

Influence of some variables in online marketing strategy on interests of student entrepreneurs

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Abstract. This study aims to find out some of the variables of Online Marketing that influence the interest in entrepreneurship of students of the Faculty of Computer Science and Information Technology Mulawarman University batch 2018. The variables are Email Marketing Marketing (X1), Social Media Marketing (X2) and Marketing with advertising networks (X3). This study used a sample of 83 students using the Slovin formula. The respondents were students who had taken Technopreneurship courses. The results of the research show that Email Marketing Marketing (X1), Marketing through Social Media (X2) and Marketing with advertising networks (X3) have a significant effect on the dependent variable (Y), namely student interest in entrepreneurship, this can be seen based on the F test on testing hypothesis where the value of F count is $5.392 > F$ Table 2.711, with significance 0.001 smaller than 0.05. Based on the t test, the value of t count for each variable obtained by the dominant variable is X2 (Marketing through social media) with the largest value of t count is 3.054 and the smallest significant level is 0.005. This shows that with the increasing number of social media can be a means for students to do small-scale business, foster their entrepreneurial spirit without difficulty finding a place of entrepreneurship and also without ignoring the lectures they are currently undergoing.

1. Introduction

At present the ways or strategies to market products are increasingly developing and a lot of variety. This happens along with the development of science and information technology. Marketing practitioners or more accurately called entrepreneurs not only market their products using conventional methods, but have increasingly developed using modern methods or strategies that make it easier for consumers to get the product they want. Some marketing strategies as below have been recognized for their reliability by utilizing technology in selling products more modern [1-2]. This strategy is nothing but a way to attract the interest of potential customers in determining purchasing decisions for a product that can have a positive impact on these consumers. Online marketing is a marketing strategy that a lot of people choose as a way to sell their products. This is because of the many conveniences experienced by business people in selling their products, among others is the increasingly active community in social media activities through Facebook, Instagram, line, twitter,

whatsapp and others so that it is easy to see the products offered by business people through social media [3-4].

Interesting online marketing strategies for many people who intend to become entrepreneurs are not spared also students in the Faculty of Computer Science and Information Technology (CSIT) Mulawarman University especially the class of 2018. Even though they are still pursuing education at undergraduate level 1 (S1), the entrepreneurial spirit and enthusiasm are growing strong in these students, because according to them it is not difficult at this time to do business since the development of information technology. Businesses do not currently have to have business premises in the form of land and buildings, complicated licensing documents, do not need a large capital, enough to be sold or marketed online can already be seen by consumers until a purchasing decision by a consumer is all done online. The development of information technology today that it causes students to choose to do business through online marketing to earn income so that they can be more independent while in college [4-5]. Online marketing strategies can be done in many ways and in this study there are three variables chosen namely through Business Marketing with Email Marketing (X1), Marketing Through Social Media (X2) and Marketing Through Advertising Networks (X3) [6-10].

2. Research method

The study was conducted at FKTI Mulawarman University in early 2019. The population in this study were students of FKTI mulawarman university 2018, where in this semester they take Entrepreneurship courses so it needs to be explored to what extent the entrepreneurial spirit that grows in their hearts by utilizing the field of IT that they field knowledge at this time. type of research is quantitative descriptive research that is to determine the effect of several variables of online marketing strategies on the entrepreneurial interest of CSIT Mulawarman University 2018 students. The population of this research is the students of CSIT Mulawarman University 2018 who are enrolled in the faculty of approximately 500. The number of samples of this study used the Slovin formula method. By taking into account data on the number of students as many as 500 people and the level of error (e) in determining respondents is 10%. Respondents needed to fill out questionnaires were 83 people [11].

The sampling method used in this study is the random sampling method. Random sampling is a sampling method that is done by selecting samples randomly by researchers. Based on the problems that have been formulated and the proposed hypothesis, the variables in this study consist of the independent variables Business Marketing with Email Marketing (X1), Marketing through Social Media (X2) and Marketing through Advertising Networks (X3) and 1 dependent variable, namely entrepreneurial interest in CSIT Mulawarman University class of 2018 (Y). The tools used in this study are questionnaires in the form of question questions and choice questions that are distributed to students, cameras, computers, calculators, SPSS software version 21.0 that is used for data processing the results of questionnaire answers given to respondents.

2.1. Validity test

Validity test is a test used to show the extent to which the measuring instrument used in measuring what is measured [10],[12],[13]. Validity test is used to measure valid, or whether a questionnaire is valid or not. A questionnaire is said to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. Validity indicator of entrepreneurial interest in CSIT Mulawaraman University Students.

Table 1. Validity indicators of entrepreneurial interest (Y).

