The Influence of E-service Quality and E-trust on BRI Mobile User Loyalty with Perceived Usefulness as a Mediator

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Abstract
Technological advances make it easier to carry out various activities. In the banking business, there is Mobile Banking innovation as a means of online banking services anywhere and anytime, such as BRI Mobile. However, in practice, the use of BRIMO has not yet been implemented by all BRI bank customers. This can be caused by several factors. The research aims to analyze the influence of E-Service Quality and E-Trust on Loyalty through Perceived Usefulness. The type of research is causal quantitative. The research population is Bank BRI Bandar Lampung customers. Determining the sample using purposive sampling with the criteria a) Savings customers who are registered and using the BRIMO application, b) Savings customers, especially Britama and Simpedes account holders who transact using the BRIMO application, and c) Customers coming from 14 BRI Branch Offices under the supervision of the BRI Regional Office Bandar Lampung so that the sample size was 100. Data collection used a questionnaire with SEM PLS as a data analysis technique. Research proves that E-Service Quality and E-Trust have a significant effect on Perceived Usefulness and Loyalty. Perceived Usefulness has a significant effect on Loyalty. Perceived Usefulness is able to mediate the relationship between E-Service Quality and E-Trust on loyalty.

Keywords: E-Service Quality, E-Trust, Perceived Usefulness, Loyalty

1. Introduction
Technological advances are starting to play an important role because they can make it easier to carry out various activities which can have an impact on improving the quality of public consumption, where every consumer demands a more practical and faster service. Online social networks have become a vital medium for social interactions and information sharing between users (Anastasiei et al., 2023). This also encourages banks to continue to follow developments and changes in people's consumption patterns. Currently, many banks have utilized online media to carry out product buying and selling.

According to the latest data from APJII (Association of Indonesian internet service providers) shows that by 2022 people using the internet in Indonesia will reach almost 210 million users. So it can be interpreted that there is an addition of approximately 35 million internet users in
Indonesia. This growth can be said to be fantastic, before the Covid-19 pandemic, internet users only reached 175 million users.

With advances in internet technology, banking businesses are able to change transactional business patterns and influence trade in many trades and industries. This change in business patterns is carried out by presenting Mobile Banking as a means of online banking services anywhere and anytime. Mobile Banking is a service facility that provides easy access and speed in obtaining the latest information and financial transactions in real time (Maulana et al., 2018). According to Finance (2020), the advantages of Mobile Banking are that it is practical (no need to carry and count cash) and safe (uses PIN/secret code). Apart from that, Mobile Banking makes non-financial transactions and financial transactions easier without having to go to a bank branch, but simply using a cell phone or other electronic device that has internet access.

The convenience offered by Mobile Banking has caused people to start switching to using Mobile Banking as a means of banking transactions or buying and selling. According to Anam (2023), in 2022, BRI noted that the company's mobile banking transactions had reached IDR 2,669 trillion. This amount has increased by almost 100% compared to transactions in the 2021 period which were only recorded at IDR 1,345 trillion.

However, with the high public use of Mobile Banking and the popularity of Mobile Banking such as BRIMO, the use of BRIMO has not yet been implemented by all BRI bank customers. This can be proven through data obtained from the BRI Bandar Lampung Regional Office where it was found that the number of BRIMO users was still less than the number of manual savings accounts at the Branch Office at the BRI Bandar Lampung Regional Office.

One of the factors that influences loyalty in using BRIMO is the E-Service Quality factor. E-Service Quality is an effort to fulfill consumer needs and desires as well as the accuracy of delivery in keeping with consumer expectations online (Tjiptono, 1997). According to Chase et al. (2013), e-service quality is a broader form of service quality using internet media that connects sellers and buyers to fulfill shopping activities effectively and efficiently. Based on the results of journal studies, there are several journals that state the influence of E-Service Quality on Loyalty. Research by Magdalena & Jaolis (2018) states that E-Service Quality has a significant effect on E-Loyalty. Apart from that, Hidayah (2021) research also states that e-service quality has a positive and significant effect on e-loyalty.

The next factor that influences loyalty in using BRIMO is E-Trust. Consumer e-Trust is defined as the belief that a product or service provider can be relied upon to behave in such a way that the consumer's long-term interests can be met (Martinez & Bosque, 2013). E-trust is the confidence that consumers have in a company as a basis for carrying out online-based transactions (Hanifati & Samiono., 2018). Based on the results of journal studies, there are several journals that state the influence of E-Trust on Loyalty. Kartono & Halilah (2019) research states that there is a significant positive influence between E-trust and e-loyalty. Apart from that, research by Liani & Yusuf (2021) also states that there is a significant influence between E-trust and e-loyalty.

