THE INFLUENCE OF SYSTEM QUALITY, INFORMATION QUALITY AND SERVICE QUALITY ON USER SATISFACTION FINANCIAL TECHNOLOGY SHOPEEPA

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Abstract

Financial technology has changed the habit of people who previously made cash payments to cashless payments. This study aims to determine and describe the effect of system quality, information quality, and service quality on user satisfaction with ShopeePay financial technology. The method used is descriptive and associative methods with a research instrument in the form of a questionnaire. The sample amounted to 100 respondents with a non-probability sampling method with purposive sampling technique. The statistical analysis used is multiple regression analysis. The results of multiple linear regression analysis can be concluded that system quality, information quality, and service quality have a positive and significant effect on user satisfaction of ShopeePay financial technology both partially and simultaneously. Based on the coefficient of determination analysis test, it was obtained at 67.3%. This shows that the effect of system quality, information quality and service quality on user satisfaction of ShopeePay financial technology is 67.3%. While the remaining 32.7% is influenced by other variables not examined in this study.

Keywords

1. Introduction

Digital transactions are increasingly becoming a trend among Indonesian society in urban and rural areas. As an assessed payment transaction tool more effectively, digital transactions have become one of the drivers of economic growth. In 2022, the value of electronic money transactions will increase by 30.84% if compared to 2021 in the same period so that digital transactions in 2022 it will reach Rp. 399.6 trillion, this was disclosed by the Bank Indonesia. This increase in transaction value is supported by the increase in public acceptance of online shopping. Developing transaction The increasingly rapid digital economy and finance is also caused by widespread and ease of digital payment systems and fast digital banking (Wisnubroto, 2023).

Based on the results of a survey conducted by Jakpat of 2,908 respondents aged 15-44 years throughout Indonesia in semester 1/2022, as many as 52% of respondents have used digital payment services. This percentage increased by 12% from the previous year only 40%. Digital wallets are used for digital payments by 94% of respondents, while mobile banking is used by 54% of respondents and those who use it both were 48% of respondents. In the survey, 94% of respondents were more choose to use a digital wallet, and 54% of respondents choose to use mobile banking services. The use of digital wallets between generations does not differ much. Survey results show that the millennial generation uses digital wallets more with a percentage of 91%, in second place is generation X with a percentage of 90% and followed by generation Z with a percentage of 88% (Sadya, 2022).

The well-known survey agency Populix conducted a survey regarding digital wallets with 1000 respondents. The survey results stated that Gopay was in first place with a percentage of 88%, followed by Dana with 83%, then Ovo
with 79%, and ShopeePay with a percentage of 76%. The survey was carried out in various areas such as Greater Jakarta, Bandung, Surabaya, Semarang, Medan, other cities in Java, and other cities in Indonesia.

Based on the results of a pre-survey of 10 students regarding the quality of the ShopeePay system, it can be seen that there are still several students who state they are neutral and disagree with the flexibility, ease of access, speed of access, system security and reliability of the ShopeePay system. So it can be assumed that the quality of the ShopeePay system can be said to have poor system quality.

Based on the pre-survey results, several students were neutral and disagreed regarding the completeness of the information, easy to understand, relevant, and the information was accurate and trustworthy. So it can be assumed that the information generated by the ShopeePay system still causes users to doubt their decision making.

The pre-survey results stated that the services provided by ShopeePay, shows service quality that is lacking or growing creates trust and confidence in its users. This can be seen from several students who responded neutrally and disagreed with the indicators of empathy, assurance, reliability, responsiveness and physical evidence. Based on the explanation above, the author is interested in conducting research with the title The Influence of Quality Systems, Information Quality and Service Quality on Satisfaction Financial Technology Users (Survey of Sangga University Students Buana YPKP Bandung).

1.1 Objectives

Based on the background description, the researcher formulates the problem regarding research on The Influence of Quality Systems, Information Quality and Service Quality on Satisfaction Financial Technology Users (Survey of Sangga University Students Buana YPKP Bandung).

