Big Data and Content Marketing on Purchase Decisions Online In Indonesia

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Abstract: This study aimed to describe big data, content marketing and purchase decision, analyze the influence of big data and content marketing on purchase decision, and analyze the dominant variable between big data and content marketing on online purchase in Indonesia. This research was conducted in Indonesia with 134 sample respondents. The method used in this research is descriptive method. This study used accidental sampling using data collection tools through an online questionnaire. The results of multiple regression analysis proved the variables of big data and content marketing, partially or simultaneously have an effect on purchase decision. The influence is a positive effect, if a technology online driven function as volume, velocity, variety, veracity, and value, it will encourage consumers to purchase decision in Indonesia. Furthermore, if the content marketing gives a positive impression on a product that is offered online through cognition, sharing, persuasion, and decision making would increase consumers online purchase decision. From testing the hypothesis that the variables of content marketing, it turns out the dominant influence on purchase decision.

Keywords: Big data, content marketing, and purchase decision

I. Introduction

At present information and technology have developed rapidly, especially the increasingly massive use of the internet in Indonesia. Based on a survey report of the Indonesian Internet Service Providers Association (APJII) conducted based on field data from March 9 to April 14, 2019 concerning penetration and behavior profiles of internet users in Indonesia, that the population in 2017 was 262 million with 54 internet users, 68% or approximately 143.26 million people spread throughout Indonesia. This has increased in 2018 by 10.12% or as many as 27,916,716 internet users compared to the previous year, assuming a population growth of 0.63% based on BPS projections of population numbers in 2018. The many benefits felt by the public make the internet a non-existent part inseparable in activities so that it becomes a potential market opportunity, especially in the field of e-commerce. Based on data released by Katadata.co.id (04/24/2019) that Indonesia is the growing-e-commerce country fastest in the world.

This is inseparable from big data, which is a term that describes volume of a largedata, both structured and unstructured data (Pavitra, 2016: 130), which makes it possible for consumers to become a basis for consideration in makingpurchasing decisions online. In addition to big data, content marketing is also one of the factors driving consumers to make transactions online. The availability of interesting, relevant, and valuable content can stimulate consumers to explore further related products offered online that lead to purchasing decisions. According to Anand (2014: 83) that content marketing is one marketing strategy that provides content that is in accordance with the wants and needs of consumers. The content in question certainly got value(value)and the relevance to provide interest that stimulate the consumer to perform an action that is transacting.

II. Literature Review

In general terms, making a decision is the selection of actions from two or more alternative choices. According to Syam, Andi Hendra (2017: 43) that a decision is a selection, a choice of two or more possibilities. Decision making can be considered as an outcome or output from mental or cognitive processes that lead to the selection of an action pathway among the available alternatives. According to Sangadji and Sophia (2018 in Suhartini, 2019: 38) that purchasing decisions are an integration process that combines knowledge to evaluate two or more alternative behaviors, and choose one of them. Roza (2014: 58) revealed that consumer purchasing decisions are inseparable from the lifestyle of those who want to buy products that are useful and have good
quality. Of the various factors that influence consumers in purchasing a product or service, consumers usually always consider the quality, price, and products that have been previously identified.

Nurvidiana (2015: 3) argues that in most people, buying behavior is often influenced by two factors namely the environment and marketing stimulus. Marketing stimuli by marketers rely heavily on the internet and big data as triggers. The amount of data that is scattered into the media to make purchasing decisions. Big data has been used in many businesses. It is not only the size of the data that is the main point but what the organization must do with it. Big data can be analyzed for insights that lead to the right decision making and better and profitable business strategies (Bhosale, 2014: 6). The phenomenon of big data is increasingly important because it allows organizations to collect, store, manage and manipulate large amounts of data at the right speed, at the right time, to get the right insight. According to De Mauro (2016: 130) that big data is the information asset characterized by such a high volume, velocity, and variety to require specific technology and analytical methods for its transformation into value. Information systems combined with the internet, cloud computing, mobile devices, and the internet of things have produced volumes of very largedata, usually called big data (Jebel, 2018: 36).

In the world of marketing, analysis of big data can be used to identify consumer behavior in interacting and transacting online. So that marketers are able to develop marketing strategies where marketers can plan, create, and distribute content that is able to attract the interest of the target consumer to immediately make a buying decision. This marketing strategy is known as content marketing. According to Pratiwi (2018: 48) that in creating content marketing interesting and creative, several factors that must be considered are design, current event, the reading experience, timing, and tone. While Limandono (2017: 3) argues that content marketing is a marketing strategy to distribute, plan, and create interesting content with the aim to attract the target market and encourage consumers to become customers of a company. Pratiwi (2018: 48) believes that basically, content marketing is the art of communicating with customers or prospective customers without having to sell. By providing information that consumers want and need will create satisfaction and customer and provide mutual value for the company. According to Elisa (2014: 93) that content must 1) be able to generate interest, involve, but also provide information and educate customers; 2) states all values that identify the company in terms of uniqueness, consistency, quality and relevance; 3) be proactive, which is able to develop over time.