Apart from E-Service Quality and E-Trust, the Perceived Usefulness variable can also influence Loyalty. Perceived Usefulness is a level where a person believes that using a system can improve performance which will have an impact on increasing a person's productivity and effectiveness.
(Ginting, 2017). Irfansyah (2021) research proves that perceived usefulness positively and significantly influences loyalty. Apart from influencing loyalty, perceived usefulness can be influenced by E-Service Quality and E-Trust as well as providing a mediating influence between the relationship between E-Service Quality and E-Trust and Loyalty.

The research gap lies in the use of Perceived Usefulness as a mediating variable in the relationship between E-Service Quality and E-Trust on Loyalty. Apart from that, research discussing the influence of E-Service Quality and E-Trust on Loyalty through Perceived Usefulness at the BRI Bandar Lampung Regional Office has never been conducted. Based on the background of the problem, it can be seen that the use of BRImo Mobile Banking is still not optimal. There are several factors that influence loyalty in using BRImo Mobile Banking such as E-Service Quality and E-Trust through Perceived Usefulness. So the aim of the research is: 1) analyzing the influence of e-service quality on perceived usefulness for BRImo users at the BRI Bandar Lampung Regional Office, 2) analyzing the influence of e-trust on perceived usefulness for BRImo users at the Regional Office BRI Bandar Lampung, 3) analyze the influence of e-service quality on loyalty for BRImo users at the BRI Bandar Lampung Regional Office, 4) analyze the influence of e-trust on loyalty for BRImo users at the BRI Bandar Lampung Regional Office, 5) analyze the influence of perceived usefulness on loyalty for BRImo users at the BRI Bandar Lampung Regional Office, 6) analyzing the influence of e-service quality on loyalty for BRImo users through perceived usefulness as a mediator and 7) analyzing the influence of e-trust on loyalty for BRImo users through perceived usefulness as a mediator.

2. Literature Review

2.1. E-Service Quality

E-Service Quality or also known as E-ServQual is a new version of Service Quality (ServQual). E-ServQual was developed to evaluate a service provided on the Internet network. In the internet context, E-Service quality is explained as a careful assessment and evaluation by buyers of the quality of services provided via the web or internet (Parasuraman et al., in Aprilia, 2023).

2.2. E-Trust

Trust can be defined as “an individual's willingness to rely based on confidence in ability, benevolence, and integrity” (Gefen et al., 2003). Additionally, trust can also be defined as a customer's willingness to engage in future transactions, where, they reflect their trust in the reliability of the seller's behavior, which will lead to a perception of further reduced risk of having other transactional activities towards the same seller's company (Steenkamp et al., 1998; Japutra, Keni & Bang, 2015; Wilson, 2018; Wilson & Keni, 2018).

2.3. Perceived Usefulness

Perceived Usefulness can be understood as people's assessment of whether their decision to use or apply a particular technology is beneficial for themselves (Tojib and Tsarenko, 2012; Stocchi et al., 2016; Wilson & Keni, 2018). Furthermore, Ozturk et al., (2016) defines Perceived Usefulness as people's intention to use new technology where people have a strong sense of belief that the new technology will improve their job performance.
2.4. Loyalty
Loyalty is a consumer’s decision to voluntarily and continuously subscribe to a particular company for a long period of time (Putri & Rahayu, 2023). Loyalty will continue as long as it perceives and can receive better value (including higher quality in relation to price) than can be obtained by switching to another product.

2.5. Conceptual Framework
The following is the conceptual framework of the research, namely:

![Figure 1 Conceptual Framework](image)

2.6. Hypothesis
Based on the framework above, research hypotheses can be formulated as follows:

- **H1**: **E-Service Quality** has a significant effect on the **Perceived Usefulness of BRIMO customers at the BRI Bandar Lampung Regional Office**

  E-service quality is a broader form of service quality using internet media that connects sellers and buyers to fulfill shopping activities effectively and efficiently (Chase *et al.*, 2013). Research by Kavitha & Gopinath (2020) states that there is a significant influence between E-Service Quality on Perceived Usefulness. So the research hypothesis is:

- **H2**: **E-Trust** has a significant effect on the **Perceived Usefulness of BRIMO customers at the BRI Bandar Lampung Regional Office**

