Analysis of the Influence of Digital Marketing and Product Quality on Customer Loyalty

Julie Abdullaha,*, Uli Wildan Nuryantob, Sri Nuryanic, Firstianty Wahyuhening Fibriandy, & I Gusti Ngurah Agung Dewantara Putrea

aGorontalo University, Jl. A. A. Wahab Limboto, Gorontalo, Indonesia
bBina Bangsa University, Jl. Raya Serang-Jakarta, Serang, Indonesia
cSTMIK LIKMI, Jl. Ir. H. Juanda, Bandung, Jawa Barat
dBina Sarana Informatika University, Jl. Kramat Raya, Jakarta, Indonesia
eUdayana University, Jl. Kampus Bukit Jimbaran, Bali, Indonesia

Abstract

The purpose of this study was to analyze the effect of digital marketing and product quality on customer loyalty. This research is a quantitative research with a descriptive and verification approach. From the research that has been done, it is obtained that the value of t count > t table so that digital marketing and product quality have a positive and significant effect on customer loyalty. The R-square value obtained is 0.852 which states that digital marketing and product quality variables affect customer loyalty by 85.20% and the remaining 14.80% is influenced by other variables.

Keywords: digital marketing, product quality, customer loyalty

1. Introduction

Social media is a medium on the internet that allows users to interact, collaborate, communicate and socialize with other users (Evania et al., 2021). Currently, social media platforms have brought many changes and have become a very powerful social tool in terms of communication, interaction, synergizing and contributing to each other online (Ahmed et al., 2019) which allows MSME actors to use the social media platform in building, developing and expanding the marketing of their products with low promotional costs. Social media platforms have changed the perspective of MSME actors in interacting among themselves, identifying market opportunities and connecting to external ecosystems (Benitez et al., 2020), so that the openness and connectivity of social media can provide solutions to the difficulties experienced by MSME actors in reaching their market share (Mastarida, 2022). In addition, social media can also provide benefits in terms of establishing cooperation between consumers and partners (Scuotto et al., 2017) and provide long-term relationships between producers and consumers (Kaplan and Haenlein, 2010). The use of social media can provide benefits for MSME actors (Ferris et al., 2007) because it makes it easy for users to make buying and selling transactions online (Erpurini et al., 2022).

Buying and selling transactions conducted online are better known as e-commerce (electronic commerce) (Handoko, 2018) which is the use of electronic technology to make sales or advertising using the internet based on business to business and business to consumer contexts (Ramanathan et al., 2012).

* Corresponding author.
E-mail address: julieabdullah99@gmail.com

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The use of e-commerce has increased due to the increasing number of internet users and the ease of accessing it (Ghisellini et al., 2016). Marketing of products produced through e-commerce will be more accessible to potential consumers (Albi, 2020) and provide opportunities for producers and consumers to introduce and get to know products more effectively (Andrian, 2019) because access to information related to the products offered can be accessed from anywhere as long as there is an internet connection (Wicaksana, 2021).

Product marketing through digitalization media will provide more value to producers because it can reach a wider marketing area which allows greater interest in the products being marketed (Apriani and Arifin, 2020), producers who cannot keep up with the development of digital marketing technology will affect the development and continuity of their business (Pangkey et al., 2019) so that business actors must always be ready to create digital marketing strategies (Sukma et al., 2020).

In addition to marketing the products produced by MSMEs digitally, producers must also maintain the quality of the products produced to attract customers' interest in buying the products offered (Wicaksana, 2021). Product quality can be realized when manufacturers are able to produce products that meet the specifications desired by customers or can even exceed customer expectations (Anggraeniet al., 2016). The quality of the resulting product will be a determining factor in creating a sense of satisfaction for consumers (Muslima and Ernawati, 2020) as well as being a determining factor for consumers in making purchases and using the resulting products (Hidayat, 2009) and product quality will have an impact on the assessment by customers of the products produced in meeting the expectations of customers (Nyonyie et al., 2019). If the quality of the product produced is below the specifications desired by the customer, it will be able to reduce customer buying interest so that it will be detrimental to the producer (Valentino et al., 2021) and vice versa, if the products produced by MSMEs are of a quality that matches customer expectations, they will be able to increase sales volume (Ababil et al., 2019).

