The Effect of Digital Marketing and Brand Awareness on the Performance of SMEs in Makassar City

Johannes Baptista Halik[1], Maria Yessica Halik[2], Nurlia[3],
Hardiyono[4], Ibriati Kartika Alimuddin[5]
Management Department, Universitas Kristen Indonesia Paulus[1]
Acounting Department, Universitas Kristen Indonesia Paulus[2]
Management Department, Universitas Balikpapan[3]
Management Department, STIE Amkop Makassar[4]
Management Department, Universitas Muslim Maros[5]

{johanneshalik@ukipaulus.ac.id[1]}

Abstract. Small and Medium Enterprises are one of the pillars that support state revenues and a means to support the Indonesian economy towards a better direction. Brand awareness is one of the things that every company dreams of in improving its performance. The company's performance, which is supported by the company's sales of the brands they own, will certainly increase with the brand awareness of consumers of the brands offered by a company. For this reason, the authors feel the need to examine the components that affect the performance of the company, in this case Small and Medium Enterprises as the object. The methods used are: 1) The validity test of each component of Digital Marketing and Brand Awareness, where the valid components are re-tested using; 2) Reliability test, then the reliable components are carried out; 3) Multiple Regression processing test. As the result, it found that Digital Marketing (X1) and Brand Awareness (X2) together have an effect on the performance of SMEs in Makassar City (Y). Therefore, it is necessary to re-examine the components that play an important role in the performance of SMEs, especially in terms of digital marketing that plays a more important role.

Keywords: Digital Marketing; Brand Awareness; SMEs; Makassar City

1 Introduction

The evolution of technology in recent years has spurred the marketing movement towards the era of digitalization. Marketing has reached a point in its evolution where adapting to digital trends is a must. The advent of digital technology has significantly changed human life and added a new dimension to our consumption behavior. Responding to these constant changes in socio-cultural dynamics, these comments define and theorize about digital consumer culture and explain how digital consumer culture facilitates digital acculturation. Human interactions with global and local communities find new fashions with the advent of Web 2.0 technology and the subsequent use of social media (Hajli, 2014). And now, we have entered the Marketing 4.0 era. The convenience and connectedness provided by social media,

ICONEBS 2020, November 04-05, Madiun, Indonesia

DOI 10.4108/eai.4-11-2020.2304613

mobile technology, and other forms of digital technology and applications promote assimilation, integration, or acculturation outside of the user's own community (Yen and Dey, 2019).

Brand awareness is one of the things that every company dreams of in improving its performance. The company's performance, which is supported by the company's sales of the brands they own, will certainly increase with the brand awareness of consumers of the brands offered by a company. For this reason, we need to see to what extent the development of marketing towards the digital era can increase the company's ability to increase brand awareness of the products it offers. Sharifi (2014) suggests that brand awareness has an indirect effect on future purchase intentions. Consequently, these findings reveal a significant impact on purchase intention. This will have an impact on the performance of a business which can be measured from the level of sales of the products and services it produces. Jinfeng and Zhilong (2009) show that store image is the basis for creating value for retailers and brands. The authors emphasize the need for empirical studies that present store image as an antecedent of brand awareness. Using social media platforms, consumers can instantly connect with new products, services and brands easily (Aral, Dellarocas, & Godes, 2013; Aswani, Kar, Ilavarasan, & Dwivedi, 2018; Sawhney & Prandelli, 2000). In this perspective, it is important to investigate whether the use of social media can assist SMEs towards their overall growth. Through the help of social media, SMEs can get feedback from consumers to improve their brands (Massey et al., 2004). Social media is claimed to have created a bridge of connection between SMEs and potential consumers (Culnan, McHugh, & Zubillaga, 2010; Hosseini, Fallon, Weerakkody, & Sivarajah, 2019; Kafai, Fields, & Burke, 2010).

However, the authors found and observed that the development of the marketing world into the digital era, in fact, caused many SMEs in Makassar to go bankrupt. Not all SMEs are able to take advantage of digital means in marketing and increase their Brand Awareness in increasing the performance of these SMEs. For this reason, the authors are interested in researching "The Effect of Digital Marketing and Brand Awareness on SME Performance in Makassar City".