  E-trust is consumer confidence in product or service providers that they can be trusted or relied on in fulfilling their promises in accordance with consumer expectations online (Liani & Yusuf, 2021). Research by Daud & Farida (2018) states that E-trust influences Perceived Usefulness. Research by Styarini & Riptiono (2020), E-trust influences the Perceived Usefulness of BRI Bank Mobile Banking Application users at the Kebumen Branch Office. So the research hypothesis is:

Based on research by Ardila & Rahmidani (2023) it is also stated that E-Service Quality has a significant effect on Customer Loyalty. Ardila & Rahmidani (2023) research states that E-
Service Quality has a significant effect on Customer Loyalty. In contrast to the research of Nurkhomaria et al. (2022) which proves that E-Service Quality partially has no significant effect on Customer Loyalty. So the research hypothesis is:

**H3 : E-Service Quality has a significant effect on customer loyalty of BRIMO users at the BRI Bandar Lampung Regional Office**

Trust will give rise to loyalty. This can be proven from the results of the following previous research studies. Hakam (2022) states that E-trust has a significant effect on customer loyalty. Widodo et al., (2020) also states that E-trust has a positive and significant effect on loyalty. However, research by Nurkhomaria et al. (2022) states that E-trust partially has no significant effect on Customer Loyalty. So the research hypothesis is:

**H4 : E-trust has a significant effect on customer loyalty of BRIMO users at the BRI Bandar Lampung Regional Office**

Perceived Usefulness is a system designed to make it easier for users and not difficult. This convenience means that a service will be easy to understand and can be easily operated, so that consumers will easily learn how to use the service. Research by Faizah & Sanaji (2022) states that Perceived Usefulness has a significant effect on loyalty. Irfansyah (2021) research proves that perceived usefulness has a significant positive effect on loyalty. In contrast to the research of Putri et al. (2023), Perceived Usefulness has no significant effect on Loyalty. So the research hypothesis is:

**H5 : Perceived Usefulness has a significant effect on Customer Loyalty of BRIMO users at the BRI Bandar Lampung Regional Office**

E-Service quality influences customer loyalty. This means that the quality of the e-service provided is good enough, so that customer loyalty is formed because loyalty is formed from experiences received continuously. The results of this research are also in accordance with research by Laurent (2016) which revealed that E-Service quality obtained by customers can influence Customer Loyalty. Meanwhile, Perceived usefulness has a significant effect on Loyalty, having significant results. So the research hypothesis is:

**H6 : E-Service Quality has a significant effect on customer loyalty of BRIMO users through Perceived Usefulness as a mediator at the BRI Bandar Lampung Regional Office**

The influence of e-trust on perceived usefulness shows that e-trust has a positive effect on perceived usefulness. In line with findings by Purnami & Nurcaya (2015) which show that e-trust has a positive effect on perceived usefulness. Meanwhile, trust can encourage loyalty. Therefore, the better the trust that consumers have, the more consumer loyalty will increase. The results of this research are supported by previous research conducted by Wiyata et al. (2020) and Febriani & Ardani (2021) which show that trust has a significant effect on Loyalty. So the research hypothesis is:

**H7 : E-trust has a significant effect on customer loyalty of BRIMO users through Perceived Usefulness as a mediator at the BRI Bandar Lampung Regional Office**
3. Research Method

3.1. Research design
This type of research is quantitative with a causal approach which examines the possibility of a causal relationship between variables (Sanusi & Anwar, 2014).

3.2. Identification of Research Variables
This research uses several research variables, namely:

1) Independent Variable
   a) E-Service Quality
      E-service quality is the level of website effectiveness in providing convenience to customers when shopping, purchasing and delivering products and services. Indicators that measure E-Service Quality consist of Efficiency, Availability, Responsiveness, Fulfillment, Privacy, Compensation and Contact (Wirapraja et al., 2021).
   
   b) E-Trust
      Trust is the willingness to take risks in meeting needs without having experience of use and only relying on a certain perspective. The indicators of trust according to the theory of Priansa (2019) include Integrity, Benevolence and Competence.

2) Dependent Variable
   Perceived Usefulness is the benefit of the system in making decisions that can be used or not by users based on trust. The perceived usefulness indicator for this research was adopted from research by Putra & Husna (2019) which consists of Work more quickly, Job performance, Increase productivity, Effectiveness, Makes job easier and Useful.

