

Analysis of Product Quality, Social Media Advertising and Brand Image toward Purchase Decision of Motorcycle

Yoan Ariesta

Mercubuana, Magister Management, Jl. Menteng Raya No.29, Jakarta, Indonesia

Abstract: *The purpose of this research is to analyze the effect of Product Quality, Social Media Advertising and Brand Image on the purchase decision of Suzuki motorcycles. The research method used a quantitative approach, in which the population in this research was Suzuki motorcycle users in Greater Jakarta. Sample selection was done by a simple random sampling technique so that 100 respondents were determined. The present research is conducted through surveys that include the use of questionnaires. The analytical method used in this research is structural equation model (SEM) with the Smart PLS 3.0. The results of the research show that the Product Quality, Social Media Advertising and Brand Image have a significant relationship toward purchasing decision of Suzuki motorcycle customers in the Greater Jakarta area.*

Keywords: Product Quality, Social Media Advertising, Brand Image, Purchase Decision, Partial Least Square and Structural Equation Model (SEM)

1. Introduction

The motorcycle and car users in Indonesia are grow significantly every year. The urge of people to get to their destination quickly resulted in motorcycle as the most preferred transportation, especially in Greater Jakarta that

well-known for its traffic jams. Therefore, it is affected to higher demand of motorcycle than car. In addition, it is affected to their fuel expenses which the fuel consumption of motorcycle is more efficient. This is supported by data from the Central Statistics Agency of Indonesia that the number of motorcycle users is higher than cars.

Table 1: The number of motorcycle and car users

Year	2010	2011	2012	2013	2014	2015	2016	2017
Car	8,91,041	9,548,866	10,432,259	11,484,514	12,599,038	13,480,973	14,588,666	15,680,359
Motorbike	61,078,188	68,839,341	76,381,183	84,732,652	92,976,240	98,881,267	105,150,082	111,418,897

Source: Central Statistics Agency of Indonesia (2018)

In order to increase purchase decision, Suzuki management uses social media as tool of advertising such as Twitter, Instagram and Facebook. Most of companies rely on social media advertisements. However, Suzuki followers took a third place which is below than other competitor such as Honda and Yamaha. Therefore, Suzuki management needs to determine an effective social media advertising to grab more social media users.

Table 2: Total percentage of social media follower of Suzuki, Honda, Yamaha

Social Media	Brand	Jan	Feb	Mar	Apr	May	Jun	Jul
Facebook	Suzuki	12%	13%	13%	13%	13%	14%	14%
	Honda	44%	43%	43%	43%	43%	43%	43%
	Yamaha	45%	45%	45%	45%	45%	45%	45%
Instagram	Suzuki	4%	5%	5%	6%	6%	6%	7%
	Honda	46%	48%	49%	50%	51%	51%	53%
	Yamaha	49%	51%	52%	53%	53%	54%	56%
Twitter	Suzuki	4%	4%	4%	4%	4%	4%	4%
	Honda	58%	57%	58%	58%	57%	57%	56%
	Yamaha	39%	39%	39%	39%	39%	39%	38%

Table 3: Total market share of motorcycle sales in Greater Jakarta

Year	Suzuki	Honda	Yamaha	Kawasaki	Vespa	Other	Total
2010	4.1%	48.4%	44.4%	2.0%	0.0%	1.1%	100%
2012	3.6%	51.6%	41.6%	1.6%	0.0%	1.7%	100%
2013	4.1%	60.6%	31.9%	2.2%	0.5%	1.3%	100%
2014	4.8%	59.0%	32.4%	2.4%	0.9%	0.5%	100%
2015	2.9%	62.9%	30.6%	2.4%	0.9%	0.4%	100%
2016	2.2%	63.4%	31.5%	1.6%	0.9%	0.5%	100%
2017	2.1%	66.8%	28.9%	0.9%	0.5%	0.7%	100%

The table above shows that total market share of Suzuki took a third place. Consequently, Suzuki management are working hard to improve their strategies in order to enhance purchase decision their customers.

2. Statement of the Problem

The main problems raised at this research are the following:

- Is there a significant relationship between product quality toward purchase decision of motorcycles?
- Is there a significant relationship between social media advertising toward purchase decision of motorcycles?
- Is there a significant relationship between brand image toward purchase decision of motorcycles?

