Analysis of the Effect of E-Service Quality on Customer E-Satisfaction of Lotte Mart Grosir Medan

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ABSTRACT
E-service quality is an important factor of marketing products by using online media. It is an expectation as what customers want by online media rather than services that may be provided by the company. E-satisfaction describes how the quality of E-service Quality can be received and provides benefits to users of online company sites. The present study is a survey research using an associative quantitative approach intending to determine the effect of the Efficiency, fulfillment System availability, and Privacy on E-satisfaction. The population of the study included all Lotte Mart Grosir Medan consumers who have used the Lotte Mart Grosir online shopping application during 2019 as of 2174. The sampling method using the Slovin formula so that there were 96 samples of the study. The data collection method used a questionnaire and the collected data were then analyzed by using a multiple linear regression. The result of the study and data analysis shown that the factors of efficiency, fulfillment, system availability and privacy had a positive and significant effect on E-satisfaction. Efficiency partially had a positive and significant effect on E-satisfaction. Fulfillment partially had a positive and significant effect on E-satisfaction. System availability partially had a significant effect on E-satisfaction. Privacy partially had a significant effect on E-satisfaction. It is suggested to the Municipal Health Department of Medan to improve the control and supervisory for any corporate engaged in food such as Lotte Mart Medan.

Keywords: E-Service quality, E-satisfaction, Customer

BACKGROUND
The rapid growth of the e-commerce market share in Indonesia cannot be doubted. The growth of e-commerce is supported by data from the Minister of Communication and Information which states that the value of e-commerce transactions in Indonesia in 2015 reached US $ 3.5 billion. This figure is up 34.6% from the previous year. When compared to 2011, the value of electronic commerce transactions in Indonesia has jumped 250%. Based on this data, it can be seen that the e-commerce market is very potential and e-commerce-based companies must implement the right strategy in order to excel in the e-commerce industry (Pratomo, 2019). In marketing products through online media, the quality of electronic services (e-service quality) is an important thing. Electronic service quality (E-Servqual) is an expectation as what customers want through online media rather than services that may be provided by the company. Electronic service quality (E-Servqual) is an economic activity that produces or produces efficient time, media, form and psychological needs or needs.

As a distributor of household products, Lotte Mart Grosir is here to meet the needs of business partners by providing quality products at competitive prices. In major cities of Indonesia, Lotte Mart Grosir is relatively easy to find because it has 28 outlets, which are spread across

Jabodetabek, West Java, East Java, Central Java, Yogyakarta, Sumatra, Bali and Kalimantan. All Lotte Mart Grosir products can be seen and available at www.lottegrosir.co.id. Besides, Lotte Mart Grosir has an online shopping application that can be downloaded through the play store under the name Lotte Mart Grosir Indonesia. Even though they have developed a strong modern outlet network and business expansion through cyberspace, there are still many Lotte Mart Grosir consumers who are not satisfied with the services provided. Researchers made preliminary observations on several Lotte Mart Grosir consumers in Medan City, North Sumatra Province through reviews and ratings of users of the Lotte Mart Grosir online shopping media. It is known that 20.0% answered that they were satisfied with the service quality (E-service quality) of Lotte Mart Grosir Medan, 66.67% were not satisfied and 13.33% stated that they were very dissatisfied with the quality of the company's electronic service (e-service quality).

As a solution to customer dissatisfaction, the company began to implement the main dimensions of e-commerce quality, namely Efficiency, fulfillment, System availability and Privacy. With the Efficiency dimension, the company strives to increase the ease and speed of accessing and using the site. With fulfillment, companies strive to keep the site's promises about order availability and item availability fulfilled. With System availability, the company ensures the correctness of the technical functions of the site. With the privacy dimension, the company seeks to improve the ability of a website or site to provide a sense of security and protect user information. By applying the 4 main dimensions of e-commerce quality, the company hopes that there will be an increase in customer satisfaction when shopping online at Lotte Mart Grosir.