3) Intervening Variable
   Customer loyalty is a good attitude towards where customers promise to buy the company's products or services again, and provide recommendations to other customers. Indicators adopted from research by Hamdallah & Aulia (2020) consist of Cognitive, Affective, Conative and Action.

3.3. Population and Sample
In determining the sample, a purposive sampling technique was used, namely determining a sample from the population based on certain criteria. The sample is part of the number and characteristics of the population (Sugiyono, 2019). The criteria for determining the sample from the population are: a) Savings customers who are registered and using the BRIMO application, b) Savings customers, especially Britama and Simpedes account holders who make transactions using the BRIMO application, and c) Customers coming from 14 BRI Branch Offices under the supervision of the Regional Office BRI Bandar Lampung. Determining the number of samples used the Slovin formula so that the total number of samples was 100 samples.

3.4. Method of collecting data
The method used in collecting data was by distributing questionnaires given to respondents to obtain primary data. A questionnaire is a list of questions that can be obtained by telephone,
letter and face to face. Data collection can be done at all BRI Regional Office Bandar Lampung branch offices. The time for distributing the questionnaire was 1 month. If respondents give inconsistent answers, the questionnaire will be redistributed.

3.5. Data analysis technique
In this research we will use logistic regression analysis with the help of the Smart PLS program.

4. Results
4.1. Validity and Reliability Test Results
a) Convergent Validity
Each indicator in the model must meet convergent validity, that is, have a value > 0.5.

| Variable          | Item | Original Sample | Sample Mean | Standard Deviation | T | Statistics (|O|STDEV|) | P-Value |
|-------------------|------|-----------------|-------------|--------------------|---|----------------|----------------|---------|
| E-Service Quality | SQ1  | 0.911           | 0.909       | 0.023              | 39,419 | 0.000          |                 |         |
|                   | SQ2  | 0.873           | 0.872       | 0.035              | 25,000 | 0.000          |                 |         |
|                   | SQ3  | 0.856           | 0.860       | 0.051              | 16,914 | 0.000          |                 |         |
|                   | SQ4  | 0.909           | 0.909       | 0.026              | 35,185 | 0.000          |                 |         |
|                   | SQ5  | 0.736           | 0.738       | 0.110              | 6,700  | 0.000          |                 |         |
|                   | SQ6  | 0.874           | 0.875       | 0.033              | 26,325 | 0.000          |                 |         |
| E-Trust           | TR1  | 0.896           | 0.896       | 0.028              | 31,941 | 0.000          |                 |         |
|                   | TR2  | 0.881           | 0.879       | 0.032              | 27,774 | 0.000          |                 |         |
|                   | TR3  | 0.914           | 0.913       | 0.020              | 44,835 | 0.000          |                 |         |
| Perceived Usefullness | PU1  | 0.887           | 0.887       | 0.033              | 26,907 | 0.000          |                 |         |
|                   | PU2  | 0.817           | 0.812       | 0.058              | 14,135 | 0.000          |                 |         |
|                   | PU3  | 0.867           | 0.863       | 0.039              | 21,979 | 0.000          |                 |         |
|                   | PU4  | 0.803           | 0.799       | 0.064              | 12,569 | 0.000          |                 |         |
|                   | PU5  | 0.846           | 0.846       | 0.038              | 22,187 | 0.000          |                 |         |
|                   | PU6  | 0.902           | 0.903       | 0.023              | 39,995 | 0.000          |                 |         |
| Loyalty           | L1   | 0.908           | 0.909       | 0.018              | 49,207 | 0.000          |                 |         |
|                   | L2   | 0.813           | 0.811       | 0.046              | 17,597 | 0.000          |                 |         |
|                   | L3   | 0.917           | 0.918       | 0.016              | 57,738 | 0.000          |                 |         |
|                   | L4   | 0.854           | 0.853       | 0.042              | 20,320 | 0.000          |                 |         |

Source: Researcher Processed Data (2024)

Based on the convergent validity test seen in the table above, it can be seen that all measurements on each variable are declared valid as a measuring tool for this construct, overall the indicator items have a Original Sample value of > 0.5.