III. Research Methods

This research was conducted online for three months from October to December 2019. The study population was consumers who had made purchases online in Indonesia with a sample of 134 respondents with a nonprobability sampling technique. The type of sampling used is incidental sampling and purposive sampling. This study uses a quantitative approach to the type of explanatory research in order to find out and explain the characteristics of the studied variables. This research is correlational by describing the relationships between the independent variables and the dependent variable through hypothesis testing, namely the t test and the F test. The variables used are independent variables consisting of big data and content marketing and the dependent variable, namely the purchasing decision. These variables were analyzed using multiple linear regression analysis in SPSS applications.

IV. Results and Discussion of

a. Research Results

In the data validity test, 42 data were tested from processing the data, all indicators have a positive correlation coefficient and are greater than r table, and the probability is smaller than α = 5%, meaning that there is a significant relationship between scores each indicator with a total score. Significant correlations indicate that the indicator really can be used to measure the variable to be measured, in other words the instrument used is valid and thus can be used in research. While the instrument reliability testing is done on the question items that are already valid. The instrument is declared unreliable if the reliability value obtained does not reach 0.6. The reliability test results show that each reliability coefficient value is greater than 0.6 so that the instrument used is declared reliable.

The results of calculations using the SPSS program can be seen in the following table:

<table>
<thead>
<tr>
<th>Table 1. Recapitulation of the results of multiple linear regression analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>X1</td>
</tr>
<tr>
<td>X2</td>
</tr>
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<td></td>
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</tbody>
</table>

Dependent Variable = Purchase Decision
The results of the multiple regression calculation can be found as follows:

\[ Y = \alpha + \beta_1X_1 + \beta_2X_2 + \varepsilon \]

\[ Y = 6.876 + 0.167X_1 + 0.925X_2 \]

Based on the results of the equation, it can be explained that the constant (\( \alpha \)) = 6.876 indicates the magnitude of the purchase decision, if there is no influence from big data (\( X_1 \)) and content marketing (\( X_2 \)), then the purchase decision (\( Y \)) amounted to 6.876. Theregression coefficient big data (\( X_1 \)) is 0.167 (\( \beta_1 \)), meaning that every time there is an increase int hevariable big data (\( X_1 \)) by 1 unit, it will increase the purchase decision (\( Y \)) by 0.167 assuming the other variables are fixed. regression coefficient Content marketing (\( X_2 \)) of 0.925 (\( \beta_2 \)), meaning that every time there is an increase in thevariable content marketing (\( X_2 \)) by 1 unit, it will increase the purchase decision (\( Y \)) by 0.925 with the assumption that other variables are fixed.

The multiple correlation coefficient (R) of 0.835; shows that there is simultaneously a strong and direct relationship between big data (\( X_1 \)) and content marketing (\( X_2 \)) with the purchase decision (\( Y \)) 83.5%. This relationship can be categorized as strong, as it is known that a relationship is said to be perfect if the correlation relationship can be categorized as strong, as it is known that a relationship is said to be perfect if the correlation coefficient reaches 100% or 1 (either with a positive or negative number).

The results of multiple linear regression analysis, it can be seen the value of the coefficient of determination (R_square) of 0.697. This figure shows that thevariable big data (\( X_1 \)) and content marketing (\( X_2 \)) can explain variations or able to contribute to the purchase decision variable (\( Y \)) of 69.7%, while the remaining 30.3% is caused by other variables not included in the study.

The results of the t test analysis obtained a value of 10.797 and significance value of 0.000, which is smaller than 0.05

\[ t = 10.797, \quad \text{Significance} = 0.000 \]

From the results of the calculation of multiple regression analysis with the SPSS program obtained an F_{calc} of 150.933 which is greater F_{table} (150.933 > 3.06), reinforced with a significance value of 0.000 <0.05, then H<sub>0</sub> rejected and H<sub>a</sub> accepted which means that thevariable big data and content marketing simultaneously significant effect on purchasing decisions online in Indonesia, so the first hypothesis is statistically accepted or tested.