**E-Service Quality**

E-service Quality or also known as E-servqual is a new version of Service Quality (ServQual). E-service quality is the service provided on the internet network as an extension of the ability of a site to facilitate shopping, purchasing, and distribution activities effectively and efficiently. According to Zeithaml, Parasuraman and Malhotra (2009), E-service Quality is defined as the extent to which a website facilitates shopping in the efficient and effective purchase and delivery of products and services. The same thing was stated by Zeithaml et al, (2009) which distinguishes the 7 E-servqual dimensions into 4 (four) core dimensions that customers use to assess websites where they do not experience questions or problems, namely:

1. **Efficiency**, speed and ease of access and use of the website. Website efficiency affects user access to the quality of website services. Efficiency on the internet can lead to value as well as purchase intention.

2. **Fulfillment**, fulfillment which refers to the success of the website in delivering products or services and its ability to correct errors that occur during the transaction process. Fulfillment includes service promise accuracy, product stock availability, and product delivery according to the promised time. Every organization manages a set of processes.

3. **System availability**, the correctness of the technical functions of the site.

4. **Privacy**, related to how a website can be proven to be trusted to store personal data for its customers. Online services that are performed well and smoothly can build trust and confidence in customers in the form of a guarantee that shopping behavior data will not be given to any other party and that customer credit card information is guaranteed security.

**E-satisfaction**

E-satisfaction is customer satisfaction with respect to previous
purchase experiences with a given e-commerce company. In his efforts at an online-based business, efforts to deliver satisfaction will be different and the marketer's task is to make adjustments to these differences so that satisfaction with an online-based business will be achieved (Zikmund, 2013). The dimensions of E-satisfaction used are quoted from Zeithaml in Suomi (2009), namely:

1. **Usefulness**
   Is the extent to which an electronic media can be useful for activities carried out by individuals on a daily basis including the benefits of the system for work and the compatibility of the system with the individual's lifestyle.

2. **Enjoyment**
   Is the level of comfort felt by individuals from using an electronic media including ease of use and convenience in using the system.

3. **Past Experience**
   Is a perception that arises from experience in using an electronic media including experience in communicating through an electronic media as well as experiences with other systems.

4. **Decision**
   It is the decision of the individual to use or not to use the offered or provided electronic media including the decision to use the provided system and the decision to switch media

**Conceptual Framework**
This study consists of 4 independent variables, namely X1 (Efficiency), X2 (Fulfillment), X3 (System availability) and X4 (Privacy) and 1 dependent variable Y (E-satisfaction) so that the research conceptual framework can be described as follows;

![Conceptual Framework Diagram](image-url)

**Research Hypothesis**
Based on the problem formulation above, the research hypothesis is as follows:

1. Efficiency has a significant effect on E-satisfaction at Lotte Mart Grosir Medan
2. Fulfillment has a significant effect on E-satisfaction at Lotte Mart Grosir Medan
3. System availability has a significant effect on E-satisfaction at Lotte Mart Grosir Medan
4. Privacy has a significant effect on E-satisfaction at Lotte Mart Grosir Medan
5. Efficiency, fulfillment, system availability and privacy have a significant effect on E-satisfaction at Lotte Mart Grosir Medan.
RESEARCH METHODS

This research is a survey research with an associative quantitative approach, namely research that aims to determine the relationship between two or more variables. Primary data sources are questionnaires and primary data obtained from documents such as a brief history of the company and the efforts made to increase satisfaction. The population of this study were all Lotte Mart Grosir Medan consumers who have used the Lotte Mart Grosir online shopping application during 2019, amounting to 2174 and the sample determination in this study used the Slovin formula totaling 96 people. The questionnaire data was tested using the Statistical Package for Social Science (SPSS) software version 21.

RESULTS AND DISCUSSION

Simultaneous F Test Results

Simultaneous F test was conducted to determine whether the 4 independent variables X1 (Efficiency), X2 (Fulfillment), X3 (System availability) and X4 (Privacy) had a significant effect on the dependent variable (E-satisfaction).