In marketing the products produced, each producer will require a greater cost to get new customers than the costs that must be incurred to retain existing customers. So to be able to retain existing customers, producers must be able to maintain the quality of the products produced (Trianah et al., 2017) because the level of customer satisfaction with a product is very dependent on the quality of the product (Suprapto, 1997) and product quality will also affect the ability of producers to face increasingly fierce competition (Andreas and Tri Yuniati, 2016). Competition that occurs in an industry makes producers more sensitive to the quality of the products produced (Marakanon and Panjakajornsak, 2017), one of the efforts that can be done in facing this competition is to create a customer-oriented marketing strategy (Sidi, 2018), satisfied customers will have an emotional bond and tend to have high loyalty to a product (Kotler, 2011). Customer loyalty to a product can be seen from the customer's habit of buying products repeatedly without considering the existence of alternative products produced by competitors (McIlroy and Barnett, 2000).

To get customers with high loyalty to the products produced, manufacturers do not only focus on the consistency of product quality but also have to pay attention to how to do marketing for these products. Therefore, this study was conducted to determine the effect of digital marketing and product quality on customer loyalty of one of the MSMEs in Sidoarjo Regency which produces processed mackerel fish meat.

2. Literature Review

2.1 Digital Marketing

Marketing is one of the efforts made by producers to introduce their products to the public (Rostiani et al., 2022), while digital marketing is marketing activities carried out by producers using various web-based media, such as blogs, websites, email, adwords or social networks (Sanjaya and Tarigan, 2009). The presence of digital marketing today is caused by the rapid development of web 2.0-based information technology followed by mobile technology (Kasali, 2011). Marketing of products produced by manufacturers digitally can help increase the number of product sales and profits obtained (Reinartz and Kumar, 2005) because the reach of marketing carried out digitally is very large, wherever, whenever and in any way (Saputra et al., 2020).

There are three important elements that describe the level of success in implementing a digital marketing strategy, namely high visitor traffic from websites or online media used for marketing, conversions or users connected to the
company's business and engagement which is marked by how the company builds relationships with target customers who have been personally contacted (Muljono, 2019). The high number of visitors to a website or online store indicates that there are more potential buyers (Primadhita et al., 2018).

Based on the results of research conducted by (Masito, 2021), states that digital marketing has a positive and significant effect on consumer loyalty to Cheers drinking water products (study at PT. Atlantic Biruraya), the same thing was said by (Sidi, 2018) which states that digital marketing has a positive and significant effect on consumer loyalty at Hj. S Malang City. Based on the results of some of these studies, the hypotheses in this study are:

Hypothesis 1: Digital marketing has a positive and significant effect on customer loyalty.

2.2 Product Quality

Product quality is the ability of a product produced by manufacturers to be able to meet customer wants and needs (Kotler and Keller, 2016). In making purchases of goods and services, customers generally expect that the products they consume can be enjoyed with quality in accordance with customer expectations, so that each producer must be able to produce goods and services that will be consumed by customers with good quality (Andalusi, 2018).

The quality of the resulting product will have an impact on customer satisfaction so that it will affect the increase in buying interest (Wantara and Tambrin, 2019) and product quality that can meet customer satisfaction will have an impact on increasing customer loyalty (Sutrisno and Haryani, 2017) because customer loyalty is directly influenced by satisfaction or dissatisfaction with a product that accumulates within a certain period of time (Mowen and Minor, 2022).

Based on the results of research conducted by (Trianah et al., 2017), states that product quality has a positive and significant effect on customer loyalty at D'Besto Mangun Jaya 2 Tambun Selatan, the same thing was said by (Dewantoro et al., 2021) which states that product quality has a positive and significant effect on customer loyalty at the Coffee Shop FIHI Pekanbaru. Based on the results of some of these studies, the hypotheses in this study are:

Hypothesis 2: Product quality has a positive and significant effect on customer loyalty.

3. Methods

3.1 Research Design and Sample

This research is a quantitative research with a descriptive and verification approach. Descriptive approach means that the research carried out is in a group of people or the object of research, a condition, a system of thought or a class of events that occur in the present.

The sample used in this study is a customer of one of the MSMEs in Sidoarjo Regency who has made repeated purchases 5 times, this is related to the variable to be studied, namely customer loyalty. The number of samples in this study was 50 customers who had made repeated purchases of processed mackerel meat products, while the data collection techniques carried out in this study were through interviews, questionnaires and observations (Sugiyono, 2017).