2 Methodology

From the explanation stated above, this research tries to formulate the following problems as follows:

a. Does digital marketing affect the performance of SMEs in Makassar City.
b. Does Brand Awareness affect the Performance of SMEs in Makassar City.
c. Do Digital Marketing and Brand Awareness jointly affect the performance of SMEs in Makassar City.

To measure and calculate the predetermined problem formulations, the authors determine the problem boundaries as follows:

1. This study only takes a limited sample of SMEs in Makassar City, amounting to 100 sample units, so there is no generalization to evaluate SMEs in general in other places.
2. Digital Marketing will be measured based on the dimensions proposed by Eun Young Kim (2011), namely Cost / Transaction, Interactive, Incentive Program, and Site Design.
3. While Brand Awareness is measured based on Aaker's approach in Durianto et al. (2001: 57-61), namely Top of Mind, Brand Recall, Brand Recognition and Unaware of Brand.

In connection with the limited time and funds required, the authors use the convenience sampling technique, which is one type of Non-Probability Sampling technique, which is an

easy, cheap and fast sampling technique (Aaker, Kumar & Day, 1998). Based on the above thinking, the authors propose a research model that looks at the influence of Digital Marketing and Brand Awareness in increasing the performance of SMEs in the city of Makassar. As independent variables, Digital Marketing and Brand Awareness will be measured by each of the four indicators. Meanwhile, the performance of SMEs as the dependent variable will be calculated using four indicators such as those used by Iramani et al., (2018), namely the increase in sales as predicted, the increase in business sales is higher than competitors, the increase in operating profit is in accordance with the estimates, the increase in operating profit is more higher than competitors. The research model prepared based on this framework is as follows:

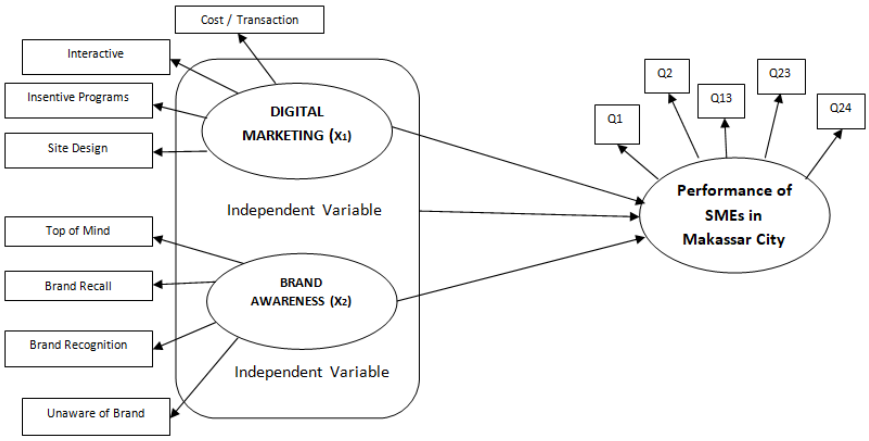

Fig. 1. Research Model

Data collection was carried out by means of a personally administered questionnaire, where the authors visited and asked the owners of SMEs in Makassar city which consisted of 44 questions divided into 13 indicators as described above regarding the operational definition of variables. All items are arranged using a Likert Scale with a scale of 1 to 5. The data were analyzed using factor analysis and multiple regression using the SPSS program. In connection with the model above, the hypothesis of this study is compiled as follows:

With regard to SME Performance:

H_0: Digital Marketing and Brand Awareness have no influence on SME Performance in Makassar City

H_1: Digital Marketing and Brand Awareness have an influence on the Performance of SMEs in Makassar City

With regards to digital marketing:

H_0: Digital Marketing has no influence on the performance of SMEs in Makassar City

H_1: Digital Marketing has an influence on the performance of SMEs in Makassar City

With regard to Brand Awareness:

H_0: Brand Awareness has no influence on SME Performance in Makassar City

H_1: Brand Awareness has an influence on the Performance of SMEs in Makassar City

