



E-servqual analysis uses the customer satisfaction index and importance performance analysis methods

Nurhaliza Ramadanti¹, Firman^{2*}

Department of Management, Faculty of Economics and Business, Universitas Negeri Padang, Padang,

INFO ARTIKEL

Diterima 12 Agustus 2024
Disetujui 15 Agustus 2024
Diterbitkan 17 Agustus 2024

Kata Kunci:

E-servqual, Customer Satisfaction Index, Importance Performance Analysis

DOI:10.24036/jsme.xxxxxxxx

Keywords:

E-servqual, Customer Satisfaction Index, Importance Performance Analysis

ABSTRAK

Tujuan dari penelitian ini adalah mengukur kualitas layanan aplikasi mobile banking BRImo berdasarkan dimensi e-servqual dengan membandingkan tingkat kesenjangan antara layanan yang diharapkan dengan layanan yang dirasakan. Selain itu untuk mengetahui tingkat kepuasan pelanggan secara keseluruhan dan untuk mengetahui aspek-aspek pelayanan yang perlu diprioritaskan. Penelitian ini merupakan penelitian deskriptif dengan menggunakan data primer yang diperoleh dari hasil kuesioner sebanyak 200 sampel. Teknik penarikan sampel menggunakan purposive sampling. Metode analisis yang digunakan adalah analisis gap, CSI, dan IPA. Hasil penelitian menunjukkan bahwa berdasarkan analisis gap seluruh atribut layanan bernilai negatif dengan rata-rata -0,35. Berdasarkan CSI tingkat kepuasan pengguna aplikasi BRImo secara keseluruhan adalah sebesar 78,68%. Sedangkan menurut IPA atribut yang perlu diprioritaskan, yaitu dimensi daya tanggap dengan kode atribut Rs4 dan dimensi kompensasi dengan kode atribut Cp1

ABSTRACT

The aim of this research is to measure the service quality of the BRImo mobile banking application based on the e-servqual dimension by comparing the level of gap between expected service and perceived service. In addition, determine the overall level of customer satisfaction and determine service aspects that need to be prioritized. This study is a descriptive study using primary data obtained from the questionnaire results of 200 samples. The sampling method uses purposive sampling. The analysis method uses gap analysis, CSI, and IPA. The results of the study show that according to the gap analysis, all service attributes have a negative value with an average of -0.35. Based on CSI, the overall satisfaction level of BRImo application users is 78.68%. According to IPA, the attributes that should be prioritized are the responsiveness dimension with the attribute code Rs4 and the compensation dimension with the attribute code Cp1

How to cite: Nurhaliza Rahmadanti, Firman. (2024). E-servqual analysis uses the customer satisfaction index and importance performance analysis methods. *Journal of Small and Medium Enterprises*, Vol.3 (No.1), 57-71. DOI : <https://doi.org/10.24036/jsme.xxxxxxxx>



This is an open access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2020 by author.

* Corresponding author: e-mail: author@gmail.com

INTRODUCTION

The increasing number of banking companies in Indonesia encourages banks to compete fiercely and work more efficiently so that they are able to adapt to social developments and human behavior patterns (Rita & Fitria, 2021). Banks compete not only in traditional banking services, but also in electronic services, namely through mobile banking innovation (Rod et al., 2009). Mobile banking is a

service provided by banks to carry out various banking transactions through various features or menus provided on banking applications and installed via smartphone.

Based on information compiled from the website (Databoks, 2023), according to Bank Indonesia (BI) figures from April 2023, the value of digital banking transactions in the country surpassed IDR 4,264.8 trillion, or nearly IDR 4.3 quadrillion. This value comprises a variety of digital banking transactions classified by the Financial Services Authority (OJK), such as online banking, SMS/mobile banking, and telephone banking. Looking back five years, in April 2023, the national value of digital banking transactions increased by 158% from April 2018.