2) Hypothesis 2

To test the second hypothesis which states that big data and content marketing partially have a significant effect on purchasing decisions online in Indonesia, then the t test was used as follows:

Table 2. Test results of the test F 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>7010.623</td>
<td>2</td>
<td>3505.312</td>
<td>150.933,</td>
<td>0.000</td>
</tr>
<tr>
<td>Residual</td>
<td>3042.392</td>
<td>131</td>
<td>23.224</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10053.015</td>
<td>133</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchase decision
b. Predictors: (Constant), Content marketing, Big data

Table 3. The results of the t test testing

<table>
<thead>
<tr>
<th>Coefficients*</th>
<th>model</th>
<th>unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.876</td>
<td>3.465</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
<td>1.984,049</td>
<td></td>
</tr>
<tr>
<td>Big Data</td>
<td></td>
<td>167.084</td>
<td>136</td>
<td>1,995</td>
<td>0.048</td>
</tr>
<tr>
<td>Content</td>
<td></td>
<td>marketing,925</td>
<td>086,734</td>
<td>10.797</td>
<td>0.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Purchasing decisions

The results of the t test analysis value of 1.995 with a significance value of 0.048 which is less than 0.05 (0.048 <0.05), which means that H<sub>0</sub> is rejected and H<sub>a</sub> accepted, so evident in partial big data (\( X_1 \)), a significant effect on purchasing decisions (\( Y \)).

b. Content marketing

Results of t test analysis obtained a value of 10.797 and significance value of 0.000, which is smaller than 0.05 (0.000 <0.05), which means that H<sub>0</sub> rejected and H<sub>a</sub> accepted, so evident in partial content marketing (\( X_2 \)) has a significant effect on purchasing decisions (\( Y \)).

Based on the results of the analysis above, it can be seen that big data and content marketing partially have a significant effect on purchasing decisions. Next to find out the variables that have a dominant influence on purchasing decisions is to see the magnitude of the regression coefficient of the variables that have a significant
effect on purchasing decisions. The independent variable that has the biggest and significant coefficient is the variable that has a dominant influence on purchasing decisions. The magnitude of the regression coefficients of each independent variable sequentially is big data of 0.136 and content marketing of 0.734. Thus the variable that has a dominant influence on purchasing decisions is content marketing, so in this second hypothesis turns out that H0 is accepted and H1 is rejected, which means that the variable big data does not have a dominant effect on purchasing decisions. So the content marketing variable has a dominant variable based on the regression coefficient value greater than the big data that is 0.734 > 0.136.

b. Discussion of research results

Based on the results of the first hypothesis test in this study shows that the variables big data and content marketing significantly influence purchasing decisions online. The results of multiple regression analysis prove that the variables big data and content marketing together (simultaneously) or individually (partially) influence the purchase decision. This influence is a positive influence, meaning that if technology online is driven by its functions inform of the volume, velocity, variety, veracity and value, it will encourage purchasing decisions for products offered online in Indonesia. Furthermore, if content marketing gives a positive impression on a product offered online through cognition, sharing, persuasion, and decision making, it will increase consumer purchasing decisions.

The results of this study are consistent with research conducted by Jeble (2018: 36) which states that big data can be used to make intelligent and decisions real-time in improving business results. In today's era, business executives are challenged with high expectations from customers, high competition, rising labor and material costs and shorter product life cycles. Globalization blurs boundaries between countries. Location and distance from markets are no longer barriers to market access. In such a turbulent environment, companies need to continuously scan for risks and opportunities and make business decisions quickly based on available data (Jeble, 2018: 40). This is in line with the results of Merendino’s research (2018: 67) which shows that big data significantly influences decision making. Big data has the potential to disrupt the organization’s senior management, encourage directors to make decisions more quickly and to shape their ability to cope with changing environments. The new paradigm in searching data and information (via big data) has influenced all aspects of consumer behavior where consumers have switched from traditional sources (manual) to the internet media to collect, store, manage, and manipulate large amounts of data and information at high speed at the right time so that it can be a basis for consumers to make purchasing decisions.

Interesting and creative content about a product offered online, gives a high contribution to attracting consumers in making transactions. The results of this study are consistent with research conducted by Anand (2014: 83) which states that content marketing is one of the marketing strategies that provides content that suits the desires and needs of consumers. Content marketing is a medium for consumers to obtain data and information related to the products needed so that purchasing decisions can be implemented properly. Content marketing is very closely related to purchasing decisions, the need alone is not enough to immediately make a purchase decision, of course consumers need a variety of accurate information so there is no mistake in making a purchase decision and the source of information is content marketing.

V. Conclusions

The results of the analysis show that big data is quite potential as data and information in making purchasing decisions online in Indonesia, content marketing has a positive influence on consumer purchasing decisions online in Indonesia.

Based on the results of the analysis show that the variables big data and content marketing simultaneously have a significant effect on purchasing decisions online in Indonesia.

The variable that has the dominant influence on purchasing decisions online in Indonesia is content marketing. This shows that the more positive content marketing presented by marketers then can improve consumer purchasing decisions online in Indonesia.

VI. Suggestions

It is expected that marketers can present content marketing that provides information, educates, and is relevant to the wants and needs of consumers so as to create a shopping experience that benefits all parties.

For further researchers to be able to develop related research variables in order to enrich the reader's insight and provide broader knowledge and more benefits.

References


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