3.2 Instrument Test

3.2.1 Validity Test

Validity test is one of the procedures used to measure whether the research variables are valid or not. The questionnaire can be said to be valid if the statement on the questionnaire is able to reveal something that is measured by the questionnaire. To be able to find out whether each question item is valid or not by looking at the corrected item total correlation value. If the question item has $r$ count $> r$ table, then the question item can be said to be valid (Suharsimi Arikanto, 2006).
3.2.2 Reliability Test

Reliability test is used to determine the consistency of the measuring instrument used and shows the extent to which the measuring instrument can be trusted and relied on in conducting research. Measurement of the level of reliability of a research variable can be seen from the statistical results of Cronbach's Alpha (α), a variable is said to be reliable if it gives Cronbach's Alpha value > 0.60 (Sanjaya, 2018).

3.3 Classic Assumption Test

3.3.1 Normality Test

To find out the independent variable and the dependent variable have a normal distribution or cannot be detected using the Kolmogorov-Smirnov test on the observed value and the predictive value of the independent variable on the dependent variable. Normality will be fulfilled if the probability of calculating the test results is greater than the level of the research test (Mulyanto and Wulandari, 2010).

3.3.2 Heteroscedasticity Test

Heteroscedasticity test is one of the tests to find out whether in a regression model there is an inequality of variance from the residuals from one observation to another (Priyatno, 2011). The heteroscedasticity test in this study uses the scatter plot method, namely by looking at the pattern of the regression scatter plot points, if the points on the scatter plot spread in an irregular pattern above and below zero on the Y axis, then there is no heteroscedasticity problem (Kalesaran et al, 2014).

3.4 Hypothesis Test

3.4.1 Coefficient of Determination Test (R²)

The coefficient of determination test was carried out to measure the extent to which the independent variables were able to explain the dependent variable. The coefficient of determination test is expressed in percentages whose values range between 0 < R² < 1, if the value of R² obtained is close to 1, it shows a stronger influence (Hartono, 2009).

3.4.2 t-Test

T-test is one of the individual partial regression coefficient tests used to determine the independent variables affect the dependent variable (Sujarweni, 2015). To find out the truth of the hypothesis, criteria are used if t count > t table then reject Ho and accept Ha, meaning that there is an influence between the dependent variable on the independent variable (Lussy, 2018).

4. Results and Discussion

4.1 Instrument Test Results

4.1.1 Validity Test Results

Validity test is one of the procedures used to measure whether the research variables are valid or not. The questionnaire can be said to be valid if the statement on the questionnaire is able to reveal something that is measured by the questionnaire. To be able to find out whether each question item is valid or not by looking at the corrected item total correlation value. If the question item has r count > r table, then the question item can be said to be valid (Suharsimi Arikanto, 2006).

Based on the table 1, it can be seen from the variables used in this study consisting of 18 statements, having r tables (0.278). The results of the validity test show that the value of the correlation coefficient r-count > r-table, which means that each statement item on each variable is valid. The way to get the r table value is df = n-2, where the number of respondents is 50, so 50-2 = 48, then the r table value is 0.278.
Table 1. Validity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Inquiry Code</th>
<th>Corrected Item-Total Correlation</th>
<th>r Table</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Marketing</td>
<td>X1.1</td>
<td>0.729</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X1.2</td>
<td>0.588</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X1.3</td>
<td>0.771</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X1.4</td>
<td>0.560</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X1.5</td>
<td>0.555</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X1.6</td>
<td>0.725</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td>Product Quality</td>
<td>X2.1</td>
<td>0.738</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X2.2</td>
<td>0.580</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X2.3</td>
<td>0.754</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X2.4</td>
<td>0.586</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X2.5</td>
<td>0.430</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>X2.6</td>
<td>0.751</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>Y1.1</td>
<td>0.706</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Y1.2</td>
<td>0.557</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Y1.3</td>
<td>0.712</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Y1.4</td>
<td>0.528</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Y1.5</td>
<td>0.410</td>
<td>0.278</td>
<td>Valid</td>
</tr>
<tr>
<td></td>
<td>Y1.6</td>
<td>0.708</td>
<td>0.278</td>
<td>Valid</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

4.1.2 Reliability Test Results

Reliability test is used to determine the consistency of the measuring instrument used and shows the extent to which the measuring instrument can be trusted and relied on in conducting research. Measurement of the level of reliability of a research variable can be seen from the statistical results of Cronbach's Alpha (\(\alpha\)), a variable is said to be reliable if it gives Cronbach's Alpha value > 0.60 (Sanjaya, 2018)

