Influence of social media advertising, e-marketing and product quality on the process of purchasing nature cosmetics

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A B S T R A C T

This study seeks to investigate the role of Social Media Advertising, E-Marketing, and Product Quality on Consumers' Decision to Purchase Nature Cosmetics in North Sumatra-Indonesia partially and simultaneously. The data were analyzed using multiple Linear Regression model and coefficient of Determination. This research leads to the results that variables of Social Media Advertising, E-Marketing, and Product Quality simultaneously have a positive and meaningful impact on consumers' decision in making purchases of Nature Cosmetics in North Sumatra-Indonesia and partially this variable of product quality is more dominant in consumers' decision in purchasing Environment-friendly Cosmetics in North Sumatra-Indonesia. The coefficient of determination (R Square) shows that the variable of Social Media Advertising, E-Marketing, Product Quality is 0,593 or 59.3% while the remaining 40.7% is affected by other factors beyond the scope of this study.

I N T R O D U C T I O N

Along with the rapid era development, the Indonesians' shopping lifestyle in general especially those of Indonesian women has shifted in which various shopping styles are adopted by Indonesians especially women, starting from midnight shopping to the trending lifestyle of shopping through the internet or which is commonly known as online shopping. The rapid development of online shopping makes the competition on the internet as an easy and quick transaction mode growingly tight. It is recorded that the number of internet users in 2017 was 143,26 million or is equivalent to 54,68 percent of the total population of Indonesia (APJII,2018) and this number indicates an increase by 10,56 million people as recorded by a survey in 2016. The composition of internet users based on gender is 48,57 percent (women), and 51,43 percent (men). Advertising on a website and social media is a gateway to any products from anywhere around the globe. Online shopping is based on its virtual nature, in which there is no longer boundary between the goods and the people, producers and consumers at the local and international levels.

Making purchase over the internet has never been easier and quicker, in the sense that there is a process of bargaining with each mechanism on every website, and in addition to that, online selling enables us to cut the costs of marketing and distribution and help us eliminate cost for human resources. Communicating the products and services through the internet has been dominantly adopted by marketers nowadays, with one of the effective online media to advertise the product is through social networking site. A social
networking site that has gained popularity in Indonesia is not only used as a means of communication, but along with the development of social media website, has been used as a political campaign and product or service promotion.

Promoting through social media is more effective as social media is able to reach a wider consumer, as well as more quickly. Through social media, the business actors can deal directly with customers or potential customers and keep at pace with the development of their experiences with the products on offer. Consumers’ commentaries which are satisfactory or tend to compare with other products can be easily identified by business actors. Marketing strategies through social networking can not only be adopted by smaller companies or home industries but also big corporations whose line of business is in other sectors. Social media may disseminate various matters related to human life, even with the rapid development, social media is not only used as a means of communication between one individual and the others but also can serve as a platform for business owners to sell their products. This is received by customers who mostly spend their time in front of monitor screen and gadgetry which is also mostly done by women who cannot get away from gadgets in their daily lives.

There are four social media platforms that fit into Indonesian users, namely Blogs, Facebook, Twitter, and Instagram. All forms of social media accessed through the internet with the purpose of informing the company’s products is referred to as social media marketing, in addition to making use of website as the main media in marketing the products. The propagation of media has changed the way message in advertisement is delivered and received. Due to the high costs incurred in reaching out to mass audience, advertisers are moving away from television advertisement and opting to invest in an alternative media such as social networking site (SNS) in order to reach out to their target customers. The emergence of social media has helped organizations directly to be engaged, efficient, cost-effective and timely end-customer contacts if compared to other conventional means of communication. Therefore, social media advertisement brings more benefits not only for large multinational companies, but also for small and medium-sized companies and even non-profit and government agencies. "Marketing through conventional channel is four times more expensive than marketing through the Internet" (Kotler et al., 2009).

A company communicates with its customers through various platforms such as online forums, word-of-mouth, blogs, discussion board and chat rooms as sponsored by the companies, products or services where consumers rank the website, internet forums and discussion, Mo-blogs (a website containing digital audio, pictures, films or photos) and several social networking websites. With the assistance of social networking site (SNSs), the consumers can actively interact with advertisements, in which case an SNS enables consumers to like specific advertisements, to follow certain advertisements on twitter, to share it with friends and to find out which friends like the advertisements. Quite a number of consumers turn away from conventional advertising sources such as radio, television, magazines, and newspapers and use social media more often to search for information about the products and make purchasing decisions. Therefore, a number of researchers think that Social Media should be incorporated as an integral part of the Integrated Marketing Communication Strategy in an organization. Integrated Marketing Communications (IMC) is an important aspect in an organization in order to communicate with the target market. "Internet marketing is known as an effective marketing strategy in the world with ten times more units are sold as compared to the tenth of advertising budget "(M. Potter, 1994).