Table 1: Simultaneous F Test Results

<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>1 Regression</td>
<td>355.421</td>
<td>4</td>
<td>88.855</td>
<td>40.321</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>200.538</td>
<td>91</td>
<td>2.204</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>555.958</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: E-satisfaction
b. Predictors: (Constant), Privacy, Fulfillment, System availability, Efficiency

Table 1 shows that the F-count = 40.321 with a significance value (p-value) = 0.000. When compared with the value of F-table = 2.31 (for N = 96 or df = 94), it can be seen that F-count (40.321)> F-table (2.31) and sig-p (0.000) <0.05, so that It is concluded that the 4 variables X1 (Efficiency), X2 (Fulfillment), X3 (System availability) and X4 (Privacy) have a significant effect on the dependent variable Y (E-satisfaction).

Partial t-test results

To determine the effect of each independent variable on the dependent variable Y (E-satisfaction), a partial t-test was performed with the following results:

Table 2: Partial t-test results

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model (Constant)</td>
<td>1.851</td>
<td>2.820</td>
<td>.656</td>
<td>.513</td>
</tr>
<tr>
<td>Efficiency</td>
<td>.620</td>
<td>.072</td>
<td>.668</td>
<td>8.592</td>
</tr>
<tr>
<td>Fulfillment</td>
<td>.189</td>
<td>.060</td>
<td>.200</td>
<td>3.157</td>
</tr>
<tr>
<td>System availability</td>
<td>.198</td>
<td>.080</td>
<td>.158</td>
<td>2.461</td>
</tr>
<tr>
<td>Privacy</td>
<td>.283</td>
<td>.132</td>
<td>.164</td>
<td>2.135</td>
</tr>
</tbody>
</table>

Effect of Efficiency on E-satisfaction (Y)

Table 2 shows that the t-value X1 (Efficiency) = 8.592 with a significance (p-value) = 0.000. When compared with the t-table value (N = 96 or df = 91) of 1.98 and sig- = 0.05, it can be seen that t-count X1 (8.592)> t-table (1.98) and p-value (0.000) <0.05. The results of this analysis meet the requirements of the hypothesis test where if t-count> t-table and p-value <0.05, it means that Ha is accepted or Ho is rejected. Thus, it can be concluded that the variable X1 (Efficiency) has a significant effect on the dependent variable Y (E-satisfaction).

In terms of efficiency, Lotte Mart Grosir is very concerned about the aspects of speed and ease of using and accessing the website in providing satisfaction to customers. The reason companies maintain efficiency or ease and speed in accessing
internet websites is because the ease and speed of website access can influence consumer buying interest.

The Effect of Fulfillment on E-satisfaction (Y)

Table 2 shows that the t-value \( X_2 \) (Fulfillment) = 3.157 with a significance (p-value) of 0.002. When compared with the t-table value (N = 96 or df = 91) of 1.98 and sig-\( \bar{p} \) = 0.05, it can be seen that the t-count \( X_2 \) (3.157) > t-table (1.98) and p-value (0.002 ) <0.05. The results of this analysis meet the requirements of the hypothesis test where if t-count> t-table and p-value <0.05, it means that Ha is accepted or Ho is rejected. Thus, it can be concluded that the variable \( X_2 \) (Fulfillment) has a significant effect on the dependent variable Y (E-satisfaction).

To further increase the fulfillment, Lotte Mart Grosir always supervises the website's ability to correct every belief that the accuracy and ability of the website in fulfilling every consumer order and the promised delivery timeliness must always be guaranteed so that consumers are satisfied and confident that the company is able to fulfill every order consumer.

Effect of System availability on E-satisfaction (Y)

Table 2 shows that the t-value \( X_3 \) (System availability) = 2.461 with a significance (p-value) of 0.016. When compared with the t-table value (N = 96 or df = 91) of 1.98 and sig-\( \bar{p} \) = 0.05, it can be seen that the t-count \( X_3 \) (2.461) > t-table (1.98) and p-value (0.016 ) <0.05. The results of this analysis meet the requirements of the hypothesis test where if t-count> t-table and p-value <0.05, it means that Ha is accepted or Ho is rejected. Thus, it can be concluded that the X3 variable (System availability) has a significant effect on the dependent variable Y (E-satisfaction).