- Are there simultaneous relationship between product quality, advertising social media and brand image toward purchasing decisions?

3. Hypothesis

The main hypotheses of the study were:

- H01: There is a significant relationship between product quality toward purchase decision of motorcycles.
- H02: There is a significant relationship between social media advertising toward purchase decision of motorcycles.
- H03: There is a significant relationship between brand image toward purchase decision of motorcycles
- H04: There are simultaneous relationship between product quality, advertising social media and brand image toward purchasing decisions

4. Significance of the Study

The data and results of the analysis of this research will be useful for academics and managerial. For academics, the results of this research can be a reference in efforts to develop science, especially the science of marketing management in improving purchasing decisions. For Suzuki management, this study can provide comprehensive information about the continuation of the strategy to increase purchase decision, regarding advertising strategies through social media (twitter, facebook or Instagram), improvement of brand image or innovation in Suzuki motorcycle product quality.

5. Scope and Limitation

Every research has own limitations, hence our limitations during this study are the following:

- The population of this research is focused only to the Suzuki motorcycle customers in Greater Jakarta.
- Total sample of this research is 100 respondents.
- In order to comprehensively measure all of the factors that influence to the purchase decision, the research is based only on determine variables that obtained from previous survey namely product quality, social media advertising and brand image.

6. Conceptual Network

The conceptual framework is based on independent and dependent variables. The independent variables are product quality, social media advertising and brand image and dependent variable is the influence in Purchase decision on clients for motorcycle which relationship is illustrated in the figure below.

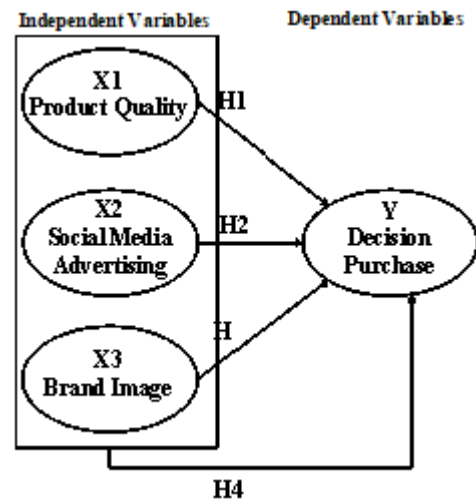


Figure 1: Independent and dependent variables

7. Literature Review

The reason of this literature review is to provide support for the hypothesis. It describes product quality, social media advertising, brand image influence purchase decision of Suzuki motorcycle.

According to Kotler and Armstrong, Product Quality is the characteristics of a product or service that bear on its ability to satisfy stated or implied customer needs [1]. Moreover, product quality is characteristic of the product in the ability to meet the needs that have been determined and latent. The product is defined as everything that can be offered to the market to gain attention, expertise, usefulness, or consumption that satisfies the wants or needs [2]. Kotler and Keller thought that the quality of the product consists of several indicators, namely performance, features, reliability, compliance, durability, service ability, aesthetics, and perceived quality [3].

Social media marketing is the use of social media platforms and websites to promote a product or service [4]. Social media content contains three distinct components. Each component of content shared social media has a fluctuating level of self-promotion (to sell directly products or to promote the brand to crowd), value-adding (engaging the crowd somehow; making a positive response) and interaction (planning to make a genuine two-way discussion with people online) [5]. Social media is a habit of information and a shift in the role of people in the process of reading and disseminating information supported by web technology. Social media empowers people to become information disseminators. Social media is a shift in the dissemination of information from a broadcast (one-to-many) mechanism to a many-to-many mechanism [6]. Social media is able to fulfill the desire of users to interact interactively and participate in what they are interested in. Due to wide range of social media can achieved, nowadays, many companies, both national and international, use social media to communicate the marketing of products and services sold to customers.

Brand image is a set of associations about a brand stored in the minds or memories of consumers. There are several factors that influence the brand image:

- Quality (quality of goods products offered by manufacturers with certain brands).
- Trusted or reliable (opinions or agreements formed by the community about a product consumed).
- Usefulness or benefits (the function of a product that can be used by consumers).
- Prices (which in this case relate to high or low amounts of the amount of money spent by consumers to influence a product, can also affect long-term images).
- The image that is owned by the brand itself, namely in the form of views, agreements and information relating to a brand of a particular product [7].