b) Discriminant Validity
The discriminant validity output from the data processing results is as shown in the following table.
Table 2. Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>E-Service Quality (SQ)</th>
<th>E-Trust (TR)</th>
<th>Perceived Usefulness (PU)</th>
<th>Loyalty (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SQ1</td>
<td>0.911</td>
<td>0.554</td>
<td>0.558</td>
<td>0.613</td>
</tr>
<tr>
<td>SQ2</td>
<td>0.873</td>
<td>0.454</td>
<td>0.486</td>
<td>0.519</td>
</tr>
<tr>
<td>SQ3</td>
<td>0.856</td>
<td>0.445</td>
<td>0.522</td>
<td>0.497</td>
</tr>
<tr>
<td>SQ4</td>
<td>0.909</td>
<td>0.547</td>
<td>0.558</td>
<td>0.599</td>
</tr>
<tr>
<td>SQ5</td>
<td>0.736</td>
<td>0.439</td>
<td>0.480</td>
<td>0.449</td>
</tr>
<tr>
<td>SQ6</td>
<td>0.874</td>
<td>0.490</td>
<td>0.573</td>
<td>0.586</td>
</tr>
<tr>
<td>SQ7</td>
<td>0.896</td>
<td>0.508</td>
<td>0.532</td>
<td>0.602</td>
</tr>
<tr>
<td>TR1</td>
<td>0.446</td>
<td>0.881</td>
<td>0.678</td>
<td>0.768</td>
</tr>
<tr>
<td>TR2</td>
<td>0.547</td>
<td>0.914</td>
<td>0.817</td>
<td>0.852</td>
</tr>
<tr>
<td>TR3</td>
<td>0.529</td>
<td>0.887</td>
<td>0.724</td>
<td>0.708</td>
</tr>
<tr>
<td>PU1</td>
<td>0.488</td>
<td>0.606</td>
<td>0.817</td>
<td>0.651</td>
</tr>
<tr>
<td>PU2</td>
<td>0.609</td>
<td>0.734</td>
<td>0.867</td>
<td>0.732</td>
</tr>
<tr>
<td>PU3</td>
<td>0.511</td>
<td>0.528</td>
<td>0.803</td>
<td>0.641</td>
</tr>
<tr>
<td>PU4</td>
<td>0.510</td>
<td>0.727</td>
<td>0.846</td>
<td>0.783</td>
</tr>
<tr>
<td>PU5</td>
<td>0.572</td>
<td>0.832</td>
<td>0.902</td>
<td>0.795</td>
</tr>
<tr>
<td>PU6</td>
<td>0.429</td>
<td>0.754</td>
<td>0.855</td>
<td>0.756</td>
</tr>
<tr>
<td>L1</td>
<td>0.539</td>
<td>0.771</td>
<td>0.788</td>
<td>0.908</td>
</tr>
<tr>
<td>L2</td>
<td>0.528</td>
<td>0.676</td>
<td>0.647</td>
<td>0.813</td>
</tr>
<tr>
<td>L3</td>
<td>0.599</td>
<td>0.873</td>
<td>0.825</td>
<td>0.917</td>
</tr>
<tr>
<td>L4</td>
<td>0.573</td>
<td>0.710</td>
<td>0.732</td>
<td>0.854</td>
</tr>
</tbody>
</table>

Source: Researcher Processed Data (2024)

Based on the table above, it is found that all of the forming constructs are stated to have good discriminants.
To measure Discriminant Validity, you can also use the AVE value with the requirement that the value be equal to or above 0.50, indicating a good convergent.

Table 3. Average Variance Extracted

<table>
<thead>
<tr>
<th>Average Variance Extracted (AVE)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Service Quality (SQ)</td>
<td>0.751</td>
</tr>
<tr>
<td>E-Trust (TR)</td>
<td>0.800</td>
</tr>
<tr>
<td>Perceived Usefullness (PU)</td>
<td>0.721</td>
</tr>
<tr>
<td>Loyalty (L)</td>
<td>0.764</td>
</tr>
</tbody>
</table>

Source: Researcher Processed Data (2024)

The AVE value for all indicators has converged because it has an AVE value greater than 0.5.

c) **Composite Reliability**

A construct is said to be reliable if the composite reliability value is above 0.60 (Nunnaly, in Ghozali, 2018).

Table 4. Composite Reliability

<table>
<thead>
<tr>
<th>Composite Reliability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Service Quality (SQ)</td>
<td>0.955</td>
</tr>
<tr>
<td>E-Trust (TR)</td>
<td>0.923</td>
</tr>
<tr>
<td>Perceived Usefullness (PU)</td>
<td>0.939</td>
</tr>
<tr>
<td>Loyalty (L)</td>
<td>0.928</td>
</tr>
</tbody>
</table>

Source: Researcher Processed Data (2024)

The entire construct studied meets the composite reliability criteria because it has a composite reliability value above 0.60.

d) **Cronbach Alpha**

Variables that have a Cronbach alpha value > 0.6 are declared reliable (Sugiyono, 2016).

