Defining Service Quality of BRI Merchant Application Using Importance Performance Analysis

Ardi Rizky Permana 1*, Lily Sudhartio 2

1,2 Faculty of Economics and Business, Universitas Indonesia, Depok City, West Java, Indonesia

Abstract. The COVID-19 pandemic has changed people’s habits worldwide, accelerating the adoption of cashless payment transactions, especially in Indonesia. This situation allows Financial Technology companies and Conventional Banks to increase competition. This thesis focuses on the Digital Payments Industry in Indonesia, emphasizing the Merchant Acceptance Business, which has a crucial role as a catalyst for Cashless Payments. This research is based on previous studies regarding service quality, business model canvas, and the importance of performance analysis of the BRI Merchant Application. This research aims to define a service quality strategy for BRI merchant applications through a critical performance analysis approach. The study found that the quality of BRI merchant application services consists of changing merchant data, adding EDC, checking transactions, reconciling Payments, filing complaints, and monitoring complaints.

Keywords: Acquiring Business; Business Model Canvas; Digital Payment Industry; Importance Performance Analysis; Service Quality.

* Corresponding Author. Email: ardirizkyp@gmail.com 1.*
Introduction

BRI has traveled a long 125-year path to promote economic development and the ever-growing development of customers from small segments throughout Indonesia. BRI provides services to MSMEs (micro, small, and medium-sized companies) by the deadlines set. BRI constantly offers top-notch services to the most significant economic sector, which most Indonesians primarily run. This is accomplished by encouraging, enabling, and assisting them in maximizing their abilities, ultimately improving their families' welfare and the communities in which they live (Bank Indonesia, 2018). The payment system benefits the country's economy and has a vital role in society and banking. There are 2 (two) types of payment system instruments, namely cash and non-cash. The cash payment system is a payment medium that uses a currency, namely banknotes and coins in general, with which we are familiar. Meanwhile, the non-cash payment system is a payment medium that uses Card-Based Instruments and Digital Instruments. Card-based instrument payment media using debit cards, credit cards, and prepaid cards as issuer payments. Meanwhile, a digital instrument is a payment medium via the internet for electronic payment / digital payment, both on smartphones/gadgets and PCs (Personal computers), which facilitates transactions anywhere. (Bank Indonesia, 2018).

Indonesia is ranked 5th out of 20 countries with the highest number of internet users, and the number of internet users in Indonesia has increased yearly. The development and use of Internet technology in Indonesia are also multiplying. From the Proxsisgroup data released on June 30, 2016, it was noted that Indonesia was ranked fifth with internet users of 132.7 million. Based on a survey report issued by the Indonesian Internet Service Providers Association in 2022, entitled Penetration and Profile of Internet Users in Indonesia (APJII, 2022), it is stated that the penetration of Internet users reaches 210 million people from the total population of Indonesia which is around 264.16 million people. This means that about 77% of internet users in Indonesia, regardless of gender and age. The rapid development of information and communication technology has impacted various fields, such as social, economic, political, and cultural. It affects lifestyle changes, including consumption patterns and how people sell and shop. Therefore, digitizing the payment system in Indonesia must be carried out by both fintech players and conventional banking.

Digital payment transactions in Indonesia are expected to continue to grow. Bank Indonesia estimates that transactions via electronic money will reach USD 25 billion in 2023. Meanwhile, Morgan Stanley predicts that digital payment transactions in Indonesia can reach US $ 50 billion in 2027, mainly supported by fintech payments. Morgan Stanley's research entitled Indonesia Banks: Fintech, which was conducted in early 2019, stated that 20% of the 1,582 respondents preferred to use digital payments provided by fintech firms over those offered by banks, telecom companies, or e-commerce. The monthly average for digital payment transactions is IDR 600,000. (Yuliawati, 2019).