Validity means how well the research variable is defined by the measurement variable used (Hair et al., 1998). This validity test is done by analyzing the processing results with the factor analysis method. Factor analysis using the Principal Component Analysis method has a provision that a factor has sufficient conditions to be used if it meets the following requirements (Hair et al., 1998): 1) The value of the Measure of Sampling Adequacy (MSA) Test is not below 0.5 , and 2) Matrice's Anti Image Correlation Value is not below 0.5. Ideally, the factor load of a research indicator is greater than 0.70. But this strength applies to sample sizes greater than 100 (a sample size of 100 people for this study led the authors to only use a factor load limitation above 0.50). In the factor analysis attachment, it appears that each component has good adequacy requirements, with the Digital Marketing component having a total variance described as 62.46%, the Brand Awareness component having a total variance explained at 51.43%, and the components for SME Performance having a total variance. which explained 66.06%. Factor analysis was carried out on the variables of Digital Marketing, Brand Awareness and Performance of SMEs in Makassar City. The goal is to see which items can represent these variables and will be used in the next regression process. To get an item that truly represents Digital marketing variables, nine times the analysis is required.

Factor analysis, then performed on the Brand Awareness variable. Unlike the previous one, this analysis needs to be done up to three times to get an item that is truly valid. The last factor analysis was carried out to see whether the items on the performance of SMEs in Makassar City were valid or not. After the analysis was carried out twice, it was found that the four indicators in it were strong enough to form a component of the performance of SMEs in Makassar City.

Before the regression analysis was carried out on the formed components (Cost / Transaction, Interactive, Brand Recall and Brand Recognition) as independent variables and SME performance as dependent variables, the authors felt the need to test the reliability of each of these components. This needs to be done considering that each item is valid (actually measures what is being measured) does not guarantee that the item will also be reliable. Table 1 describes the results of the research tool test using Cronbach Alpha for each variable.

Table 1. Reliability Test Results (Alpha Cronbach)

No	Component	Reliability
1.	Cost/Transaction	0.769
2.	Interactive	0.570
3.	Brand Recall	0.500
4.	Brand Recognition	0.685
5.	SME performance	0.827

This reliability is shown by the value which indicates that the research data will be consistent if the measurement is carried out repeatedly (Malhotra, 1999). Reliability is indicated by the alpha coefficient (Cronbach's Alpha) which varies from 0 to 1 where the requirements for adequacy in identifying reliability are not less than 0.6 (Malhotra, 1999).

Table 1 above shows that there are two components that have alpha coefficients smaller than 0.6 (Interactive and Brand Recall) so that in the next analysis (regression analysis), the author deliberately excludes these two components. As for the other three components, it can be said that the data is consistent enough to be used in further measurements.

3 Result and Discussion

Prior to multiple regression analysis, a correlation test of each component was carried out. This correlation test uses Pearson Correlation with $\alpha = 0.05$. In Table 2, we can see the data on the results of the correlation test carried out. Overall, each variable is correlated with one another. It is shown that the variables X1 and Y have a correlation of 0.917 while the variable X2 is only 0.195. This indicates that the effect of X1 on Y is greater than that of X2 on Y.

Table 2. Correlation Test Results

		var_X1	var_X2	var_Y
var_X1	Pearson Correlation	1	.176(*)	.917(**)
	Sig (1-tailed)		.040	.000
	N	100	100	100
var_X2	Pearson Correlation	.176(*)	1	.195(*)
	Sig (1-tailed)	.040		.026
	N	100	100	100
var_Y	Pearson Correlation	.917(**)	.195(*)	1
	Sig (1-tailed)	.000	.026	
	N	100	100	100

*Correlation is significant at the 0.05 level (1-tailed)
**Correlation is significant at the 0.01 level (1-tailed)

Table 2 shows the results of multiple correlations using the "Stepwise" method by including variables to see how much the prediction level of the performance variable can be achieved for each variable. All independent variables included in the multiple analysis are X1 and X2. Furthermore, multiple regression analysis processing is performed which is shown in tables 3, 4, 5 and 6 with $\alpha = 0.05$.