Table 2. Reliability Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Cronbach's Alpha standard</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Marketing</td>
<td>0.703</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Product Quality</td>
<td>0.723</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
<tr>
<td>Customer Loyalty</td>
<td>0.715</td>
<td>0.60</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

Based on the table 2, the reliability test shows that Cronbach's Alpha of all research variables used is declared reliable. Because the Cronbach's Alpha value of each variable is greater than the comparison Alpha, it can be concluded that all variables in this study can have good measurement consistency.
4.2 Classic Assumption Test Results

4.2.1 Normality Test Results

To find out the independent variable and the dependent variable have a normal distribution or cannot be detected using the Kolmogorov-Smirnov test on the observed value and the predictive value of the independent variable on the dependent variable. Normality will be fulfilled if the probability of calculating the test results is greater than the level of the research test (Mulyanto and Wulandari, 2010)

<table>
<thead>
<tr>
<th>Table 3. Normality Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>One-Sample Kolmogorov-Smirnov Test</strong></td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td><strong>Normal Parameters</strong>&lt;sup&gt;ab&lt;/sup&gt;</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td><strong>Most Extreme Differences</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Test Statistic</strong></td>
</tr>
<tr>
<td><strong>Asymp. Sig. (2-tailed)</strong></td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

Based on the table 3, the normality test shows that the Asymp value. Sig. of all research variables used is greater than 0.05, so it can be concluded that all variables are normally distributed.

4.2.2 Heteroscedasticity Test Results

![Scatterplot](image)

**Figure 1.** Heteroscedasticity Results

Figure 1 shows that the points contained in the scatter plot graph spread randomly or do not form a certain pattern. This shows that there is no heteroscedasticity in the regression model.
4.3 Hypothesis Test Results

4.3.1 Coefficient of Determination Test Results ($R^2$)
The value of the coefficient of determination ($R^2$) ranges from $0 < R^2 < 1$. A small value of $R^2$ means that the ability of the independent variable to explain the variation of the dependent variable is very limited. Conversely, if the value is close to 1, it means that the independent variable provides all the information needed to predict the dependent variable.

Table 4. Coefficient of Determination Test Results

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R-Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.923</td>
<td>0.852</td>
<td>0.846</td>
<td>0.897</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

Based on the table 4, the R-square value of 0.852 means that the variability of the independent variable explains the dependent variable of 85.20% or the value states that the variables of digital marketing and product quality affect the customer loyalty by 85.20% and the remaining 14.80% influenced by other variables.

4.3.2 t-Test Results

Hypothesis testing with t test is used to determine which partial hypothesis is accepted. The first hypothesis ($H_1$) states that digital marketing has a positive and significant effect on customer loyalty.

Table 5. The Results of the Hypothesis Test of Digital Marketing on the Customer Loyalty

<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>7.216</td>
<td>1.197</td>
<td>6.028</td>
<td>.000</td>
</tr>
<tr>
<td>Digital Marketing ($X_1$)</td>
<td>.738</td>
<td>.045</td>
<td>.921</td>
<td>16.402</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

Based on the test results in the table 5, the value of $t$ count > $t$ table is 16.402 > 1.678. Thus, the first hypothesis proposed is that there is a significant influence between digital marketing on the customer loyalty.

The second hypothesis ($H_2$) states that product quality has a positive and significant effect on customer loyalty.

Table 6. The Results of the Hypothesis Test of Product Quality on the Customer Loyalty

<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>8.195</td>
<td>1.182</td>
<td>6.936</td>
<td>.000</td>
</tr>
<tr>
<td>Product Quality ($X_2$)</td>
<td>.703</td>
<td>.045</td>
<td>.916</td>
<td>15.793</td>
</tr>
</tbody>
</table>

Source: Primary data processed, 2022.

Based on the test results in the table 6, the value of $t$ count > $t$ table is 15.793 > 1.678. Thus the second hypothesis proposed is that there is a significant influence between product quality on the customer loyalty.
5. Conclusion

This study examines the effect of digital marketing and product quality on customer loyalty. Based on the results of the research above, the following conclusions can be drawn:

1) Based on the results of data analysis in this study, it can be seen that the results of hypothesis testing, especially the research model, found that the research model consisting of digital marketing and product quality had a positive and significant effect on customer loyalty.

2) The R-square value of 0.852 means that the variability of the independent variable explains the dependent variable by 85.20% or the value states that the digital marketing variable and product quality affect customer loyalty by 85.20% and the remaining 14.80% is influenced by other variables.

References