2. Literature Review

After reviewing the literature, researchers found several studies that have similarities in the subject of the study, look at this table:

<table>
<thead>
<tr>
<th>No.</th>
<th>Research Title</th>
<th>Variable</th>
<th>Research result</th>
<th>Equality</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Influence of System Quality, Information Quality and Service Quality on LinkAja User Satisfaction (Inggit and Wijaksana, 2020)</td>
<td>Influence of System Quality, Information Quality, Service Quality</td>
<td>System quality, information quality and service quality have a positive and significant effect on LinkAja user satisfaction, both partially and simultaneously.</td>
<td>Independent variables and dependent variables, sampling techniques, methods used</td>
<td>Object Research, Research sites</td>
</tr>
<tr>
<td>2</td>
<td>The Influence of System Quality, Information Quality and Service Quality on User Satisfaction of Institutional Level Financial Application Systems (SAKTI) (Sihotang et al., 2020)</td>
<td>System Quality, Information Quality, Service Quality, Financial Application Systems</td>
<td>Partially, system quality and service quality have a significant effect on user satisfaction, while information quality has no significant effect. System quality, information quality and service quality influence user satisfaction simultaneously.</td>
<td>Independent variables and dependent variables, sampling techniques</td>
<td>Object Research, Research sites, Methods used</td>
</tr>
</tbody>
</table>
### 2.1 System Quality

Urbach & Muller (2012) define system quality as the quality of the combination of hardware and software in an information system whose focus is on system performance. System quality reflects the expected characteristics of the system performance itself (Krisdiantoro et al., 2018). Jogiyanto (2007) System quality is the technical quality of the system itself. System Quality DeLone & McLean (2003) defines system quality as the desired quality characteristics of the information system itself, and the desired quality of information regarding product characteristics (Azzahra & Pratomo, 2020).

From the description above, researchers can draw the conclusion that system quality is a characteristic characteristic of the desired combination of hardware and software from an information system which also influences the information system itself.

### 2.2 Information Quality

Information quality is the output of the user's use of the information system (Suranto, 2022). O'Brien (2009) defines information quality as the level to which information has characteristics of content, form and time, which provide value to its users (Putra et al., 2020). Information Quality according to DeLone & McLean (2003), namely measuring the quality of output from the system, namely the quality produced by the information system, especially in the form of reports (Azzahra & Pratomo, 2020).

From the description above, the researcher draws the conclusion that information quality is the quality of output or output produced from an information system which has characteristics of content, form and time that provide benefits to end users in the form of reports.

### 2.3 Quality of Service

According to Kotler (2019) in (Rustiana, 2022) service quality is a form of consumer assessment of the level of service received and the expected service. Azzahra & Pratomo (2020) argue that service quality is a responsive reaction obtained from information system developers in the form of personnel support for fulfilling expectations and providing solutions to user problems.

It can be concluded that service quality is a service provided by the developer to users in the form of application updates and reviews from the developer if problems occur in the application.

### 2.4 User Satisfaction

According to Kotler & Keller (2009) customer satisfaction is a person's assessment of product performance that emerges after comparing the perceived performance/results with their expectations. If the product meets expectations, then the customer is satisfied. If the product performance exceeds expectations, the customer will be satisfied (Adhitya Rinaldi & Suryono Budi Santoso, 2018). Delone & McLean (2003) define user satisfaction as a response to the use of an information system that is felt by the user after using the information system (Azzahra & Pratomo, 2020).

From the description above, it can be concluded that user satisfaction is a person's assessment of the performance/results of an information system that arises after using the information system by comparing expectations with the performance/results they feel, and this assessment will be used as system development.

### 2.5 D&M IS Success Theory

The D&M IS Success theory 1992 is the first model connects variables measuring the success of information systems, which include information quality, system quality, user satisfaction, individual impact and organizational impact. In this model, measuring six variables only measures one variable influencing other variables, does not measure variables separately or independently (DeLone & McLean, 1992).

### 2.6 Financial Technology

In the era of industrial revolution 4.0, the term financial technology or often called fintech, it is a new breakthrough in the financial services sector that utilizes technology in the financial system to provide easy transactions. In Bank

| 3 | The Influence of System Quality, Information Quality and Service Quality on SAKTI User Satisfaction at KPPN Gorontalo (Suranto, 2022) | System Quality, Information Quality, and Service Quality show a positive and significant relationship to SAKTI user satisfaction at KPPN Gorontalo. | Independent variables and dependent variables, Audit Tenure, Audit Rotation |
Indonesia Regulation Number 19/12/PBI/2017, "financial technology is the use of technology in the financial system that produces new products, services, technology, and/or business models and can have an impact on monetary stability, financial system stability, and/or efficiency, smoothness, security and reliability of the payment system" (Bank Indonesia, 2017).

3. Methods

The research use method descriptive and associative methods with a research instrument in the form of a questionnaire. The data source used in this research was obtained through questionnaires which converted to Method Succesive Interval. The Instrument research use Validity Instrument, Reliability Instrument and Cassic Assumption Test. Regression analysis process carried out is using multiple regression analysis drawing conclusions using statistical tests, t-test, and F-test.