Table 3. Prices of R and R^2 for Variable X_1

R	R^2	Adjusted R^2	Std.Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.917 (a)	.841	.840	.41414	.841	519.656	1	98	.000

a. Predictors: (Constant), var_X1
b. Dependent Variable: var_Y

Table 4. Prices of R and R^2 for Variable X_2

R	R^2	Adjusted R^2	Std.Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.915 (a)	.038	.028	1.01968	.038	3.888	1	98	.051

a. Predictors: (Constant), var_X2
b. Dependent Variable: var_Y

Table 5. Results of X1 to Y Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std.Error	Beta			Tolerance	VIF
1	(Constant)	.134	.185		.725	.470		
	var_X1	.966	.042	.917	22.796	.000	1.000	1.000

a. Dependent Variable: var Y

Table 6. Results of X_2 to Y Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std.Error	Beta			Tolerance	VIF
1	(Constant)	3.320	.484		6.859	.000		
	var_X2	.216	.110	.195	1.972	.051	1.000	1.000

a. Dependent Variable: var_Y

From this table, it can be seen that the results of multiple regression processing with $\alpha = 0.05$ and a critical t value of $\pm$ 1.66. The R^2 value of multiple regression processing for components X1 and X2 were 0.841 and 0.038. This shows that the total variation on Y which can be explained by the variations in X_1 and X_2 is 84.1% and 3.8%. In addition, there is a Beta value (hereinafter referred to as β) which is taken from the Standardized Coefficients column, as well as a t-test value that determines the significance of a variable X_1 and X_2 on variable Y. Provided that a variable X can be said to have a significant effect on the variable Y if it has a t-test value greater than the t-table, which is 1.66.

In Table 5 and Table 6, it can be seen that the component X_1 is proven to have a significant effect on Y with $\beta = 0.917$; t-test = 22,976 (greater than 1.66) with sig.) .000 less than 0.05. The X_2 component also has an influence on Y with $\beta = 0.195$; t-test = 1.972 (greater than 1.66), and is supported by a sig value. smaller than 0.05 which is equal to 0.026. After analyzing the significance of each component, the regression equation is obtained as follows:

a. $Y = 0.134 + 0.966\ X_1$ (see table 5)
b. $Y = 3.320 + 0.216\ X_2$ (see table 6)
c. $Y = 0.006 + 0.959$ X1 $+ 0.039$ X2 (See table 7)

Table 7. Effect of X_1 and X_2 on Y

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std.Error	Beta			Tolerance	VIF
1	(Constant)	.006	.247		-.024	.981		
	var_X1	.959	.043	.911	22.260	.000	.969	1.032
	var_X2	.039	.045	.035	.860	.392	.969	1.032

a. Dependent Variable : var_Y

Table 8 shows the results of the hypothesis test with $\alpha = 5\%$ ($\pm$ 1.66) using the t-test. Of the three hypotheses that have been compiled in the methodology, it is found that the three proposed hypotheses are significant or acceptable because the significance value is smaller than 0.05.

Table 8. Research Hypothesis Test Results with $\alpha = 0.05$ (1.96)

Hypothesis	Statement	F and t-test	Sig.	Results
H_1	X_1 and X_2 have an influence on Y	259.506	0.000	H_0 rejected
H_1	X_1 has an influence on Y	22.796	0.000	H_0 rejected
H_1	X_2 has an influence on Y	1.972	0.026	H_0 rejected

From the research results, it was found that X_1 (Digital Marketing) and X_2 (Brand Awareness) both had a significant influence on Y (SME Performance in Makassar City). This condition shows that both Digital Marketing and Brand Awareness affect the Performance of SMEs in Makassar City, although I can conclude that the influence of Digital Marketing is more dominant than the influence of Brand Awareness.

Based on the results of this study, the SMEs who are the object of research need to understand and be aware of what components play a role in improving their current performance. For this reason, the proportion of several significant items such as Cost / Transaction in Digital Marketing and Brand Recognition of Brand Awareness must be the main concern of SME owners in improving the performance of their companies.

4 Conclusion

The development of the marketing era, which has now entered the Marketing 4.0 era, is one of the things that entrepreneurs need to pay attention to, including SME owners. Through the help of social media, SMEs can get feedback from consumers to improve their brands (Massey et al., 2004). This research is expected to be able to assist SMEs in improving their business performance. As we can conclude from this research, digital marketing plays a more dominant role in improving the performance of SMEs in Makassar city. By utilizing digital marketing tools, business actors can reduce costs and increase transactions to improve the performance of their business.