Indicator	Factor Loading	Communalities	Information
Y1.1	0.887	0.590	Valid
Y1.2	0.651	0.652	Valid

Based on Table 1, all items of questions for student entrepreneurial interest (Y) show the number of communalities and factor loading which is > 0.5 , so it can be maintained for further analysis in this study.

Table 2. Validity of business marketing with email marketing (X1).

Indicator	Factor Loading	Communalities	Information
X1.1	0.877	0.781	Valid
X1.2	0.621	0.581	Valid

Based on Table 2, all question items for business marketing with email marketing show communalities and factor loading rates > 0.5 , so it can be maintained for further analysis in this study.

Table 3. Validity of marketing through social media (X2).

Indicator	Factor Loading	Communalities	Information
X3.1	0.826	0.724	Valid
X3.2	0.692	0.597	Valid

Based on Table 3, all question items for the social media marketing variable show the numbers of communalities and factor loading which are > 0.5 , so it can be maintained for further analysis in this study.

Table 4. Validity of marketing through advertising networks (X3).

Indicator	Factor Loading	Communalities	Information
X2.1	0.836	0.649	Valid
X2.2	0.661	0.564	Valid

Based on Table 4, all the question items for the marketing through advertising network variable show the number of communalities and factor loading which is > 0.5 , so it can be maintained for further analysis in this study.

From the results of the validity test with the product moment correlation (Pearson Correlation) it appears that all items have a value of the product moment correlation / Pearson correlation (r) between each question to the total score $> r$ Table (where the r Table used is 0.182 and as many samples 83 people) so it can be said that all of these questions are valid. As for the value of the product moment correlation of each variable are as follows:

Business marketing with email marketing (X1). Three questions used to measure the variable Business marketing with email marketing (X1) shows the value of the product moment correlation / Pearson correlation (r) between each question to the total score as in Table 5.

Table 5. Correlation value X1.

Indicator	Correlation	Information
X1.1	0.784	Valid
X1.2	0.545	Valid

Based on Table 5, all question items for variable X1 are valid, because it shows the correlation value $> r$ Table.

Marketing through social media (X2). Three questions used to measure the variable *marketing through social media* (X2) shows the value of the product moment correlation / Pearson correlation (r) between each question to the total score as in Table 6.

Table 6. Correlation value X6.

Indicator	Indicator	Information
X3.1	0.817	Valid
X3.2	0.799	Valid

Based on Table 6, all question items for variable X2 are valid, because they show the correlation value > r Table.

Marketing through advertising networks (X3). Three questions used to measure the variable Marketing through advertising networks (X3) shows the value of the product moment correlation / Pearson correlation (r) between each question to the total score as in Table 7.

Table 7. Correlation value X3.

Indicator	Indicator	Information
X2.1	0.876	Valid
X2.2	0.634	Valid

Based on Table 7, all question items for variable X2 are valid, because they show the correlation value > r Table.

2.2. Reliability Test

Reliability tests are carried out to show the extent to which a measuring device is reliable or reliable. State of the attributes of each variable, among others [14-15], can be identified through internal testing of the consistency of reliability on the questionnaire made using Cronbach's Alpha analysis techniques through computer assistance with SPSS program version 21.0. For the reliability test, Cronbach Alpha coefficient values are obtained for the questions given to respondents, each variable can be seen in Table 8.

Table 8. Reliability test results.

Variable	R-Alpha	Decision
Business Marketing With Email Marketing	0.545	Reliabel
Marketing Through Social Media	0.682	Reliabel
Marketing With Advertising Networks	0.625	Reliabel

As for the Cronbach's Alpha value for the instrument as a whole, it was 0.408 where the value was positive and greater than r Table. So it can be said to be reliable and this shows the existence of consistency.

2.3. Multiple regression model

After conducting various tests with the help of the SPSS program the regression equations are obtained in Table 9.

Table 9. Coefficients^a.

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Collinearity Statistic	
	B	Std. Error	Beta				Tolerance	VIF
1 (Constant)	-2.722	2.329			1.169	.252		
X1	.200	.114	.312		2.758	.020	.157	1.256
X2	.447	.314	.419		3.054	.005	.465	1.493
X3	.379	.145	.399		2.792	.010	.448	1.327

Based on the regression equations obtained can be explained about the coefficient. The value of the constant shows the amount of interest in entrepreneurship at the Faculty of Medicine Unmul 2018 (Y) if X1, X2, X3 are zero (0) then the amount of student entrepreneurial interest will be worth -2.722. This means that if the interests of student entrepreneurship are not supported by these 3 independent variables, students will find it difficult to do business or business because of the limited place and means of entrepreneurship. Regression coefficient (X1) of 0.200 means that if there is a change in the positive direction or an increase in marketing with email marketing, then the Y variable will change positively as well and so on other variables.