Almost all banks in Indonesia offer mobile banking services, including Bank Rakyat Indonesia (BRI). Bank BRI launched the BRIimo in 2019, as a successor to its prior mobile banking service. This application can be referred to as a one-stop mobile banking solution because it can perform a variety of functions. Aside from that, BRIimo makes it simple to log in to the application with facial recognition technology and a fingerprint sensor. One of the benefits of the BRIimo application is that it allows consumers to make cash withdrawals without the necessity of an ATM card, depending just on the application on their smartphone.

Data.AI report, a major technological research platform, has released its annual State of Mobile 2024 report. According to this survey, BRIimo became the most downloads mobile banking application among Indonesians in 2023 (MediaIndonesia, 2024). Despite having the most downloads, the Top Brand Award (TBA, 2024) website revealed the most popular m-banking application in Indonesia in 2024, the BRIimo application, with an index score of 18.50%, is far behind m-BCA, with an index score of 52.20%.

Throughout its journey, the BRIimo app has been downloaded by over 50 million users on Playstore, with a 4.7 rating and over 1 million reviews. Despite the services given, the BRIimo application continues to receive several customer complaints. Service complaints arise from negative reviews on the Playstore. Negative reviews include login process that frequently fail, facial verification that fails, transactions with failed status but the balance is still deducted, inability to see account balance contents, and mistake activation of Brizzi balance. The most recent customer complaint, as reported by the Jawa Pos news portal, involved a customer who sued the security of the BRIimo application after losing an IDR 72 million balance due to an error logging in to the BRIimo application. Customers' negative reviews indicate that they are dissatisfied with the BRIimo application services.

According to an essay by (Fishman, 2020), reviews are far more essential than ratings. Reviews are a significant marketing technique for persuading new users about the legitimacy of an application. According to the article (Oliveri, 2023), there are various potential consequences of programs with unfavorable ratings, including potential consumers' reluctance to download them. Furthermore, if users are displeased with an app, they may use it less frequently or discontinue use altogether. This can lead to decreased user engagement and potentially reduce app revenue.

Maintaining customer service quality is a requirement in the banking industry to prevent clients from switching to other banks. Similarly, maintaining service quality in the m-banking application is very crucial so that clients always get the best quality from a service (Susnita, 2020). To determine the extent to which m-banking service quality fulfills online consumer satisfaction, use Electronic Quality of Service (e-Servqual). Electronic Service Quality, often known as online service quality, is commonly used to refer to all stages of client engagement with online services. Santos (Saraswati & Agustina, 2021) defines e-Servqual as an assessment that evaluates service quality in the virtual market. E-servqual determines the quality parameters that need to be addressed in service quality based on the difference between consumer perceptions and expectations.

Based on the above context, researchers are interested in analyzing the quality of BRIimo application services using the customer statistics index (CSI) and importance performance analysis (IPA). This CSI is used to determine the overall level of consumer satisfaction using an approach that considers the level of expectations and performance of the e-Servqual attributes being measured. IPA is a method that

compares customer perceptions of the level of importance (importance) of service characteristics against customer perceptions of service performance in order to discover services that need to be improved. The analytical results are interpreted as a matrix with four quadrants. According to the quality attribute quadrant, the company determines whether the quality attribute of the existing service is an advantage or disadvantage, and then develops a strategy for each quality attribute in each quadrant (Dabestani et al., 2016). Service quality measurements must be performed in order to maintain and develop the BRImo application to make it more effective and efficient, allowing it to fulfill customer expectations.

LITERATURE REVIEW

Service Quality

According to Lewis and Booms (Tjiptono, 2012), service quality is simply defined as a measure of how well the level of service delivered matches customer expectations.

Measuring customer satisfaction

Each organization can utilize a variety of strategies to measure and monitor customer satisfaction. According to (Kotler & Keller, 2016) proposed four techniques for measuring customer satisfaction, including:

1. Customer complaints
2. Ghost shopping
3. Lost customer analysis
4. Customer surveys

E-service Quality

Electronic service quality refers to services provided over the internet. The concept of electronic service quality (e-service quality) is defined as the extent to which a website or application can provide facilities for consumers' shopping activities to run smoothly, effectively, and efficiently, as well as in terms of product and service delivery.