Table 5. Composite Reliability

<table>
<thead>
<tr>
<th>Composite Reliability</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Service Quality (SQ)</td>
<td>0.944</td>
</tr>
<tr>
<td>E-Trust (TR)</td>
<td>0.875</td>
</tr>
<tr>
<td>Perceived Usefullness (PU)</td>
<td>0.922</td>
</tr>
<tr>
<td>Loyalty (L)</td>
<td>0.896</td>
</tr>
</tbody>
</table>

Source: Researcher Processed Data (2024)

Based on the Cronbach Alpha value, it is concluded that all variables have high reliability because they have a Cronbach Alpha value above 0.6.
4.2. Research result
Hypothesis testing uses Partial Least Square (PLS) analysis with SmartPLS.

Based on the picture above, it is known that Perceived Usefulness (PU) is influenced by E-Service Quality (SQ) and E-Trust (TR). Then Loyalty (L) is also influenced by E-Service Quality (SQ), E-Trust (TR) and Perceived Usefulness (PU) which is shown in the equation below.

\[
PU = 0.208 \times SQ + 0.712 \times TR
\]

\[
L = 0.136 \times SQ + 0.481 \times TR + 0.378 \times PU
\]

In assessing the model with PLS, start by looking at the R-square for each dependent latent variable. For endogenous latent variables in the structural model which has an R2 of 0.75 indicating that the model is "good", an R2 of 0.50 indicates that the model is "moderate", an R2 of 0.25 indicates that the model is "weak" (Ghozali, 2018). The PLS output is as explained in the following table.

<table>
<thead>
<tr>
<th>R Square</th>
<th>Source: Researcher Processed Data (2024)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loyalty (L)</td>
<td>0.831</td>
</tr>
<tr>
<td>Perceived Usefulness (PU)</td>
<td>0.719</td>
</tr>
</tbody>
</table>

Based on the table above, the Loyalty (L) variable has an R2 value of 0.831 which indicates that Service Quality (SQ), E-Trust (TR) and Perceived Usefulness (PU) in influencing Loyalty (L) has a value of 83.1% which included in the Good category. Meanwhile, the Perceived Usefulness (PU) variable has an R2 value of 0.719, which indicates that Service Quality (SQ) and E-Trust (TR) in influencing Perceived Usefulness (PU) has a value of 71.9% which is included in the Moderate category. The suitability of the structural model can be seen from Q2, as follows:
\[ Q^2 = 1 - [(1 - R1)*(1 - R2)] \]
\[ = 1 - [(1 - 0,831)*(1 - 0,719)] \]
\[ = 1 - [(0,169)*(0,281)] \]
\[ = 1 - [(0,047)] \]
\[ = 0.953 \]

The results of the Q2 calculation show that the Q2 value is 0.953, which indicates that the Q2 value is in the "strong" category.

4.3. Hypothesis test
To answer the research hypothesis, the t-statistic can be seen in the following table:

| Variable Relationships              | Original Sample (O) | Sample Mean (M) | T Statistics (|O/STDEV|) | P Values | Results   |
|-------------------------------------|---------------------|-----------------|----------------|-----------|-----------|
| E-Service Quality (SQ) -> Perceived Usefulness (PU) | 0,208               | 0,212           | 3,184          | 0,002     | Significant |
| E-Trust (TR) -> Perceived Usefulness (PU) | 0,712               | 0,713           | 12,929         | 0,000     | Significant |
| E-Service Quality (SQ) -> Loyalty (L) | 0,136               | 0,128           | 2,122          | 0,034     | Significant |
| E-Trust (TR) -> Loyalty (L) | 0,481               | 0,475           | 4,821          | 0,000     | Significant |
| Perceived Usefulness (PU) -> Loyalty (L) | 0,378               | 0,390           | 3,614          | 0,000     | Significant |
| E-Service Quality (SQ) -> Perceived Usefulness (PU) | 0,078               | 0,083           | 2,233          | 0,026     | Significant |
| E-Trust (TR) -> Perceived Usefulness (PU) | 0,269               | 0,278           | 3,460          | 0,001     | Significant |

Source: Researcher Processed Data (2024)