8. Research Methodology

This research uses a descriptive quantitative approach that is directed towards achieving goals in obtaining a broad explanation, about phenomena that are defined as the object of research. By using a survey method that is held to obtain facts from existing symptoms and look for information in factual terms.

The population of this research is Suzuki motorcycle customers in Greater Jakarta, whose numbers were unknown and could be said to be in the infinite category.

Simple random sampling is a technique for getting samples that are directly carried out on the sampling unit. Then each sampling unit as an isolated population element has the same opportunity to be a sample or to represent its population. This method is done if members of the population are considered homogeneous with the research location in DKI Jakarta. The number of samples taken in this study uses the Lemeshow formula, this is because the population is unknown or infinite and the number of samples is set to 100 respondents.

The data analysis method in this research uses Component or Variance Based Structural Equation Modeling wherein the data processing uses version 3.0 of the Partial Least Square (Smart-PLS) program. PLS (Partial Least Square) is an alternative model of covariance based SEM.

9. Results and Discussion

According to the results of the questionnaires which distributed to 100 respondents of Suzuki motorcycle users in Greater Jakarta, it can be concluded that the respondents in this research were 67% male and 33% female. The dominant age range of respondents at the age of 23-28 years is 64%, age 29-34 years is 25% and age 17 - 22 years is 6% with the last education dominant is bachelor degree at 92%. In addition, the majority of respondents who were married were 61% with the most dominant profession as private employees at 73%. Based on the motorbike maintenance budget, most respondents spent a budget in the range of Rp 1,500,001 - Rp 2,000,000 for 31%, Rp 2,000,001 - Rp 2,500,000 for 29%.

a) Evaluation on the Final Outer Model (Indicator of Reliability and Validity)

- Composite Reliability

Table 4: Composite Reliability Values

Variable	Composite Reliability
Product Quality	0.957
Social Media Advertising	0.936
Brand Image	0.924
Decision Purchase	0.899

The value of composite reliability test is greater than 0.6, which means the value of each instrument is reliable.

- Average Variance Extracted (AVE)

Table 5: AVE Values

Variable	AVE
Product Quality	0.633
Social Media Advertising	0.55
Brand Image	0.525
Decision Purchase	0.642

The value of AVE for each variable is greater than 0.5, which means each latent construct has a valid measurement model.

- Loading Factor

Table 6: Loading Factor Values

Variable	Indicator	Loading Factor	Result
Product Quality	PQ1	0.76	Valid
	PQ2	0.808	Valid
	PQ3	0.792	Valid
	PQ4	0.823	Valid
	PQ5	0.812	Valid
	PQ6	0.807	Valid
	PQ7	0.704	Valid
	PQ8	0.778	Valid
	PQ9	0.815	Valid
	PQ10	0.854	Valid
	PQ11	0.832	Valid
	PQ12	0.742	Valid
	PQ13	0.807	Valid
Social Media Advertising	SMA 1	0.62	Valid
	SMA 2	0.782	Valid
	SMA 3	0.675	Valid
	SMA 4	0.659	Valid
	SMA 5	0.815	Valid
	SMA 6	0.778	Valid
	SMA 7	0.739	Valid
	SMA 8	0.749	Valid
	SMA 9	0.798	Valid
	SMA 10	0.734	Valid
	SMA 11	0.77	Valid
	SMA 12	0.756	Valid
Brand Image	BI 1	0.682	Valid
	BI 2	0.693	Valid
	BI 3	0.763	Valid
	BI 4	0.82	Valid
	BI 5	0.787	Valid
	BI 6	0.734	Valid
	BI 7	0.723	Valid
	BI 8	0.708	Valid
	BI 9	0.672	Valid
	BI 10	0.678	Valid
	BI 11	0.693	Valid
Decision Purchase	DP 1	0.813	Valid
	DP 2	0.806	Valid
	DP 3	0.896	Valid
	DP 4	0.818	Valid
	DP 5	0.656	Valid

The value of loading factor for each indicator is greater than 0.5 so that it can be concluded that 41 indicators in this research is valid.