Zeithaml, LL Berry, and Parasuraman (2002) proposed a conceptual paradigm (Tjiptono, 2014) for analyzing and improving the quality of electronic services (e-Servqual or e-SQ). E-servqual has seven dimensions, which make up the core online service scale and the online service recovery scale. The four primary dimensions (efficiency, dependability, fulfillment, and privacy) make up the e-Servqual core scale, which customers use to evaluate ordinary online services when they do not encounter problems when using a certain site. Meanwhile, the other three dimensions (responsiveness, compensation, and interaction) serve as a recovery scale, with these dimensions playing an essential role in cases where online customers encounter problems or have a multitude of queries for which they seek answers. To summarize, the seven dimensions of e-Servqual are described as follows:

1. Efficiency
2. Reliability
3. Fulfillment
4. Privacy
5. Responsiveness
6. Compensation
7. Contact

Customer Satisfaction Index (CSI)

The Customer Satisfaction Index (CSI) measures overall consumer satisfaction with services by examining the importance of product/service features. The stages of measuring CSI are as follows.

1. Calculate the Mean Importance Score (MIS) for each variable or attribute inside the service dimension.
2. Determine the weight factors (WF) for each variable.
3. Calculate the mean satisfaction score (MSS) or average performance for each service dimension attribute.
4. Calculate the Weight Score (WS) for each variable. This weight is calculated using the Weight Factor (WF) and the Mean Satisfaction Score (MSS).
5. Calculate the Customer Satisfaction Index (CSI) with the following formula:

$$CSI = \frac{\sum WS}{HS} \times 100\%$$

Information:

CSI = Customer Satisfaction Index

HS = Maximum scale used

Based on (Irawan, 2004) the CSI value is divided into five criteria as follows:

Table 1. Criteria CSI

Index Value (100%)	CSI Criteria
81.00 – 100.00	Very Satisfied
66.00 – 80.99	Satisfied
51.00 – 65.99	Quite Satisfied
35.00 – 50.00	Less Satisfied
0.00 – 34.999	Not Satisfied

Importance Performance Analysis

The IPA instrument was first introduced by Martilla and James in 1977 to assess customer satisfaction with corporate services or products. The Importance Performance Analysis (IPA) technique is used, in which respondents are asked to assess several elements (attributes) of the product according to their importance and how well the organization performs in each element (Tjiptono, 2012)

IPA categorises attribute types into four quadrants (Pranitasari & Sidqi, 2021). Mapping is done in the four quadrants of the Cartesian figure. The distribution of attribute placement on the Cartesian diagram can be modified depending on the following quadrant-specific criteria:

1. Quadrant A (highest priority) indicates that the indicator is important to customers, but the company's performance is below expectations.
2. Quadrant B (maintain performance) indicates that the indication is essential to customers and that performance has fulfilled their expectations.
3. Quadrant C (Low priority) This quadrant indicates that the attribute is not regarded important, and its performance is below expectation.
4. Quadrant D (potential overkill). This quadrant indicates that the attribute is less significant, but the performance exceeds expectations.

