, marketing includes the company's business by identifying consumer needs that need to be satisfied, determining appropriate product prices, determining how to promote and sell the product.

3. RESEARCH DESIGN AND METHOD

3.1. Population and Sample

According to Sugiyono (2016: 115) states that population is a generalized area consisting of objects or subjects that have certain qualities and characteristics determined by researchers to be studied and then conclusions drawn. The population in this study were active undergraduate students at Universitas HKBP Nommensen, Medan in 2022/2023 who had used Grab online transportation services. Sugiyono (2016:116) states that the sample is part of the number and characteristics of the population. In this research, the sampling technique used was purposive sampling with the snowball sampling method. Snowball sampling is a technique for determining a sample that is initially small, then this sample is asked to choose its friends to be used as samples and so on, so that the number of samples increases. Sampling was based on several criteria relevant to this research. These criteria are Status as an active undergraduate student at Universitas HKBP Nommensen, Medan. Have you ever used Grab's online transportation service?. Because the population of Universitas HKBP Nommensen students in Medan who have used online grab transportation is unknown, the sampling technique for determining the number of samples uses the Lemeshow formula. According to Riyanto and Hermawan in Akka Latifah Jusdienar, et al (2024 :133) said that sample calculations using the Lemeshow formula approach can be used when the population size is not known with certainty. that is:

$$n = \frac{Z^2 \times p (1 - p)}{d^2}$$

$$n = \frac{1,96^2 \times 0,5 (1 - 0,5)}{0,10^2} = 96,04$$

Information:

n = Number of Samples

Z = Standard Value = 1.96

p = Maximum estimate =50% = 0.5

d = Alpha (0.10) or sampling error = 10%



So the minimum sample required for this research is 96 respondents. This research uses the formula from lemeshow because the target population is very large and numbers can change.

4. RESULT AND DISCUSSION

4.1. Validity test

If $r_{hitung} \geq r_{tabel}$ (5% significant level), it can be said that the questionnaire items are valid. If $r_{hitung} < r_{tabel}$ (significant level 5%), then it can be said that the questionnaire item is invalid. In this study the number of samples was 96 respondents, which means r_{tabel} at $\alpha = 0.05$ with degree $df = n-2 = 96-2 = 94$, the results of the significance level of the two-way test are obtained at $r_{tabel} 0,2006$.

Table 1. Social Media Marketing Validity Test (X)

Social Media Marketing					
Statement Items	Error Rate	r Table	Sig	r Count	Information
X1	0.05	0.2006	0.001	0.793	Valid
X2	0.05	0.2006	0.001	0.821	Valid
X3	0.05	0.2006	0.001	0.606	Valid
X4	0,05	0,2006	0,001	0,593	Valid
X5	0,05	0,2006	0,001	0,571	Valid
X6	0,05	0,2006	0,001	0,580	Valid
X7	0,05	0,2006	0,001	0,601	Valid
X8	0,05	0,2006	0,001	0,765	Valid
X9	0.05	0.2006	0.001	0.672	Valid
X10	0.05	0.2006	0.001	0.816	Valid

Source: Results of processing and using the SPSS program version 25, 2024

Based on Table 1, it shows that all statements of the Social Media Marketing (X) variable have a value r_{hitung} greater than the value r_{tabel} of $r_{tabel} 0.2006$ with a significance of less than 0.05. Based on this, it can be concluded that the 8 (eight) statements on the Social media marketing (X) variable are declared valid and are suitable for measuring research variables.

Table 2. Test the Validity of Decisions to Use Services (Y)

Service Use Decisions					
Statement Items	Error Rate	r Table	Sig	r Count	Information
Y1	0.05	0.2006	0.001	0,816	Valid
Y2	0,05	0,2006	0,001	0,854	Valid
Y3	0,05	0,2006	0,001	0,836	Valid
Y4	0,05	0,2006	0,001	0,826	Valid
Y5	0,05	0,2006	0,001	0,791	Valid
Y6	0,05	0,2006	0,001	0,766	Valid
Y7	0.05	0.2006	0.001	0.8	Valid
Y8	0.05	0.2006	0.001	0.805	Valid
Y9	0.05	0.2006	0.001	0.826	Valid
Y10	0.05	0.2006	0.001	0.82	Valid

Source: Results of processing and using the SPSS version 26 program

Based on Table 2, it shows that all statements of the Service Use Decision (Y) variable have a value r_{hitung} greater than the value r_{tabel} of $r_{tabel} 0.2006$ with a significance of less than 0.05. Based on this, it can be concluded that the 10 (ten) statement items in the Service Use Decision (Y) variable are declared valid and are suitable for measuring research variables.