3. Results and discussion

From the regression equation model that has been formed obtained overall correlation coefficient (Multiple R) of 0.694 or 69.4%, which means the relationship between X1, X2, X3 as the independent variable with the dependent variable Y is positive and strong enough. While the value of the coefficient of determination (R²) is 0.482. This means that 48.2% of the proportion of diversity in student entrepreneurial interest (Y) can be explained by variables X1, X2 and X3, while the other 48.2% is explained by other variables outside the three independent variables not examined in this study. So, based on the coefficient of determination it can be seen that the three independent variables have a real influence on Y.

Table 10. Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.694a	.482	.392	1.09164	1.572

a. Predictors: (Constant), X5, X4, X2, X3, X1

b. Dependent Variable: Y

Based on the feasibility test (model validity) using the calculated F value of 5.392 > F Table 2.711 with a significance of 0.001 smaller than 0.05, it can be said that the equation model is feasible to use and overall the independent variables have a significant effect on the variables Y.

Table 11. Anova.

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	32.127	5	6.425	5.392	.001b
Residual	34.559	29	1.192		
Total	66.686	34			

a. Dependent Variable: Y

b. Predictors: (Constant), X5, X4, X2, X3, X1

3.1. Testing of the regression coefficient hypothesis (Uji F)

Based on the results of calculations using SPSS program assistance, the value of the F ratio obtained was 5.392 with a significance of 0.000 so it can be concluded that H1 was accepted at a significance level of 0.05. So the hypothesis which states that Marketing with email marketing (X1), Marketing through social media (X2), and Marketing through advertising networks (X3) simultaneously (together) has a significant (significant) effect on students' interest in entrepreneurship so that (Y) can be accepted.

3.2. Partial regression coefficient hypothesis testing (Uji T)

Test the truth of the hypothesis carried out in this study to determine the effect of each independent variable on the dependent variable Y using the t test. Hypothesis testing partially obtained t count for Marketing with email marketing (X1) of 2.758 with a significance level of 0.02 smaller than 0.05 so

that H_a for X_1 can be accepted. Therefore, the hypothesis stating that marketing with email marketing (X_1) influences student entrepreneurial interest (Y) can be accepted.

While t arithmetic for marketing through social media is 3.054 with a significance level of 0.010 less than 0.05 so H_a for marketing through social media can be accepted. Therefore, the hypothesis which states that marketing through social media (X_2) influences the interest in student entrepreneurship (Y) can be accepted. The results of t count for Marketing with advertising networks (X_3) of 2.792 with a significance level of 0.010 less than 0.05 so H_a for Marketing with advertising networks (X_3) can be accepted. Therefore, the hypothesis stating that marketing with advertising networks (X_3) influences the interests of student entrepreneurship (Y) can be accepted.

Based on partial testing, it can be seen that the variable that has a dominant influence on student entrepreneurial interest (Y) is Marketing through social media (X_2). This can be seen based on the regression coefficient, where the regression coefficient for variable X_3 has the highest coefficient value compared to the coefficient values of other variables, the smallest significance value compared to other variables. Therefore, the alternative hypothesis (H_a) which states that Marketing through social media (X_2) is the dominant variable on student entrepreneurial interest (Y) can be accepted, because based on partial hypothesis testing, the dominant variable is X_2 , with t arithmetic 3.054 and the level of significance of 0.005 smaller than 0.05 (Data can be seen in Table 9).

4. Conclusions

- Independent variables Email marketing marketing (X_1), marketing through social media (X_2), marketing with advertising networks (X_3), have a significant (significant) effect on student entrepreneurial interest (Y) is evidenced by the F test (F ratio) obtained is 5.392 with a significance of 0.001.
- While the influence of independent variables on the dependent variable, partially it can be seen from each of the t value, namely Marketing with email marketing (X_1) of 2.758 with a significance level of 0.020 less than 0.05, Marketing through social media (X_2) of 3.054 with a significance level of 0.005 less than 0.05, Marketing with an advertising network (X_3) of 2.792 with a significance level of 0.010 less than 0.05. Among the variables X_1 - X_3 above, the variable Marketing through social media (X_2) predominantly affects student entrepreneurial interest (Y) with a t value of 3.054 and a significant 0.005.

5. Suggestions

- Online marketing is currently becoming a trend for the community as well as for students, they can do business by not setting aside the education that they are taking specifically in CSIT Mulawarman University, so it needs motivation and direction from both lecturers and processors of CSIT Mulawarman University to build and instill souls and the spirit of entrepreneurship in these students.
- Advances in Information Technology makes students become independent people, because of the various facilities to do business that they offer, especially doing business through social media, so it needs teaching and training also for students.
- Further research needs to be done on this study by using other variables.

6. References

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