RESEARCH MODELS

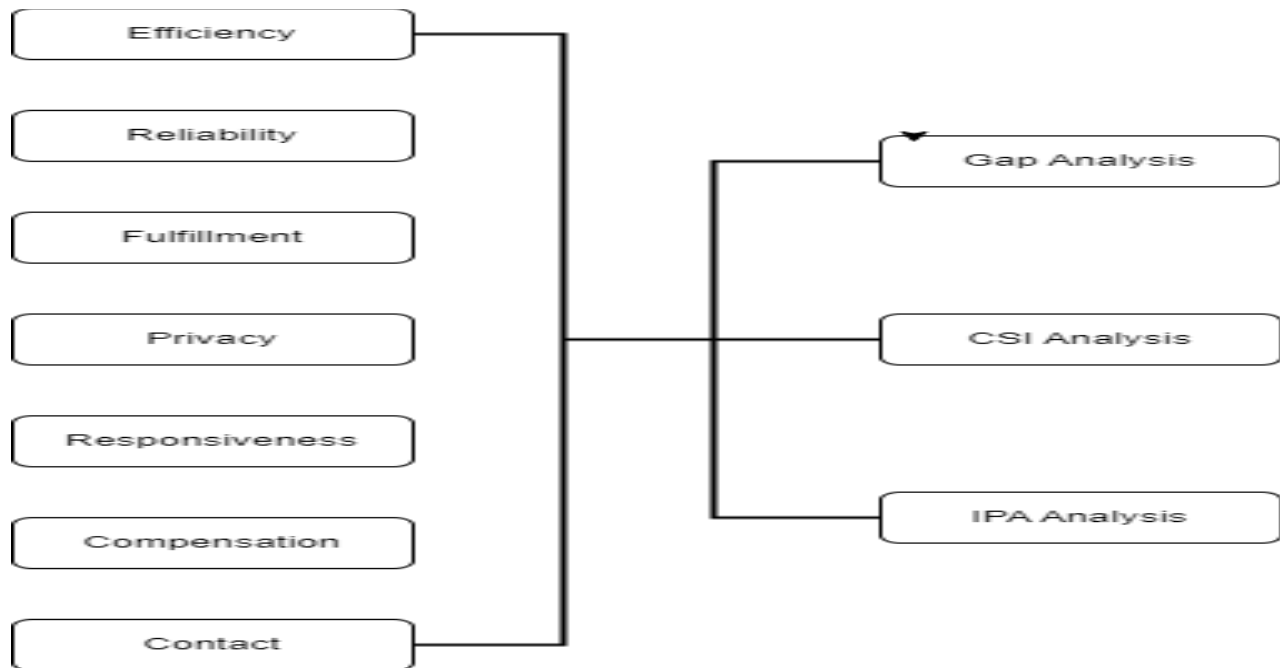


Figure 1. Conceptual Framework

METHOD

This research is classified as descriptive according to the formulation of the problem and the research aims. Descriptive research describes the characteristics of the population or phenomenon under study. Descriptive research methods place a greater emphasis on explaining the object of study, with the goal of producing answers to a past occurrence. The data source is primary data acquired from BRIimo application users via a questionnaire that includes their degree of satisfaction and expectations for the quality of the BRIimo application's electronic services. The population of the research includes all BRI customers who utilize the BRIimo m-banking application. In this research, purposive sampling was used. Purposive sampling (Sugiyono, 2014) is a random sample strategy from a population based on the researcher's requirements. The Hair formula was used to calculate the sample size for this study based on the population. The Hair formula is used because the research population is not yet known for definite. The usual approach for research with a minimum sample size is to multiply the research indicator by 5-10. If there are more than 20 indicators, the sample size will range from 100 to 200 samples. The number of indicators in this research is 29, hence the number of samples to be analyzed in this research is 200, which is thought to be adequate to represent the population. According to (Ferdinand, 2014), a good sample size is between 100 and 200 respondents. The analysis method uses gap analysis, Customer Satisfaction Index and Importance Performance Analysis.

Table 1. Table of Operational Variable

Research Variables	Variable indicators	Code	Scale	Reference
Efficiency: speed and ease of accessing the site	Easy verification and login	Ef1	Likert	(Ariff et al., 2012)
	Easy and fast transactions	Ef2	Likert	(Khan et al., 2019)
	Easy to use	Ef3	Likert	(Khan et al., 2019)
	Easily find the transactions	Ef4	Likert	(Khan et al., 2019)