The main benefit of selecting social networking site as the medium for advertisement is that it allows advertisers to use demographic information of the users and aim their advertisement to the bull’s eye. On one hand, social media has provided a great advantage to consumers who have never had experiences in similar market; and on the other hand, it does not have a direct control over the content, duration and the frequency of conversation. The relationship between business owners and customers has changed as a result of Social Media emergence. Various aspects of consumer behaviors influenced by social media. Business owners are required to develop their marketing strategy in order to produce a sincere relationship with its customers. In an advertisement, the attraction is how the message is delivered. Through the advertisement, one attempts to convey the message of the products for people. The attraction of this message is used based on the desired level, which means that the message delivered through advertisement in social media is the message that you want to deliver to target audiences which is the case social media offers various kinds of life needs, starting from fashions, health care to home appliances and it provides discounts on various items online. With this advertisement’s attraction, it is expected that product sales increases as a result of promotion through advertising in social media. Hence, it can be said that advertising in social media with such attraction will effectively help boost company’s goal in increasing the sales of the product.

This is also experienced by cosmetic sales industry which has been known by most people for centuries. In the nineteenth century, the use of cosmetics started to gain attention, which is in addition for beauty purposes, it also functions as health purposes. The development of cosmetics science and its industry began to develop extensively in the twentieth century. Cosmetic is classified as a business. Even now, the cosmetic technology is so advanced and is made in a combination of cosmetics and medicine or is often called medical cosmetics. The number of companies whose line of business is cosmetic domestically increased to 153 companies in 2017, which make up a total of more than 760 companies. From that number, 95 % of national cosmetic companies is comprised of small and medium industry sectors (IKM) and the remaining percentage is large-scale industries. As for medium and large scale industries, some of the companies have successfully exported the products overseas such as Asian, Africa, the Middle East and others. In 2017, the export value of national cosmetic products reached US$ 516,99 million which is an indication of an increase as compared to the previous year of 2016, which was only US$ 470,30 million (www.menperindag.go.id).

Today, in producing cosmetics, companies should consider the eco-green. This is what encourages several companies to create environmentally-friendly cosmetic products. In Indonesia, there are some green cosmetic industries that produce nature cosmetics.
products (green cosmetic) under the category of natural cosmetic. These companies are PT Martina Bento with product brand Dewi Sri Spa, Biokos, PAC, Caring, Sariayu Martha Tilaar, Belia, Mirabela and Cempaka, PT MustikaRatu with product brand MustikaRatuKosmetik, Biocel, Putri, Bask, Ratu Mas and Moor, PT Monika Hijau Lestari with product brand The Body Shop Indonesia, PT Perdana Duta Persada with product brand the Face Shop Indonesia, PT Asia Bandar Alam with the product brand L’Occitane Indonesia and PT Interkos Jaya Bakti with product brand Estee Lauder. The green cosmetics industry in Indonesia that offers nature cosmetics products (green cosmetic) under the category of organic cosmetic is PT Anugrah Intersimindo with product brand Melilea Botanical Skin Care. If we observe, these companies conducted promotion through social media, e-marketing and created quality products so that consumers are seduced into buying the nature cosmetics products. Based on this reason, we are trying to investigate and answer the roles of social media advertising, e-marketing, product quality on consumers’ decision in purchasing nature cosmetics in North Sumatra-Indonesia.

Research and Methodology

Since the population is unknown in terms of its quantity or purchasing power, the Lemeshow Formula is adopted for an unknown population (Sitorus, 2017)

\[ n = Z_{\alpha}^2 \times P \times Q / L^2 \]

Information:

- \( n \): Minimum number of samples required
- \( Z_{\alpha} \): Standard distribution value according to value \( \alpha = 5\% = 1.96 \)
- \( P \): Prevalence of outcome, because the data are not obtained, 50% is used
- \( Q = 1 - P \)
- \( L \): 10% accuracy level

Based on the formula, then

\[ n = (1.96)^2 \times 0.5 \times 0.5 / (0.1)^2 \]
\[ = 96.04 \]

It was obtained that the minimum number of samples needed in this study were 96 respondents.

Data analysis techniques

The analysis method used in this study is multiple linear regression analysis with classical assumption test as a requirement of regression analysis, and the model of data analysis in this research is as follows:

Where:

- \( Y \): Purchasing Decision Variable
- \( a \): Constant
- \( b1, b2 \): Regression Coefficient
- \( X1 \): Sosial Media Advertising Variable
- \( X2 \): E-Marketing Variable
- \( X3 \): KualitasProduk
- \( e \): Standard Error (error rate) 5%.

Hypothesis testing

The F test was conducted to explore how the independent variables affect the dependent variable simultaneously. Significant regression models are simultaneously tested by looking at the difference between \( F_{\text{table}} \) and \( F_{\text{count}} \). Significant value (sig) will be seen if the significant value is below 0.05, the independent variable is declared influential on the dependent variable. The following are the results of simultaneous hypothesis testing on the research variables: Total \( F_{\text{table}} \) in this study is as follows: \( F_{\text{table}} \) according to \( F_{\text{table}} \) is 3.155932. In the table above it can be seen that the \( F_{\text{count}} \) value is 44.706 with a probability of 0.000. As the probability is smaller than 0.05 and \( F_{\text{count}} (44.706) > F_{\text{table}} (3.155932) \), then \( H_0 \) is rejected or \( H_a \) is accepted, which thus means that the variables of social media advertising, e-marketing, product quality simultaneously have a positive and significant effect on consumer decision in purchasing nature cosmetics in North Sumatra-Indonesia.