4.2. Reliability Test

Reliability is a measuring tool for measuring a questionnaire which is an indicator of the variables. A questionnaire is said to be reliable if a person's answer to a statement is consistent or stable over time.

Table 3. Social Media Marketing Reliability Test (X)

Reliability Statistics	
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Cronbach's Alpha	N of Items
,872	10

Source: Results of data processing using the SPSS program version 25, (2024)

Based on Table 3, which shows the results of the reliability test where the 8 Social media marketing (X) variable statement items with a resulting Cronboach Alpha value of 0.872, it can be concluded that the Social media marketing (X) variable statement items are declared Reliable or accepted because the Cronboach Alpha value is $0,872 > 0.70$.

Table 4. Test the Reliability of Decisions to Use Services (Y)

Reliability Statistics	
Cronbach's Alpha	N of Items
,843	10

Source: Results of data processing using the SPSS program version 25 , (2024)

Based on Table 4, which shows the results of the reliability test where the 10 statement items for the variable Decision to Use Services (Y) with a Cronboach Alpha value of 0.843, it can be concluded that the item statement for the variable Decision to Use Services (Y) is declared Reliable or accepted because the Cronboach Alpha value is $0.843 > 0.70$.

4.3. Classic assumption test

The normality test aims to determine whether in the regression model used, the related variables, independent variables or both have a normal distribution or not by using statistical analysis and graphic analysis. The statistical tests used in this research are the Kolmogorov Smirnov test, which is to find out whether the Kolmogorov-Smirnov test is and the P-plot graph is to find out whether this test has a normal distribution or not.

Table 5. Kolmogorov-Smirnov Normality Test

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residuals
N		96
Normal Parameters ^{a, b}	Mean	.0000000
	Std. Deviation	3.41269714
Most Extreme Differences	Absolute	.037
	Positive	.031
	Negative	-.037
Test Statistic		.037
Asymp. Sig. (2-tailed)		.200 ^{c, d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: Results of data processing using the SPSS program version 25, (2024)

Based on Table 5. shows the Asymp value. Sig. (2-tailed) or the resulting significant value is 0.200. This value meets the conditions for stating data normality, namely the Asymp value. Sig must be greater than 0.05. So it can be concluded that the data above is a normal contribution because $0.200 > 0.05$.

4.4. Regression Analysis

regression analysis aims to determine the influence of Social Media Marketing (X) on Service Use Decisions (Y) among Universitas HKBP Nommensen Students in Medan. The simple regression analysis statistical calculations used in this research were using the SPSS Version 25 program . The results of simple regression analysis can be seen in the following table 6:

Table 6. Simple Regression Analysis Results

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20,619	2,529		8,153	,000
	Social Media Marketing	,552	,064	,665	8,632	,000

a. Dependent Variable: Decision to Use Services

Source: Results of data processing using the SPSS version 25 program, (2024)

From the table in column B, the constant values and simple regression coefficient values for the independent variables are listed. Based on this value, a simple regression value can be determined expressed in the following equation:

$$Y = 20.619 + 0.552X$$

From this equation, the results of the simple regression equation mean that:

1. The constant is 20.619 if the social media marketing variable is assumed to be constant, then the decision to use the service will increase by 20.619.
2. The regression coefficient value for the social media marketing variable (X) in the regression equation shows a positive value of 0.552, which means that if the social media marketing variable increases by 1 unit then the decision to use services will increase by 0.552 .
3. From the results of testing the regression coefficients, it is concluded that social media marketing influences the decision to use services.

4.5. Partial Test (t Test)

Partial Test (t Test) is used to test how each independent variable individually influences the dependent variable. This test can be done by comparing $t_{\text{calculated}}$ with t_{tabel} or by looking at the significance column for each $t_{\text{calculated}}$. To determine the size t_{tabel} , use the formula $df = n-2$ with a significance level of 0.05. The partial test (t test) used is $df = n-2 = 94$ with a value t_{tabel} of 0.2006.