Lotte Mart Grosir company places special personnel in handling system availability to guarantee the availability of an online business system whenever it is needed and accessed by customers. The company realizes that the guarantee of the site's existence can make customers feel sure that the online shopping system provided by the company is really functioning properly so as not to cause delays in the delivery of customer orders.

Effect of Privacy on E-satisfaction (Y)

Table 2 shows that the t-value \( X_4 \) (Privacy) = 2.135 with a significance (p-value) of 0.035. When compared with the t-table value (N = 96 or df = 91) of 1.98 and sig-\( \bar{p} \) = 0.05, it can be seen that t-count \( X_4 \) (2.135) > t-table (1.98) and p-value (0.035 ) <0.05. The results of this analysis meet the requirements of the hypothesis test where if t-count> t-table and p-value <0.05, it means that Ha is accepted or Ho is rejected. Thus, it can be concluded that the variable \( X_4 \) (Privacy) has a significant effect on the dependent variable Y (E-satisfaction).

Lotte Mart Grosir is very aware of the importance of maintaining customer privacy rights so that customers feel confident in the company's ability to maintain data integrity from customers. The company's ability to maintain the privacy of every customer who comes shopping will certainly increase customer interest in shopping.

R-Square Test Results

To determine the influence of the independent variable on the dependent variable Y, namely sales volume, an R-square test was performed with the following results:

<table>
<thead>
<tr>
<th>Table 3: Results of the Determination Test R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Summary*</td>
</tr>
<tr>
<td>Model</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>a. Predictors: (Constant), Privacy, Fulfillment, System availability, Efficiency</td>
</tr>
<tr>
<td>b. Dependent Variable: E-satisfaction</td>
</tr>
</tbody>
</table>
Table 3 shows that the adjusted r-square value = 0.623, this means that the influence of the independent variable on the dependent variable Y (E-satisfaction) is 0.623 x 100% = 62.3%. In other words, 62.3% of the E-satisfaction variable can be explained by the variables Efficiency, fulfillment, System availability and Privacy, and trust, while the rest (37.7%) is explained by other factors not examined.

**Regression Equations**

The regression equation can be arranged according to the coefficient value of the following calculation results:

\[ Y = a + b_{1}X_{1} + b_{2}X_{2} + b_{3}X_{3} + b_{4}X_{4} + e \]

\[ Y = 1.851 + 0.620X_{1} + 0.189X_{2} + 0.198X_{3} + 0.283X_{4} + e \]

**Interpretation:**

1) \[ Y = 1.851 + 0.620X_{1} \]

This equation shows that every 1 point increase in Efficiency can increase E-satisfaction by 1.851 + 0.620 = 2.4 points. In other words, every increase in Efficiency can increase E-satisfaction by 2.4 times.

2) \[ Y = 1.851 + 0.189X_{2} \]

This equation shows that every 1 point increase in Fulfillment can increase E-satisfaction by 1.851 + 0.189 = 2 points. In other words, every increase in Fulfillment can increase E-satisfaction by 2 times.

3) \[ Y = 1.851 + 0.198X_{3} \]

This equation shows that every increase in system availability by 1 point can increase E-satisfaction by 1.851 + 0.198 = 2 points. In other words, every increase in system availability, can increase E-satisfaction by 2 times.

4) \[ Y = 1.851 + 0.283X_{4} \]

This equation shows that every 1 point increase in Privacy can increase E-satisfaction by 1.851 + 0.283 = 2.1 points. In other words, every increase in Privacy, can increase E-satisfaction by 2.1 times.

**CONCLUSION**

Based on the results of data analysis about the effect of service quality on E-satisfaction at Lotte Mart Grosir Medan, the following conclusions once answered the research hypothesis:

1. Efficiency, fulfillment, system availability and privacy have a positive and significant effect on E-satisfaction.
2. Efficiency partially has a positive and significant effect on E-satisfaction.
3. Partial fulfillment has a positive and significant effect on E-satisfaction.
4. System availability partially has a significant effect on E-satisfaction.
5. Privacy partially has a significant effect on E-satisfaction.

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