Table 1: F Test Results (Simultaneous Test)
ANOVA*

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>279,359</td>
<td>3</td>
<td>93,120</td>
<td>44,706</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>191,631</td>
<td>92</td>
<td>2,083</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>470,990</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Kept.Pembelian  
b. Predictors: (Constant), KualitasProduk, SMAdv, EMart

Source: Authors

Table 2: T Test Results (Partial Test)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>53,416</td>
<td>5,660</td>
<td>9,438</td>
<td>.000</td>
</tr>
<tr>
<td>SMAdv</td>
<td>-.225</td>
<td>.060</td>
<td>-.250</td>
<td>-3,763 .000</td>
</tr>
<tr>
<td>EMart</td>
<td>.039</td>
<td>.045</td>
<td>.058</td>
<td>.868</td>
</tr>
<tr>
<td>KualitasProduk</td>
<td>.614</td>
<td>.057</td>
<td>.714</td>
<td>10,694 .000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchasing Decision

Source: Authors

Table 3: Multiple Linear Regression Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
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<td>5,660</td>
<td>9,438</td>
<td>.000</td>
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<td>.060</td>
<td>-.250</td>
<td>-3,763 .000</td>
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<td>.868</td>
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<td>.057</td>
<td>.714</td>
<td>10,694 .000</td>
</tr>
</tbody>
</table>

Source: Authors

Regression equation formed by the data on the table above is:

\[ Y = 53,416 - 0.225X_1 + 0.039X_2 + 0.614X_3 + e \]

The above equation leads to the following interpretation:

1. Constant (a) = 53,416, which means that even though the independent variables (X1); social media advertising, the independent variables (X2) e-marketing, independent variable (X3), product quality = 0, then the dependent variable Y Consumer Decision in Purchasing Nature cosmetics in North Sumatra-Indonesia fixed n 53,416

2. Coefficient X1 (B1) = -0.225 with negative value. This means that the X1 variable depreciates Consumer’s Decision in Purchasing Eco-friendly Cosmetic in North Sumatra, Indonesia by -0.225 or - 22.5%.

3. The coefficient of X2 (B2) = 0.039 with a positive value. This means that whenever the X2 variable increases by 1 unit, Consumer’s Decision in Purchasing Eco-friendly Cosmetic in North Sumatra, Indonesia (Y) will increase by 0.039 or 3.39%.

4. Coefficient X3 (B3) = 0.614 with a positive value. This means that every time the X3 variable increases by 1 unit, Consumer’s
Decision in Purchasing Eco-friendly Cosmetic in North Sumatra, Indonesia (Y) increases by 0.614 or 61.4%. Based on data processing, it was found that the variables with the most dominant effect on Consumer’s Decision in Purchasing Nature cosmetics in North Sumatra-Indonesia (Y) are product quality as the regression coefficient value is greater than the other two variables.

**Conclusion**

The first hypothesis yielded the value of t count (-3.763) < t table (1.986) and the significance value (sig) of 0.000<0.05 which leads to the conclusion that Social Media Advertising does not have a positive and significant effect on Consumer’s Decision in Purchasing Nature cosmetics in North Sumatra, Indonesia. The second hypothesis yielded the value of t count (0.868) < t table (1.986) and significance value (sig) 0.388> 0.05 which led to the conclusion that E-Marketing does not have significant effect on Consumer’s Decision in Purchasing Eco-friendly Cosmetics in North Sumatra, Indonesia. The third hypothesis yielded the value of t count (10.694)> t table (1.986) and significance value (sig) 0.000 <0.05 which leads to the conclusion that Product Quality has a positive and significant effect on Consumer’s Decision in Purchasing Environmentally Friendly Cosmetic in North Sumatra, Indonesia. The results of simultaneous hypothesis testing of the research variables are as follows: Ftable in accordance with the Ftable is 3.155932, In the above table, it can be seen that the Fcount value is 44.706 with a probability of 0.000. As the probability is smaller than 0.05 and Fcount (44.706)> Ftable (3.155932), then Ho is rejected or Ha is accepted which means that the variables of Social Media Advertising, E-Marketing, Product Quality simultaneously have a positive and significant effect on Consumer’s Decision in Purchasing Nature cosmetics in North Sumatra, Indonesia. The coefficient of determination (R Square) revealed that Consumer’s Decision in Purchasing Nature cosmetics in North Sumatra, Indonesia is influenced by the variables of Social Media Advertising, E-Marketing, Product Quality by 0.593 or 59.3% while the remaining 40.7% is influenced by other factors beyond the scope of this study.

**References**


Werner, C. L. (2011). Social media and public safety: identifying values, opportunities and threats. FIREHOUSE.