• Discriminant Validity

Table 7: Discriminant Validity Value

Indicator	Product Quality	Social Media Advertising	Brand Image	Decision Purchase
PQ1	0.76	0.526	0.571	0.55
PQ2	0.808	0.493	0.431	0.509
PQ3	0.792	0.446	0.477	0.532
PQ4	0.823	0.539	0.514	0.578
PQ5	0.812	0.524	0.444	0.504
PQ6	0.807	0.502	0.43	0.537
PQ7	0.704	0.471	0.423	0.486
PQ8	0.778	0.424	0.417	0.473
PQ9	0.815	0.489	0.484	0.452
PQ10	0.854	0.437	0.544	0.536
PQ11	0.832	0.556	0.625	0.57
PQ12	0.742	0.546	0.553	0.508
PQ13	0.807	0.466	0.527	0.479
SMA 1	0.538	0.62	0.558	0.447
SMA 2	0.441	0.782	0.583	0.557
SMA 3	0.39	0.675	0.574	0.408
SMA 4	0.382	0.659	0.608	0.472
SMA 5	0.589	0.815	0.683	0.66
SMA 6	0.474	0.778	0.608	0.588
SMA 7	0.346	0.739	0.542	0.523
SMA 8	0.551	0.749	0.796	0.663
SMA 9	0.512	0.798	0.657	0.724
SMA 10	0.358	0.734	0.616	0.623
SMA 11	0.448	0.77	0.602	0.616
SMA 12	0.485	0.756	0.647	0.559
BI 1	0.242	0.488	0.682	0.393
BI 2	0.462	0.486	0.693	0.561
BI 3	0.538	0.611	0.793	0.641
BI 4	0.583	0.65	0.82	0.623
BI 5	0.478	0.608	0.787	0.653
BI 6	0.437	0.64	0.734	0.458
BI 7	0.459	0.589	0.723	0.561
BI 8	0.404	0.658	0.708	0.557
BI 9	0.364	0.589	0.672	0.437
BI 10	0.48	0.677	0.678	0.62
BI 11	0.436	0.601	0.693	0.526
DP 1	0.59	0.682	0.669	0.813
DP 2	0.466	0.635	0.632	0.806
DP 3	0.554	0.691	0.672	0.896
DP 4	0.562	0.547	0.505	0.818
DP 5	0.43	0.557	0.59	0.656

variable has a substantive effect. R-square results are 0.67, 0.33, and 0.19 indicating that the models are "good", "moderate", and "weak" [8]. Beside R-square, the inner model is evaluated by estimation of path coefficients and estimated stability using the t-statistical test through Bootstrap method.

Table 8: R-squared coefficients

Variable	R-Square
Decision Purchase	0.683

The value of R-square for purchase decision variable is 0.683, this means 68.3% variation in purchase decision is effected by product quality, social media advertising and brand image. The rest of the percentage that is 31.7% is accounted by other variables that are not part of this research. Hence, the R-square calculation results show "Good".

Table 9: Result of PLS – SEM

	Original Sample (O)	Standard Deviation (Std Dev)	T Statistics (O/ St Dev)	P values
Product Quality-> Decision Purchase	0.219	0.088	2.5	0.013
Social Media Advertising-> Decision Purchase	0.385	0.17	2.271	0.024
Brand Image-> Decision Purchase	0.309	0.144	2.145	0.032

The value of discriminant validity (cross loading) or indicator correlation to the latent construct is greater than the correlation value of the indicator to other constructs, so that the validity of the measurement model is fulfilled.

A. Inner Model Evaluation Evaluation (Results of Bootstrap Method Resampling Analysis)

The inner model describes the relationship between latent constructs based on substantive theory. The structural model is evaluated using R-square for the dependent construct, Stone-Geiser Q-square test for relevant predictive. The value of R-square can be used to assess the influence of certain independent latent variables, whether the dependent latent