Based on the table above regarding hypothesis testing, it can be explained that:

a. E-Service Quality has a significant influence on Perceived Usefulness, because the T-statistic value is 3.184, which means it is greater than 1.96. So, hypothesis H1 which states "E-Service Quality has a significant effect on the Perceived Usefulness of BRIMO customers at the BRI Bandar Lampung Regional Office", can be declared accepted.
b. E-Trust has a significant influence on Perceived Usefulness, because the T-statistic value is 12.929, which means it is greater than 1.96. So, hypothesis H2 which states "E-Trust has a significant effect on the Perceived Usefulness of BRIMO customers at the BRI Bandar Lampung Regional Office", can be declared accepted.

c. E-Service Quality has a significant influence on Loyalty, because the T-statistic value is 2.122, which means it is greater than 1.96. So, hypothesis H3 which states "E-Service Quality has a significant effect on customer loyalty of BRIMO users at the BRI Bandar Lampung Regional Office", can be declared accepted.

d. E-Trust has a significant influence on Loyalty, because the T-statistic value is 4.821, which means it is greater than 1.96. So, hypothesis H4 which states "E-Trust has a significant effect on customer loyalty of BRIMO users at the BRI Bandar Lampung Regional Office", can be declared accepted.

e. Perceived Usefulness has a significant influence on Loyalty, because the T-statistic value is 3.614, which means it is greater than 1.96. So, hypothesis H5 which states "Perceived Usefulness has a significant effect on the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office", can be declared accepted.

f. E-Service Quality has a significant influence on Loyalty through Perceived Usefulness, because the T-statistic value is 2.233, which means it is greater than 1.96. So, hypothesis H6 which states "E-Service Quality has a significant effect on customer loyalty of BRIMO users through Perceived Usefulness as a mediator at the BRI Bandar Lampung Regional Office.", can be declared accepted.

g. E-Service Quality has a significant influence on Loyalty through Perceived Usefulness, because the T-statistic value is 3.460, which means it is greater than 1.96. So, hypothesis H7 which states "E-Trust has a significant effect on customer loyalty of BRIMO users through Perceived Usefulness as a mediator at the BRI Bandar Lampung Regional Office.", can be declared accepted.

5. Discussion

1. The Effect of E-Service Quality on Perceived Usefulness

The results of this research show that the T-Statistic value of the relationship between the E- Service Quality variable and the Perceived Usefulness of customers using BRIMO at the Regional Office of BRI Bandar Lampung is 3.184, which means it is greater than 1.96, so that E- Service Quality has a significant effect on the Perceived Usefulness of customer users BRIMO at the BRI Bandar Lampung Regional Office directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.208, so that the better the E-Service Quality, the greater the Perceived Usefulness of BRIMO user customers at the BRI Bandar Lampung Regional Office. The research results are in line with research by Kavitha & Gopinath (2020) which states that there is a significant influence between E-Service Quality on Perceived Usefulness.

2. The Effect of E-Trust on Perceived Usefulness

The results of this research show that the T-Statistic value of the relationship between the E- Trust variable and the Perceived Usefulness of customers using BRIMO in the Regional Office
of BRI Bandar Lampung is 12.929, which means it is greater than 1.96, so that E-Trust has a significant effect on the Perceived Usefulness of customers using BRIMO in BRI Bandar Lampung Regional Office directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.712, so that the better the E-Trust, the more Perceived Usefulness of BRIMO user customers at the BRI Bandar Lampung Regional Office. The research results are in line with research by Daud & Farida (2018) which states that E-trust has an effect on Perceived Usefulness.

3. The Effect of E-Service Quality on Loyalty
The results of this research show that the T-Statistic value of the relationship between the E-Service Quality variable and the Loyalty of BRIMO user customers in the BRI Bandar Lampung Regional Office is 2.122, which means it is greater than 1.96, so that E-Service Quality has a significant effect on the Loyalty of BRIMO user customers in BRI Bandar Lampung Regional Office directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.136, so that the better the E-Service Quality, the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office would increase. The research results are in line with research by Ardila & Rahmidani (2023) which also states that E-Service Quality has a significant effect on Customer Loyalty.

4. The Effect of E-Trust on Loyalty
The results of this research show that the T-Statistic value of the relationship between the E-Trust variable and the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office is 4.821, which means it is greater than 1.96, so that E-Trust has a significant effect on the Loyalty of BRIMO user customers at the Regional Office BRI Bandar Lampung directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.481, so that the better the E-Trust, the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office would increase. The research results are in line with Hakam (2022) research which states that E-trust has a significant effect on customer loyalty.