![Figure 1. The Growth of Cashless Transactions in Indonesia](Source: BCG analysis 2020)
Based on Boston Consulting Group research in 2020, there is a massive growth of cashless transactions, up to IDR 4,000 trillion in 2025. The trend is also followed by the shifting payment method from offline to online. Asosiasi FintechIndonesia’s research in 2021 regarding customer behavior also supports BCG research, which inform the increase of cashless payments by up to 72%. Digital payment transactions are divided into two major parts: Acquirer and Issuer. According to Bank Indonesia Regulations (PBI No. 11/12/PBI/2009), an Acquirer is a Bank or Non-Bank Institution cooperating with merchants who can process electronic money data issued by parties other, while an Issuer is a Bank or Non-Bank Institution that publishes card-based payment instruments. This research will focus on the acquirer business that processes payment in merchant. The study case of this research is PT. Bank Rakyat Indonesia (Persero) Tbk. (BRI). Moreover, when we take a deeper look, we can see, based on BCG research in 2020, that the market leader of acquirer banks in Indonesia is BCA, with a total market share of 47%. Meanwhile, BRI is third with a 14% market share and only 1% under the closest competitor, Bank Mandiri. BRI is developing an application created especially for merchants called BRImerchant to close the market leader in the merchant acquirer business.

Service quality will become the determinant factor in the intense competition in the banking industry, especially in the acquiring merchant sector. We can determine the level of quality by using Importance Performance Analysis (IPA). Therefore, this research proposes to define the Service Quality of BRImerchant applications using Importance Performance Analysis. By considering time and data access limitations, below are some scopes and limitations of this study:

1) The research will focus on Merchant Acquiring Business at PT. Bank Rakyat Indonesia (Persero) Tbk.
2) The research started on September 2022, and the cut-off date for updating information is the end of December 2022.
3) The primary source of information is Merchant Acquiring Business Department at PT. Bank Rakyat Indonesia (Persero) Tbk. Any other party related to those sources (e.g., the Government and Association) are non-mandatory, depending on the time spent on research

Literature Review

BRI Merchant Acquirer
BRI Merchant Acquirer
BRI merchant acquirer business has operated since 2011. This business was focused on a payment acceptance model that aims to gather transaction-based CASA as much as possible. BRI merchant acquirer business considered is not a pioneer in the market, especially behind BCA and Mandiri. However, the BRI merchant business has proliferated, following its competitors. The transaction of the BRI merchant acquirer was still dominated by offline transactions, which are from Electronic Data Capture (EDC). Meanwhile, online marketing is also experiencing rapid growth, especially in the COVID-19 pandemic era. Even though BRI merchant acquisition has grown, BRI still needs help taking over competitor businesses, and it still finds challenges in taking over competitors' businesses and becoming the market leader. Therefore, BRI developed an innovative idea to give value to its merchants by providing a dedicated mobile application called BRImerchant.

BRI merchant Mobile Application
BRImerchant is a mobile app version for BRI’s merchants that adds value for the user to manage and monitor transactions from their mobile phone. BRImerchant applications in their early stages are focused on three main features with multi-benefits—BRImerchant features such as Transaction Detail Monitoring, Download Settlement Report, and User Management. Banks as a service must be implemented in BRI merchant acquirer businesses to compete with the market leader. BRImerchant Application must give service quality through features and benefits to its customers. Therefore, this qualitative research will define the Service Quality of BRImerchant applications using Importance Performance Analysis.
Business Model Canvas

Osterwalder & Pigneur (2015) describes a business model that can be described in the form of a canvas containing nine essential boxes that show how to make money. These boxes define how the organization creates and benefits its customers.

Service Quality

Quality is a dynamic condition that affects products, services, people, processes, and the environment that meet or exceed expectations (Goetsch & Davis, 1994). Meanwhile, in their book Marketing Management (14 Edition, 2012), Kotler and Keller state, "Service quality is an action or performance that one party can offer to another which is essentially intangible and does not result in any ownership." Based on the definition of Kotler and Keller above, service quality is relatively more challenging to do and imitate because it is intangible and does not give any ownership to consumers. The scale model created by Parasuraman, Zeithaml, and Berry is the most often used model for assessing service quality. A study named "A Conceptual Model of Service Quality and Its Implications for Future Research (The Journal of Marketing)" was conducted, according to Parasuraman et al., at the beginning of 1885.

The following research conducted by Parasuraman, Zeithaml, and Berry in 1988, titled "SERVQUAL: A Multiple-item Scale for Measuring Consumer Perception of Service Quality," changed the ten service quality dimensions into five sizes. This is done by perfecting and summarizing competence, courtesy, credibility, and security in one size: assurance. Meanwhile, access, communication, and the ability to understand customers are categorized as empathy. The other three dimensions are directly taken from the previously determined dimensions: tangibles, reliability, and Responsiveness.