By utilizing digital marketing facilities, it will also directly increase the Brand Awareness of consumers towards what is offered by SMEs in Makassar. Brand recognition is a major factor that needs to be paid attention to by SMEs in the city of Makassar. At least, how can SME entrepreneurs make their brand recognizable. This will have a direct impact on improving the performance of their business.

References

[1] Aaker, David A, Kumar, and Day, George S., "Marketing Research", 6th edition, Wiley, New York, 1998.

[2] Aral, S., Dellarocas, C., & Godes, D. "Introduction to the special issue —Social media and business transformation: A framework for research." *Information Systems Research, 24*(1), 3–13. 2013.

[3] Aswani, R., Kar, A. K., Ilavarasan, P. V., & Dwivedi, Y. K." Search engine marketing is not all gold: Insights from Twitter and SEOClerks." *International Journal of Information Management, 38*(1), 107–116. 2018.

[4] Culnan, M. J., McHugh, P. J., & Zubillaga, J. I. "How large US companies can use Twitter and other social media to gain business value." *MIS Quarterly Executive, 9*(4), 243–259. 2010.

[5] Durianto, Darmadi, Sugiharto & Tony, S. “Strategi menaklukkan pasar: melalui Riset Ekuitas dan Perilaku Merek.” Cetakan kedua. Jakarta: PT.Gramedia Pustaka Utama. 2001.
[6] Hair Joseph. P,Jr, Anderson Rolph E., Tatham Ronald L. and Black Willian C. “Multivariate Data Analysis”, 5th edition, Prentice Hall,Inc. New Jersey. 1998
[7] Hajli, M. N. “The role of social support on relationship quality and social commerce.” Technological Forecasting and Social Change, 87, 17–27. 2014.
[8] Hajli, M. Nick. A study of the impact of social media on consumers. *International Journal of Market Research*, 56(3). 2014.
[9] Hosseini, S., Fallon, G., Weerakkody, V., & Sivarajah, U. “Cloud computing utilization and mitigation of informational and marketing barriers of the SMEs from the emerging markets: Evidence from Iran and Turkey.” *International Journal of Information Management, 46*, 54–69. 2019.
[10] Iramani et al. “Financial literacy and business performance improvement of micro, small, medium-sized enterprises in East Java Province, Indonesia”, International Journal of Education Economics Development, 9(4). 2018.
[11] Jinfeng, W., Zhilong, T.. “The impact of selected store image dimensions on retailer equity: evidence from 10 Chinese hypermarkets.” J. Retailing Consum. Serv. 16 (No 6), 486–494. 2009.
[12] Kafai, Y. B., Fields, D. A., & Burke, W. Q., “Entering the clubhouse.” *Journal of Organizational and End User Computing, 22*(2), 21–35. 2010.
[13] Kim, E. Y., & Kim, Y. “Predicting online pur-chase intentions for clothing productsnull.” *Euro-pean Journal of Marketing*, *38*(7), 883–897. 2011.
[14] Malhotra. “Marketing Research: An Applied Orientation”, http://filebox.vt.edu/user/. 1999.
[15] Massey, C., Cameron, A., Cheyne, J., Harris, C., Tweed, D., Wallace, C., et al. “*Speaking up: Stories of growth in small & medium enterprises in New Zealand”*. 2004.
[16] Sawhney, M., & Prandelli, E., “Communities of creation: Managing distributed innovation in turbulent markets.” *California Management Review, 42*(4), 24–54. 2000.
[17] Sharifi, S.S., “Impacts of the trilogy of emotion on future purchase intentions in products of high involvement under the mediating role of brand awareness.” Eur. Bus. Rev. 26 (No 1), 43–63. 2014.
[18] Yen, D., & Dey, B. “Acculturation in the Social Media: myth or reality? Analysing social-media-led integration and polarisation.” *Technological Forecasting and Social Change*, 145, 426–427 ISSN: 0040-1625. 2019.