	you need			
Reliability : all technical functions of the site are running correctly	Service is available 24 hours	Re1	Likert	(Khan et al., 2019), (Raza et al., 2020), (Zemblyt�, 2015)
	Service is not slow/congested	Re2	Likert	(Khan et al., 2019)
	Error free	Re3	Likert	(Raza et al., 2020), (Wu et al., 2008)
	Transactions are quickly confirmed	Re4	Likert	(Zemblyte, 2015)
Fulfillment: how the site meets expectations and expectations in all kinds of transactions, delivery, and product availability.	Service according to description	Fu1	Likert	(Khan et al., 2019)
	Various transactions	Fu2	Likert	(Sari & Suyatno, 2023)
	Service instructions are easy to follow	Fu3	Liket	(Zhang, 2013)
	Accurate transactions	Fu4	Likert	(Ariff et al., 2013)
Privacy: provides guarantees for customer information or personal data.	Security of personal data and transaction data	Pr1	Likert	(Alnaim et al., 2022)
	Use of passwords	Pr2	Likert	(Ariff et al., 2012) , (Tsao et al., 2016)
	Personal data is used as necessary	Pr3	Likert	(Khan et al., 2019)
	Transaction security	Pr4	Likert	(Raza et al., 2020) , (Ariff et al., 2012)
	Free of risks associated with online transactions	Pr5	Likert	(Khan et al., 2019)
Responsiveness: how the site responds quickly to customers when problems arise	Fast service response	Rs1	Likert	(Raza et al., 2020) , (Islam et al., 2021)
	Notification of problematic accounts	Rs2	Likert	(Ariff et al., 2012)
	Handle problems quickly	Rs3	Likert	(Zemblyt�, 2015) , (Elsharnouby & Mahrous, 2018)
	Notification of unprocessed transactions	Rs4	Likert	(Raza et al., 2020) , (Elsharnouby & Mahrous, 2018) , (Sari & Suyatno, 2023)
Compensation: how management provides compensation including refunds, shipping costs, and product handling costs.	Refund service	Cp1	Likert	(Tsao et al., 2016) , (Sari & Suyatno, 2023)
	Providing compensation	Cp2	Likert	(Zemblyt�, 2015) , (Tsao et al., 2016) , (Elsharnouby & Mahrous, 2018)
	Low price offer	Cp3	Likert	(Wu et al., 2008)

Contact: availability of customer service on the site to be able to talk to customer service staff online or by telephone	Special service offers such as cashback	Cp4	Likert	(Wu et al., 2008)
	Customer service	Cn1	Likert	(Tsao et al., 2016) , (Sari & Suyatno, 2023)
	Availability of call center/email	Cn2	Likert	(Wu et al., 2008) , (Ting et al., 2016) , (Sari & Suyatno, 2023)
	Chat/message service feature	Cn3	Likert	(Wu et al., 2008)
	Contact service is easy to contact	Cn4	Likert	(Wu et al., 2008) (Ariff et al., 2012)

RESULTS AND DISCUSSION

Characteristics of Respondents

The characteristic of respondent in this study must live in Padang City, have downloaded/used the BRIMO application for more than a year, and be active users of the BRImo application, having completed at least three transactions in the previous six months. The characteristics of the respondents can be seen in Table 2:

Table 2. Characteristic of Respondent

Characteristics	Category	Amount	Percentage
Gender	Male	65	32,5%
	Female	135	67,5%
Age	18-22 years old	80	40%
	23-27 years old	97	45%
	28-32 years old	17	8,5%
	33-38 years old	3	1,5%
	39-45 years old	2	1%
	>45 years old	1	0,5%
	Job	Student	120
	Civil Servant	11	5,5%
	Private Emplooe	34	17%
	Self-employed	18	9%
	Farmer	1	0,5%
	Seller	6	3%
	Honorary Emploee	2	1%
	Freelancer	2	1%
	Houswife	3	1,5%
	Radiografer	1	0,5%
	Unemployee	2	1%

Validity Test

The validity test determines the accuracy of each tool attribute. The data were processed with IBM SPSS Statistics 23. With 30 respondents, the r table formula is $df = N - 2$, with $N = 30$ and a 5% significant level, yielding a r table value of 0.349. If $r_{count} > r_{table}$, the assertion is judged legitimate.