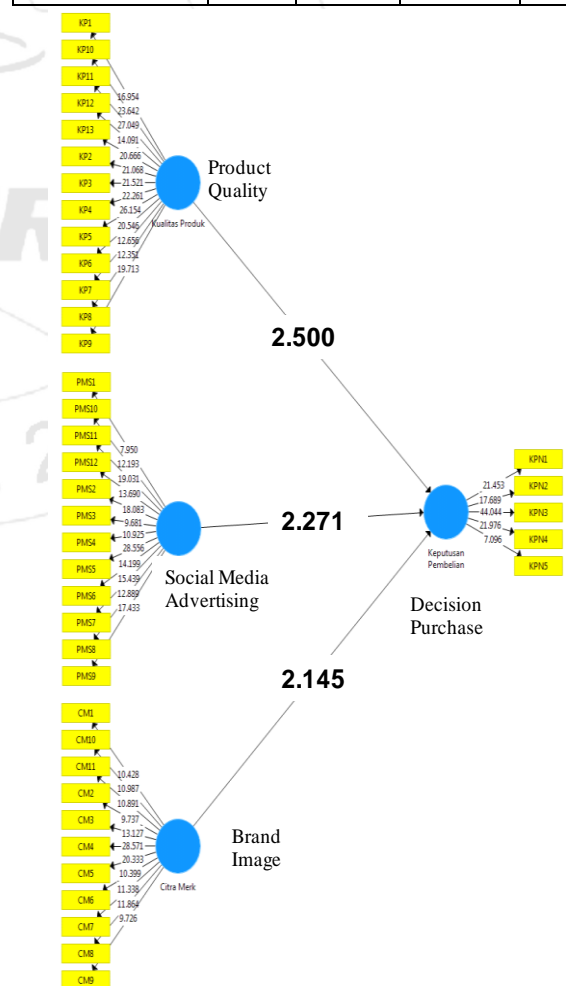


Figure 2: Path model and PLS – SEM Estimate

As presented in Table 9, all T-statistics values are greater than 1.96. Therefore, the interpretation of the outer loading of the model is very significant. From the original sample value or estimation coefficient product quality, social media advertising, brand image to purchase decision give a positive value of 0.219, 0.385 and 0.309. Answering hypothesis 1,2 and 3 with an increase in social media advertising, improvement in brand image and product quality can give a significant effect to purchase decision of motorcycle which Social Media Marketing gives highest influence to purchase decision (0.385) while all P-values is lower than significant level (5%) means hypothesis 4 is significant.

10. Conclusion and Implication

Based on the results of the research that has been stated, conclusions are drawn as follows:

- There is a significant relationship between product quality toward purchase decision of motorcycles.
- There is a significant relationship between social media advertising toward purchase decision of motorcycles.
- There is a significant relationship between brand image toward purchase decision of motorcycles.
- There are simultaneous relationship between product quality, advertising social media and brand image toward purchasing decisions.

Regarding to the results of this research, suggestions are proposed as follow.

- Since the result of PLS-SEM is social media advertising which gives the highest influence to purchase decision (0.385), companies are recommended to enhance social marketing advertising by increasing interaction intensity to social media users especially twitter, instagram and facebook. As the greater respondents are between 23 – 28 years old, it shows that millennial or youthful people tend to use social media in terms of choosing particular brand. Therefore, social media advertising gives a big role for purchase decision among Suzuki customers, since all of the respondents have one account in once social media. It is recommended for Suzuki management to augment and consider different advertisement strategic in social media such as uploading attractive and informative contents in order to attract follower to visit Suzuki social media pages. Furthermore, the range of social media network should be a consideration in this case. Moreover, the after-sales interaction should be responsive and give solution to customer if there is question and suggestion through social media.
- It is also recommended for future researchers on this similar topic to augment other variables such as brand loyalty, price and customer satisfaction.

References

- [1] Kotler, P and Amstrong, G. 2012. Principle of Marketing.14th Edition. New Jersey. Published by Prentice Hall.
- [2] Philip and Amstrong Gary, K. (2006). Marketing Principles, New Jersey.

- [3] Kotler, P and Keller, K. L. 2012. Marketing Management.14th Edition. New Jersey. Published by Prentice Hall
- [4] Felix, R., Rauschnabel, P.A.; Hinsch, C. (2016). "Elements of Strategic Social Media Marketing: A Holistic Framework". Journal of Business Research. pp: 118–126.
- [5] Jodi (2013). Social media content matrix. Retrieved May 29, 2018, from <https://www.jcsocialmedia.com/socialmedia-content-matrix/>
- [6] Mc Quail, Denis. (2011). Teori Komunikasi Massa. Jakarta: Salemba ‘Humanika.
- [7] Schiffman dan Kanuk. 2007. Perilaku Konsumen. Edisi Kedua. Jakarta: PT. Indeks Gramedia
- [8] Ghozali, Imam, 2009. Aplikasi Analisis Multivariate Dengan Program SPSS, Edisi Keempat, Penerbit Universitas Diponegoro. International, Inc, New Jersey.