The author continues to use the five dimensions of service quality from Parasuraman et al. (1988) because the author considers that the theory is still relevant to measuring service quality accurately. International researchers also support and use this theory, as stated in the International Journal of Marketing Studies (November 2010): In most instances, SERVQUAL is the instrument that is used for its confirmatory factor analyses. So far, SERVQUAL has demonstrated to be a thrifty model used in a variety of service organizations and industries, including banks, to measure service quality.

Importance of Performance Analysis

To make data interpretation more accessible, the IPA combines consumer perceptions of performance and relevance into a two-dimensional plot (Martilla & James, 1977). Philip Kotler claims that importance-performance analysis can rank the various components of a set of services and determine the necessary steps. The Importance-Performance Analysis method is recommended by Martilla and Jams (Zeithaml et al., 1990) to gauge service satisfaction levels. In order to assess how much the client is pleased with the business' performance and how well the service provider comprehends what the client needs from the services they offer, the level of conformance must be measured. All variables that impact service quality are mapped into 4 Quadrants (Q1 up to Q4) as part of the importance-performance analysis. The Importance Performance Analysis quadrants are divided as shown below.

![Figure 2. The Importance Performance Analysis Quadrant](image)

Figure 2. The Importance Performance Analysis Quadrant

Sources: Martilla & James, 1977

The strategies that can be implemented regarding the position of each variable in the four quadrants can be explained as follows:

1) Concentrate These (Q1)

They place importance on some factors in this area. However, these factors need to match what customers expect (the level of satisfaction obtained is still low). This quadrant’s factors need to be strengthened.
2) Keep Up The Good Work (Q2)
Customers place importance on specific variables in this area since those factors correspond to how customers feel, which leads to a significantly higher degree of customer satisfaction. Because each of the variables in this quadrant elevates the product or service in the eyes of the customer, they must be maintained.

3) Low Priority (Q3)
Customers view these factors as less significant in this region, and the performance could be more spectacular. Because there is little impact on consumer benefits, increasing the factors in this quadrant may be reconsidered.

4) Possible Overkill (Q4)
Customers may find certain factors in this area to be overly vital or to be of less importance. To help the business save money, the variables in this quadrant can be decreased.

Previous Research
This study is an expansion of earlier work by R. Mohebifar et al. from 2016, which was published in the Journal of Osong Public Health Research rate Q2 in 2016 and Q1 in 2021 and was titled Evaluating Service Quality from Patients' Perceptions Application of the Importance Performance Analysis Method. The study concludes that all sizes need to increase their quality because there is a negative gap across all quality criteria. Hospital managers will be assisted in planning for service quality improvement and achieving long-term objectives through tools for measuring quality and diagnosis, such as importance-performance analysis.

A thorough study reviewing prior work on service quality in the banking sector was published in 2020 in the International Journal of Bank Marketing under the title "Service quality in the banking sector: A literature review" by H. Al-Khazali. The study's primary goals are to pinpoint the significant variables that affect banking service quality and its most prevalent metrics.

The study then examines previous investigations of service quality in the banking industry, including those that employed the SERVQUAL model. It observes that previous studies have highlighted several essential factors that affect service quality in banking, such as trustworthiness, dependability, and agility. Furthermore, the article points out that the most frequently utilized method for measuring service quality in banking is the SERVQUAL model, which gauges service quality based on five aspects: tangibles, reliability, responsiveness, assurance, and empathy.

The study summarizes previous research on service quality in the banking industry, including critical factors that impact service quality, such as trust, reliability, and responsiveness. The commonly used SERVQUAL model is also highlighted, which measures service quality through tangibles, reliability, responsiveness, assurance, and empathy. The study underscores the shift towards digitalization in the banking sector and its impact on service quality. The research is considered a significant contribution to the field of service quality in banking and offers valuable insights for both researchers and industry professionals.

Research Methodology
This research uses qualitative data research combined with the experimental method. That is survey research that explains how the variables studied will describe the object under study through the collected data.

This research uses two data collection techniques: Field Research through interviews, library research, and company internal data. The field research carried out is by asking several interview questions to BRI Merchant customers. The author will conduct direct face-to-face interviews to take all samples. This is necessary to help support get accurate, more reliable, and minimize errors.