4. Data Collection

The data collection techniques used in this research are Library Research and Field Research. The data collection technique in this study involves using a questionnaire method, which means collecting data by gathering responses from the Student at Sangga Buana University. The sampling technique with random sampling techniques to determine the sample.

The measurement variables for this research are:

Table 2. Variable Indicators

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Quality (X₁)</td>
<td>1. Easy to use</td>
</tr>
<tr>
<td></td>
<td>2. Flexibility</td>
</tr>
<tr>
<td></td>
<td>3. Access speed</td>
</tr>
<tr>
<td></td>
<td>4. Security</td>
</tr>
<tr>
<td></td>
<td>5. System reliability</td>
</tr>
<tr>
<td></td>
<td>(Suranto:2022)</td>
</tr>
<tr>
<td>Information Quality (X₂)</td>
<td>1. Completeness</td>
</tr>
<tr>
<td></td>
<td>2. Easy to understand</td>
</tr>
<tr>
<td></td>
<td>3. Relevance</td>
</tr>
<tr>
<td></td>
<td>4. Accurate</td>
</tr>
<tr>
<td></td>
<td>(DeLone and McLean, 2003)</td>
</tr>
<tr>
<td>Quality Services (X₃)</td>
<td>1. Physical Evidence</td>
</tr>
<tr>
<td></td>
<td>2. Empathy</td>
</tr>
<tr>
<td></td>
<td>3. Responsiveness</td>
</tr>
<tr>
<td></td>
<td>4. Reliability</td>
</tr>
<tr>
<td></td>
<td>5. Guarantee</td>
</tr>
<tr>
<td></td>
<td>(Tjiptono and Chandra, 2017)</td>
</tr>
<tr>
<td>User Satisfaction (Y)</td>
<td>1. Information Satisfaction</td>
</tr>
<tr>
<td></td>
<td>2. Complete Satisfaction</td>
</tr>
<tr>
<td></td>
<td>3. Interest in reuse</td>
</tr>
<tr>
<td></td>
<td>(DeLone and McLean, 2003)</td>
</tr>
</tbody>
</table>

Source: data processed by the author (2023)

5. Results and Discussion

5.1 Validity Test and Reliability Test Result

In research, the data used must be valid, which means the instrument can be used to measure what it should measure. The minimum requirement to meet the requirements is if \( r = 0.195 \), so if the correlation between items with a total score is less than 0.195 it is declared invalid. The results of validity test in this research are:

<table>
<thead>
<tr>
<th>Question No.</th>
<th>Coefficient Validity</th>
<th>Variable</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.787</td>
<td>System Quality (X₁)</td>
<td>Valid</td>
</tr>
<tr>
<td>2</td>
<td>0.737</td>
<td>System Quality (X₁)</td>
<td>Valid</td>
</tr>
<tr>
<td>3</td>
<td>0.718</td>
<td>System Quality (X₁)</td>
<td>Valid</td>
</tr>
<tr>
<td>4</td>
<td>0.798</td>
<td>System Quality (X₁)</td>
<td>Valid</td>
</tr>
</tbody>
</table>
Table 6. Reliability Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
<th>N of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>X&lt;sub&gt;1&lt;/sub&gt;</td>
<td>0.896</td>
<td>11</td>
</tr>
<tr>
<td>X&lt;sub&gt;2&lt;/sub&gt;</td>
<td>0.919</td>
<td>8</td>
</tr>
<tr>
<td>X&lt;sub&gt;3&lt;/sub&gt;</td>
<td>0.930</td>
<td>9</td>
</tr>
<tr>
<td>Y</td>
<td>0.926</td>
<td>7</td>
</tr>
</tbody>
</table>

To determine a reliable statement you can determine if the Cronbach alpha item in the statistical reliability table is greater than 0.6. It can be seen from all variables that the Cronbach’s Alpha value is > 0.6.

5.2 Analytical Deskriptif Statistic

1. System Quality
   The results of the answers from the respondents' perceptions regarding system quality variables which consist of 11 statements. The results answer from the respondents' perceptions, the statement number 1 has the highest score with a score of 4.43 and statement number 7 has the lowest score with a score of 3.00. The
system quality has a calculated average (mean) of 3.97. In classifying the total score, respondents' responses are included in the High category.

2. Information Quality
The results of the answers from the respondents' perceptions regarding the information quality variable which consists of 8 statements. The results of the answers from the respondents' perceptions, the statement number 3 has the highest score with a score of 4.16 and statement number 7 has the lowest score with a score of 3.63. The quality of information has a calculated average (mean) of 3.96. In classifying the total score, respondents' responses are included in the High category.