5. The Effect of Perceived Usefulness on Loyalty
The results of this research show that the T-Statistic value of the relationship between the Perceived Usefulness variable and the Loyalty of BRIMO user customers in the BRI Bandar Lampung Regional Office is 3.614, which means it is greater than 1.96, so that Perceived Usefulness has a significant effect on the Loyalty of BRIMO user customers in the BRI Bandar Regional Office Lampung directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.378, so that the better the Perceived Usefulness, the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office would increase. The research results are in line with research by Faizah & Sanaji (2022) which states that Perceived Usefulness has a significant effect on loyalty.

6. The Effect of E-Service Quality on Loyalty through Perceived Usefulness
The results of this research show that the T-Statistic value of the relationship between the E-Service Quality variable and Loyalty through Perceived Usefulness as a mediator at the BRI
Bandar Lampung Regional Office is 2.233, which means it is greater than 1.96, so that E-Service Quality has a significant effect on Loyalty through Perceived Usefulness of BRIMO customers directly at the BRI Bandar Lampung Regional Office. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.078, so that the better the E-Service Quality and Perceived Usefulness, the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office would increase. The research results are in line with research by Dewi (2020) which states that there is a significant positive influence between E-Service Quality and Customer Loyalty mediated by perceived usefulness.

7. The Effect of E-Trust on Loyalty through Perceived Usefulness
The results of this research show that the T-Statistic value of the relationship between the E-Trust variable and Loyalty through Perceived Usefulness as a mediator at the BRI Bandar Lampung Regional Office is 3.460, which means it is greater than 1.96, so that E-Trust has a significant effect on customer Loyalty through Perceived Usefulness. BRIMO users at the BRI Bandar Lampung Regional Office directly. From the test results, it was found that the Original Sample value of the variable relationship showed a positive number of 0.269, so that the better the E-Trust and Perceived Usefulness, the Loyalty of BRIMO user customers at the BRI Bandar Lampung Regional Office would increase. The research results are in line with research by Wiyata et al., (2020) and Febriani & Ardani (2021) which show that trust has a significant effect on Loyalty mediated by Perceived Usefulness; and also Rianto & Hapsari (2022) who also stated that trust has a positive and significant effect on loyalty mediated by Perceived Usefulness.

6. Conclusion and Suggestion
6.1 Conclusion
Based on the results of data analysis and discussions that have been carried out, several conclusions in this research were obtained: 1) E-Service Quality has a significant positive effect on the Perceived Usefulness of BRIMO Customers at the BRI Bandar Lampung Regional Office, 2) E-Trust has a significant positive effect on the Perceived Usefulness of Customers BRIMO at BRI Bandar Lampung Regional Office, 3) E-Service Quality has a significant positive effect on BRIMO Customer Loyalty at BRI Bandar Lampung Regional Office, 4) E-Trust has a significant positive effect on BRIMO Customer Loyalty at BRI Bandar Lampung Regional Office, 5) Perceived Usefulness has a significant positive effect on BRIMO Customer Loyalty at BRI Bandar Lampung Regional Office, 6) E-Service Quality has a positive significant effect on Loyalty through perceived usefulness as a mediator for BRIMO Customers at BRI Bandar Lampung Regional Office, 7) E-Trust has a positive significant effect on Loyalty through perceived usefulness as a mediator for BRIMO customers at the BRI Bandar Lampung Regional Office.

6.2 Suggestion
The following are some of the suggestions given by researchers from the results of this research, including: 1) It is recommended that BRI Bandar Lampung Regional Office branch offices improve E-Service Quality by improving the accuracy of the BRIMO application in carrying out transactions. Apart from that, it is also recommended to establish a Call Center so that it can
provide assistance to customers if problems arise, 2) It is recommended that the BRI Bandar Lampung Regional Office branch offices improve E-Trust by adding features that can help fulfill people's needs in online transactions, 3) It is recommended to branch offices supported by the BRI Bandar Lampung Regional Office to increase Perceived Usefulness by speeding up transaction speed through the BRImo application so as to facilitate the customer transaction process. 4) It is recommended to branch offices assisted by the BRI Bandar Lampung Regional Office to increase Loyalty by providing discount promos for using the BRImo application so that customers can recommend the BRImo application to other people. 5) It is recommended that further research add other variables that influence Perceived Usefulness and Customer Loyalty, such as the Promotion variable, which aims to improve the results of this research.

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References