Preparation of Interview
This research conducts four steps of data gathering. The journey begins with competitor research to define service quality presumption. After that, this research begins to define respondent criteria and search for responses that are suitable for this research. Moreover, the
respondent that was suitable for the study were asked about their importance expectancy regarding BRI merchant application service quality. Finally, respondents were shown the BRI merchant application video and asked about its performance based on what they saw in the demo video. Here is the resume of the 4 steps of interview preparation.

<table>
<thead>
<tr>
<th>No</th>
<th>Activities</th>
<th>Description</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Competitor Analysis</td>
<td>Focus on analyze BCA as market leader</td>
<td>Sept 2022</td>
</tr>
<tr>
<td>2</td>
<td>Respondent Criteria</td>
<td>Looking for respondent that suitable with the research</td>
<td>Oct – Nov 2022</td>
</tr>
<tr>
<td>3</td>
<td>Importance Analysis</td>
<td>Gathering information of the matters that importance to the merchant</td>
<td>Oct – Nov 2022</td>
</tr>
<tr>
<td>4</td>
<td>Performance Analysis</td>
<td>Finding information of BRI merchant performance based on the video demo that shown before respondent aswer the question</td>
<td>Dec 2022</td>
</tr>
</tbody>
</table>

**Competitor Analysis**

BCA, the market leader of the merchant acquirer business, already has an application dedicated to their merchant since the end of 2021. Therefore, this research will analyze BCA merchant applications to create service quality that matters for BRI merchants. The following is a comparison between BCA and BRI merchant applications. Based on the BCA & BRI Merchant application comparison above and service quality theory, this research defines six features aligned with TERRA, as shown in the table below.

<table>
<thead>
<tr>
<th>Service Quality</th>
<th>Merchant Application Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tangible</td>
<td>Changes in Merchant Data</td>
</tr>
<tr>
<td>Empathy</td>
<td>Complaint Monitoring</td>
</tr>
<tr>
<td>Reliability</td>
<td>Payment Reconciliation</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>Transaction Checking</td>
</tr>
<tr>
<td>Assurance</td>
<td>Filing Complaints and Adding EDC Merchants</td>
</tr>
</tbody>
</table>

Sources: Author’s Processed.

After obtaining compatibility between service quality and superior features of the merchant application. Furthermore, the writer prepared to conduct interviews.

**Respondent Criteria**

Before conducting the interview, the researcher defines the type of criteria of the respondent suitable for the research. Therefore, only the respondents who pass the respondent criteria question will continue to follow the research question.

**Importance Analysis**

If the merchant passes the respondent criteria, they will be pleased to continue following up with a question to define the Importance of

**Performance Analysis**

Moreover, respondents will be pleased to watch a video showing some features of the BRI merchant Application. after that, they will be delighted to answer the interview's final question.

**Results and Discussion**

Business Model Canvas Not only determining
service quality using importance performance analysis, but this research also created a business model canvas for BRImerchant application as shown in the figure below.

This research defines three value propositions of BRImerchant application. The first is the value added for the BRI merchant, rather than only using the conventional EDC. The second is to make merchants able to monitor their transactions only from the BRImerchant application itself. Last but not least is to inform the success of the trade in the app. Later in this research will also check the linkage between BRImerchant BMC and the service quality measured by IPA.

**Importance Performance Analysis**
Based on the interview of 40 respondents, this research defines the service quality of the BRImerchant application using importance performance analysis. The researcher divided 2 segment questions into 2 types of data. The first one measures Importance symbolized by “Y” and the second one measures Importance represented by “X”. After calculating all the interview items, the total average value obtained for X is 4.57 while for Y is 4.43. To better understand, this research will discuss the Improvement Performance Analysis of each question, which has been compiled referring to service quality criteria.

**Changes in Merchant Data**
Changes in Merchant Data refers to the first question and belongs to the tangible aspects of service quality. Based on the interview found the following results:

\[
X_1 = \text{Performance} = 4.53 \\
Y_1 = \text{Importance} = 4.40
\]

These data show that the X1 and Y1 values for questions related to data changes are below the overall average X and Y values. Therefore, according to the theory of importance performance analysis, this item is in **quadrant 3**, defined as **low priority**.