Table 7. Social Media Marketing Significance Test Results (X)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20,619	2,529		8,153	,000
	Social Media Marketing	,552	,064	,665	8,632	,000

a. Dependent Variable: Decision to Use Services

Source: Results of data processing using the SPSS program version 25, (2024)

Based on the results of the partial test in Table 7. above, it can be concluded that: The value of $t_{\text{calculated}}$ the Social Media Marketing variable (X) is 8.632, where this value is greater than t_{tabel} 0.2006 and the significance value of the Social Media Marketing variable is $0.000 < 0.05$. So it can be concluded that Social Media Marketing has a positive and significant effect on Service Use Decisions.

4.6. Determinant Coefficient (R²)

The coefficient of determination test is carried out to determine the variation or how much influence the independent (free) variable, namely Social Media Marketing (X), has on the dependent (related) variable, namely the Decision to Use Services together. The coefficient of determination value between the independent variables provides almost all the information needed to predict the dependent variable. However, if the R² value is getting smaller, it means that the ability of the independent variables to explain the dependent variable is quite limited.

Table 8. Determinant Coefficient Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.665 ^a	.442	.436	3,431
a. Predictors: (Constant), Social Media Marketing				
b. Dependent Variable: Decision to Use Services				

Source: Results of data processing using the SPSS version 26 program, (2024)

Based on the results of data processing in table 8 in Above, it can be seen that the R value is 0.665, meaning that this coefficient value shows that the relationship between Social Media Marketing and Service Use Decisions is quite close because the closer the R value is , the better the model is used. The Adjusted R Square value or determinant coefficient value is 0.4 42 shows that the Social Media Marketing variable (X) can explain the Service Use Decision variable (Y) by 4 4.2 % while the remaining 5 5.8 % is influenced by other variables outside this research variable, such as product quality, price, brand of a product, and so forth.

5. CONCLUSIONS

Based on results the above research has been done regarding the Influence of Social Media Marketing on the Decision to Use Grab Online Transportation Services among HKBP Nommensen Medan University Students who have submitted with a simple linear regression analysis model then it can be withdrawn conclusion as following: Based on the results of data processing from SPSS 26 in the Test . The value of t_{hitung} the Social Media Marketing variable (X) is 8.935, where this value is greater than t_{tabel} 0.2006 and the significance value of the Social Media Marketing variable is $0.001 < 0.05$. So H_0 is rejected and H_1 is accepted, which means that Social Media Marketing has a positive and significant effect on Service Use Decisions. Based on results processing data from SPSS 26 in the Coefficient Test Determinant It can be concluded that there is a close relationship between the Social Media Marketing variables and Service Use Decisions, as reflected in the coefficient value Determinant (R^2) is high, namely 0.665. The taller R value, increasingly strong connection between second This variable shows that Social Media Marketing has a significant influence on Service Use Decisions. In addition, the Adjusted R Square value of 0.442 indicates that around 44.2% of Variations in Service Use Decisions can be explained by Social Media Marketing variables. Although This variable makes a significant contribution, still there is around 55.8% of the variation in Service Use Decisions is influenced by other outside factors variable research, like quality product, price , and brand . From the results in this research, it can be concluded that the Social Media Marketing variable has a positive influence to Service Use Decision variable. This research is in line with a study The previous one also found it connection strong between these factors with the same variable. First, in Mega Ayu Kusumawati's (2020) research entitled The Influence of Product Price , Social Media Marketing, and Word of Mouth on Repurchase Intention Wardah Cosmetics (Consumer case study cosmetics wardah in the city of Yogyakarta), results This research shows the influence of product price , social media marketing, and word of mouth on repurchase interest Wardah Cosmetics (Consumer case study cosmetics wardah in the city of Yogyakarta). Second , in Lubiana Mileva 's (2018) research entitled "The influence of social media marketing on decisions purchasing (online survey of undergraduate students Major Knowledge Administration Business Class 2014/2015 Faculty Knowledge Brawijaya University administration bought it Sturbuck using line) indicates that the existence and effective management of created content , share content , interaction (connecting), and development community (community building) in context marketing via social media own positive impact to decision purchase consumers , specifically in this case , undergraduate students Major Knowledge Administration Businesses at Brawijaya University that use Line and buy Starbucks products . Third , research conducted by Fasihatul Muslihah (2018) entitled "The Influence of Instagram Social Media Marketing on Purchasing Decisions Fashion Products from an Islamic View (Case study of FEBI UIN Raden Intan Lampung students class 2014-2016)" shows that social media marketing , especially via Instagram, has a significant influence on decision purchase fashion products , though Thus , the Islamic perspective emphasizes importance ensure that consumption in line with values and principles in accordance with confidence individual . Conclusions of results third This research shows that Social Media Marketing has role important in influencing interests and decisions purchase consumer. From the results of the research conducted, it can be concluded that to improve