Table 3. Validity Test

According to the validity test in the table above, all attributes already have a calculated r higher

Dimension	Attribute Code	Perception		Expectation	
		Result	Information	Result	Information
Efficiency	Ef1	0,760	Valid	0,867	Valid
	Ef2	0,833	Valid	0,925	Valid
	Ef3	0,855	Valid	0,888	Valid
	Ef4	0,801	Valid	0,880	Valid
Reliability	Re1	0,796	Valid	0,930	Valid
	Re2	0,861	Valid	0,891	Valid
	Re3	0,722	Valid	0,843	Valid
	Re4	0,723	Valid	0,942	Valid
Fulfillment	Fu1	0,862	Valid	0,942	Valid
	Fu2	0,805	Valid	0,780	Valid
	Fu3	0,879	Valid	0,950	Valid
	Fu4	0,806	Valid	0,872	Valid
Privacy	Pr1	0,903	Valid	0,912	Valid
	Pr2	0,827	Valid	0,926	Valid
	Pr3	0,900	Valid	0,896	Valid
	Pr4	0,894	Valid	0,915	Valid
	Pr5	0,879	Valid	0,896	Valid
Responsiveness	Rs1	0,918	Valid	0,946	Valid
	Rs2	0,870	Valid	0,889	Valid
	Rs3	0,818	Valid	0,930	Valid
	Rs4	0,873	Valid	0,931	Valid
Compensation	Cp1	0,836	Valid	0,917	Valid
	Cp2	0,719	Valid	0,889	Valid
	Cp3	0,702	Valid	0,853	Valid
	Cp4	0,777	Valid	0,877	Valid
Contact	Cn1	0,827	Valid	0,907	Valid
	Cn2	0,872	Valid	0,935	Valid
	Cn3	0,841	Valid	0,859	Valid
	Cn4	0,778	Valid	0,860	Valid

than the r table. As a result, the 29 attributes have been declared genuine and can be used to collect primary data via surveys.

Reliability Test

Reliability measurement is done by looking at the output of composite reliability and Cronbach alpha.

Table 4. Cronbach’s Alpha

Perception		Expectation	
Cronbach’s Alpha	Information	Cronbach’s Alpha	Information
0,983	Reliable	0,991	Reliable

Source : Primary Data 2024

According to the findings of the reliability test in the table above, perception and expectation have a Cronbach alpha greater than 0.7. So it can be concluded that all of the features listed above are reliable and can be used as input for further data analysis.

Gap Analysis

To obtain the attribute gap, the e-servqual score is calculated based on the following formula:

$$\begin{aligned} \text{Gap Attribute} &= (\text{Consumer Perception Score}) - (\text{Consumer Expectation Score}) \\ &= 4,01 - 4,30 \\ &= -0,29 \end{aligned}$$

$$\begin{aligned} \text{Dimension Gap} &= (\text{Total of all attribute dimension gaps}) / (\text{Number of dimension attributes}) \\ &= \frac{(-0,29) + (-0,25) + (-0,23) + (-0,39)}{4} \\ &= -0,29 \end{aligned}$$

Table 5. Gap Analysis

Dimension	Attribut Code	Mean		Attribut Gap	Dimension Gap	Rangking		
		Perception	Expectation					
Efficiency	Ef1	4,01	4,02	4,30	4,31	-0,29	-0,29	9
	Ef2	4,04		4,29		-0,25		5
	Ef3	4,11		4,35		-0,23		2
	Ef4	3,94		4,32		-0,39		18
Reliability	Re1	3,95	3,83	4,33	4,25	-0,38	-0,41	17
	Re2	3,77		4,21		-0,44		25
	Re3	3,63		4,16		-0,53		29
	Re4	3,99		4,29		-0,31		11
Fulfillment	Fu1	3,97	4,06	4,34	4,32	-0,37	-0,26	16
	Fu2	4,00		4,28		-0,28		7
	Fu3	4,10		4,39		-0,29		8
	Fu4	4,18		4,29		-0,12		1
Privacy	Pr1	4,11	4,05	4,35	4,33	-0,24	-0,28	3
	Pr2	4,06		4,31		-0,25		5