**Added EDC Merchant**
Added EDC Merchant refers to the second question and belongs to the assurance aspects of service quality. Based on the interview found the following results:

\[
X_2 = \text{Performance} = 4.53
\]
Y2 = Importance = 4.40.

These data show that the X2 and Y2 values for questions related to data changes are below the overall average X and Y values. Therefore, according to the theory of importance performance analysis, this item is in quadrant 3, defined as low priority.

Checking Merchant Transactions
Checking Merchant Transactions refers to the third question and belongs to the assurance aspects of service quality. Based on the interview found the following results:

X3 = Performance = 4.48
Y3 = Importance = 4.58

These data show that the X3 and Y3 values for questions related to data changes are above the overall average X and Y values. Therefore, according to the theory of importance performance analysis, this item is located in quadrant 2, defined as keep up the excellent work.

Payment Reconciliation
Payment Reconciliation refers to the fourth question and belongs to the assurance aspects of service quality. Based on the interview found the following results:

X4 = Performance = 4.48
Y4 = Importance = 4.58

These data show that the X4 and Y4 values for questions related to data changes are above the overall average X and Y values. Therefore, according to the theory of importance performance analysis, this item is located in quadrant 2, defined as keep up the excellent work.

Filing a Complaint
Filing a Complaint refers to the fifth question and belongs to the assurance aspects of service quality. Based on the interview found the following results:

X5 = Performance = 4.40
Y5 = Importance = 4.60

These data show that the X5 value for question 6 is above the overall average X value while the Y5 value for question 6 is below the overall average Y value. Therefore, according to the theory of importance performance analysis, this item is located in quadrant 4, defined as possible overkill.

Complaint Monitoring
Complaint Monitoring refers to the sixth question and belongs to the assurance aspects of service quality. Based on the interview found the following results:

X6 = Performance = 4.40
Y6 = Importance = 4.60

These data show that the X6 value for question 6 is above the overall average X value while the Y6 value for question 6 is below the overall average Y value. Therefore, according to the theory of importance performance analysis, this item is located in quadrant 4, defined as possible overkill.

The IPA Quadrant
After finding all the results from the interview question, this research gathers all the information to create Importance Performance Analysis Quadrant, as shown in the figure below.

Based on the Importance Performance Analysis (IPA) Quadrant above, questions Q1 and Q2 are in Quadrant III (low priority), questions Q3 and Q4 are in Quadrant II (keep up the good work), and questions Q5 and Q6 are in Quadrant IV (possible overkill). To facilitate understanding, the researcher makes the table provided below.
Table 3. BRImerchant IPA Resume

<table>
<thead>
<tr>
<th>Question</th>
<th>Merchant Application Features</th>
<th>Quadrant</th>
<th>Service Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Changes in Merchant Data</td>
<td>III (low priority)</td>
<td>Tangible</td>
</tr>
<tr>
<td>2</td>
<td>Added EDC</td>
<td>III (low priority)</td>
<td>Assurance</td>
</tr>
<tr>
<td>3</td>
<td>Transaction Checking</td>
<td>II (keep up the good work)</td>
<td>Responsiveness</td>
</tr>
<tr>
<td>4</td>
<td>Payment Reconciliation</td>
<td>II (keep up the good work)</td>
<td>Reliability</td>
</tr>
<tr>
<td>5</td>
<td>Filing a Complaint</td>
<td>IV (possible overkill)</td>
<td>Assurance</td>
</tr>
<tr>
<td>6</td>
<td>Complaint Monitoring</td>
<td>IV (possible overkill)</td>
<td>Empathy</td>
</tr>
</tbody>
</table>

Sources: Author’s Processed.

The table above shows that the features already good and must continue to be developed by BRI are Pengecekan Transaksi and Rekonsiliasi Pembayaran, which are in quadrant II on the importance of performance analysis. It also means that BRImerchant must continue to improve Responsiveness and Reliability by Service quality theory.

Conclusion

BRI merchant service quality consists of Merchant Data Changes, EDC Additions, Transaction Checks, Payment Reconciliations, Complaint Submissions, and Complaint Monitoring. These results are obtained from competitor analysis and service quality analysis that has been done. Improving performance analysis is essential to determine the position of the features owned by the BRImerchant application.

References