Grab services, the company needs to focus on analyzing customer needs, implementing advanced technology, and effective employee training. With these steps, it is hoped that Grab can continue to compete and provide the best service to its loyal users. By implementing appropriate marketing strategies that are relevant to social media usage trends, Grab has the potential to increase presence and interaction on these platforms. By understanding user needs, providing engaging content, and learning from the best practices of other companies, Grab can strengthen its brand awareness, expand market reach, and increase customer loyalty. It is hoped that further research will be able to develop this research with other variables and expand the scope of research, so that it can be useful for the development of science, especially in the field of marketing.

References

- Afina, Alya and Tri Widarmanti (2022). "The Influence of Instagram Social Media Marketing on Repurchase Decisions for Scarlett Whitening Products", *Journal of Economics - Engineering*, Vol 1 No 9, pp. 640-652.
- Alma, Buchari, (2018). *Marketing Management & Services Marketing*, Revised Edition, Alfabeta, Bandung.
- Daeng, Christian RN, Joula Rogahang, Olivia Walangitan, (2023). "The Influence of Price on the Decision to Use the Maxim Bike Online Transportation Service among Fisipol Unsrat Students", *Productivity*, Vol 4 No 5, page 611.
- Jusdienar, Akka Latifah, et al, (2024). *Textbook of Economic Statistics*: Sonpedia Publishing Indonesia, Jambi.
- Kristiawan, Theophilus Alpha, and Keni Keni (2020). "The Influence of Packaging, Social Media Marketing and Electronic Word of Mouth on Local Brand Purchase Decisions", *DeReMa (Development of Research Management)*, Vol 15 No 2, pp. 244–256.
- Manap, Abdul H, (2016). *Marketing Management Revolution*, First Edition, Mitra Wacana Media, Jakarta.
- Mursid, M, (2019). *Marketing Management*, Third Edition, Bumi Akasara, Jakarta.
- Nur, Desy S and Ade Octavia (2022). "The Influence of Electronic Word of Mouth on Purchasing Decisions with Consumer Trust as Mediation at the Shopee Marketplace in Jambi City", *Journal of Applied Management and Finance (Mankeu)*, Vol 11 No 02, pp. 387-399
- Permadi, Amarningto Wahyu, (2020). "Social Media Marketing Analysis in Building Brand Awareness (Case Study: PT. Minna Padi Asset Management)", *e-Proceeding of Management*, Vol.7, No.2, pp. 4306-4307.
- Sari, Novita, Muhammad Saputra, Jamaluddin Husein, (2017). "The Influence of Electronic Word of Mouth on Purchasing Decisions at the Bukalapak.com Online Store", *Magister Management Journal*, Vol 3 No 1, pp. 100-101.
- Sugiyono, (2016). *Research Methodology*, Second Edition, Alfabeta, Bandung.
- Syahrul, Muhammad., and Nurul Aisyah, (2020). "User Perceptions of Grab Online Transportation Services Judging from Service Quality", *Journal of Economic Education and Entrepreneurship Studies*, Vol 1 No 2, pp. 88-100.
- Taan, Hapsawati, Djoko Lesmana Radji, Indriyani, (2021). "Social Media Marketing to Improve Brand Image", *Journal of Management & Business*, Vol 4 No 1, pp. 315-330.
- Wibowo, Lili Adi, Donni Juni Priansa, (2018). *Communication and Marketing Management*, Alfabeta, Bandung.
- Winatadewi, Wulansari, Pramitha Aulia, (2020). "The Influence of Electronic Word of Mouth on Purchasing Decisions in Bukalapak E-Commerce in Bandung", *e-Proceeding of Management*, Vol 7 No 02, p. 3731.
- Yuliantari, Kartika, Nurvi Oktiani, and Kus Daru Widayati, (2019). *Marketing Management*, First Edition, Graha Ilmu, Jakarta.