3. Quality Service
The results of respondents' answers regarding the service quality variable which consists of 9 statements. The answers from the respondents' perceptions, statement number 1 has the highest score with a score of 3.97 and statement number 5 has the lowest score with a score of 3.50. The system quality has a calculated average (mean) of 3.70. In classifying the total score, respondents' responses are included in the High category.

4. User Satisfaction
The results of respondents' answers regarding the ShopeePay financial technology user satisfaction variable, which consists of 7 statements. The answers from the respondents' perceptions, statement number 6 has the highest score with a score of 4.29 and statement number 1 has the lowest score with a score of 3.94. System quality has a calculated average (mean) of 4.08. In classifying the total score, respondents' responses are included in the High category.

5.3 Classical Assumption Test Result
1. Normality test
The significant value (asym. Sig. 2 tailed) is 0.200 which is greater than 0.05. So in accordance with the basis for decision making in the Kolmogorov-Smirnov normality test above, it can be concluded that the data is normally distributed.

2. Multicollinearity Test
The tolerance value of the system quality variable (X1) is 0.268 or (> 0.10), the information quality variable (X2) is 0.264 or (> 0.10), and the service quality variable (X3) is 0.458 or (> 0, 10) which means there is no correlation between the independent variables. And the VIF value of the system quality variable is 3.726 or (< 10), the information quality variable is 3.794 or (< 10) and the quality variable services amounting to 2.186 or (< 10). So from the VIF values of the three independent variables it can be assumed that there are no multicollinearity problems between variables.

3. Heteroscedasticity Test
The scatterplot graph shows points that are spread randomly between each other and are spread above and below the number 0 on the Y axis, so it can be concluded that there is no heteroscedasticity problem in this regression model.

5.4 Statistical Result
F count value is 68.773 or more If the F table value is 2.70, it can be concluded that simultaneously variables influencing system quality, information quality, service quality significant impact on the satisfaction of ShopeePay financial technology users.

1. T test
a. The Influence of System Quality on Users Satisfaction
table with alpha = 0.05 is obtained at 1.988. The test results show that tcount is 2.222 which is greater than ttable which is 1.988. So the quality of the system influences the satisfaction of ShopeePay financial technology users.

b. The Influence of Information Quality on Users Satisfaction
table with alpha = 0.05 is obtained at 1.988. The test results show that tcount is 4.062 which is greater than ttable which is 1.988. So the quality of information influences the satisfaction of ShopeePay financial technology users.

c. The Influence of Service Quality on User Satisfaction
table with alpha = 0.05 is obtained at 1.988. Results testing shows that tcount is 2.240 greater than ttable, namely amounted to 1.988. So service quality influences user satisfaction financial technology ShopeePay.
F Test

- If the $F_{\text{count}}$ value is 68.773 or more, or if the $F_{\text{table}}$ value is 2.70, it can be concluded that simultaneously variables influencing system quality, information quality, service quality significant impact on the satisfaction of ShopeePay financial technology users.

6. Conclusion

Based on the results and discussion of the research on The Influence of Quality Systems, Information Quality and Service Quality on Satisfaction Financial Technology Users (Survey of Sangga University Students Buana YPKP Bandung), the author can draw the following conclusions:

1. System quality influences financial user satisfaction ShopeePay technology. This can be seen from the data processing results which show a tcount value of 2.222 which is greater than ttable 1.988. The system quality regression coefficient ($b_1$) is 0.172, this shows that if the system quality variable increases once, user satisfaction will increase by 0.172.

2. Information quality influences financial user satisfaction ShopeePay technology. This can be seen from the results of data processing which shows a tcount of 4.062 which is greater than ttable 1.988. The information quality regression coefficient ($b_2$) is 0.369, this shows that if the information quality variable increases once, user satisfaction will increase by 0.369.

3. Service quality influences the satisfaction of ShopeePay financial technology users. This can be seen from the data processing results which show a tcount of 2.240 which is greater than ttable 1.988. The service quality regression coefficient ($b_3$) is 0.128, this shows that if the system quality variable increases once, user satisfaction will increase by 0.128.

4. System quality, information quality and service quality influence the satisfaction of ShopeePay financial technology users. This can be seen from the data processing results which show an $F_{\text{count}}$ value of 68.773 which is greater than the $F_{\text{table}}$ of 2.70.

References


Fandy Tjiptono, Manajemen Pemasaran Jasa, PT Indeks Kelompok Gramedia, Jakarta 2017


**Biography**

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