Responsiveness	Pr3	4,05		4,36		-0,31		12
	Pr4	4,10		4,34		-0,25		4
	Pr5	3,96		4,31		-0,35		14
	Rs1	4,02	3,90	4,35	4,29	-0,33	-0,39	13
	Rs2	3,94		4,29		-0,35		15
	Rs3	3,80		4,24		-0,44		24
	Rs4	3,83		4,29		-0,46		26
	Compensation	Cp1	3,87	3,77	4,29	4,23	-0,42	-0,46
Cp2		3,68		4,18		-0,51		28
Cp3		3,77		4,20		-0,43		22
Cp4		3,77		4,24		-0,47		27
Contact	Cn1	3,88	3,86	4,28	4,25	-0,41	-0,39	19
	Cn2	3,94		4,23		-0,30		10
	Cn3	3,81		4,24		-0,43		22
	Cn4	3,84		4,25		-0,41		20
Mean	3,93	3,93	4,28	4,28	-0,35	-0,35		

Source : Primary Data 2024

The table shows that all qualities have negative values, with an average of -0.35. Negative qualities suggest that the service quality does not fulfill the user's expectations.

Customer Satisfaction Index Analysis

This calculation measures the total level of user satisfaction by taking into account the importance and performance level of each dimension's attributes.

Table 6. CSI

Kode Atribut	MIS	MSS	WF	WS
Ef1	4,30	4,01	0,0346	0,138
Ef2	4,29	4,04	0,0345	0,140
Ef3	4,35	4,11	0,0350	0,144
Ef4	4,32	3,94	0,0348	0,137
Re1	4,33	3,95	0,0349	0,138
Re2	4,21	3,77	0,0339	0,127
Re3	4,16	3,63	0,0335	0,122
Re4	4,29	3,99	0,0345	0,138
Fu1	4,34	3,97	0,0349	0,138
Fu2	4,28	4,00	0,0344	0,138
Fu3	4,39	4,10	0,0353	0,145
Fu4	4,29	4,18	0,0345	0,144
Pr1	4,35	4,11	0,0350	0,144

Pr2	4,31	4,06	0,0347	0,141
Pr3	4,36	4,05	0,0351	0,142
Pr4	4,34	4,10	0,0349	0,143
Pr5	4,31	3,96	0,0347	0,137
Rs1	4,35	4,02	0,0350	0,141
Rs2	4,29	3,94	0,0345	0,136
Rs3	4,24	3,80	0,0341	0,130
Rs4	4,29	3,83	0,0345	0,132
Cp1	4,29	3,87	0,0345	0,133
Cp2	4,18	3,68	0,0337	0,124
Cp3	4,20	3,77	0,0338	0,127
Cp4	4,24	3,77	0,0341	0,128
Cn1	4,28	3,88	0,0345	0,134
Cn2	4,23	3,94	0,0341	0,134
Cn3	4,24	3,81	0,0341	0,130
Cn4	4,25	3,84	0,0342	0,131
Total	124,22		3,934	

Source : Primary Data 2024

Next, compute the CSI value using the highest scale (HS) employed in this research, which is 5.

$$\begin{aligned}
 CSI &= \frac{WS}{HS} \times 100\% \\
 &= \frac{3,934}{5} \times 100\% \\
 &= 78,68 \%
 \end{aligned}$$

Importance Performance Analysis

The 29 attributes processed in the e-servqual analysis are then analyzed using a Cartesian or IPA diagram. The phases in the IPA analysis include calculating the total average for the qualities of expectation and performance. The Y axis will have the total average of the expectation attribute, while the X axis will contain the total average of the performance attribute. The overall average of X and Y will serve as the Cartesian diagram's center line or intersection point.

$$X=3,93 \quad Y= 4,28$$

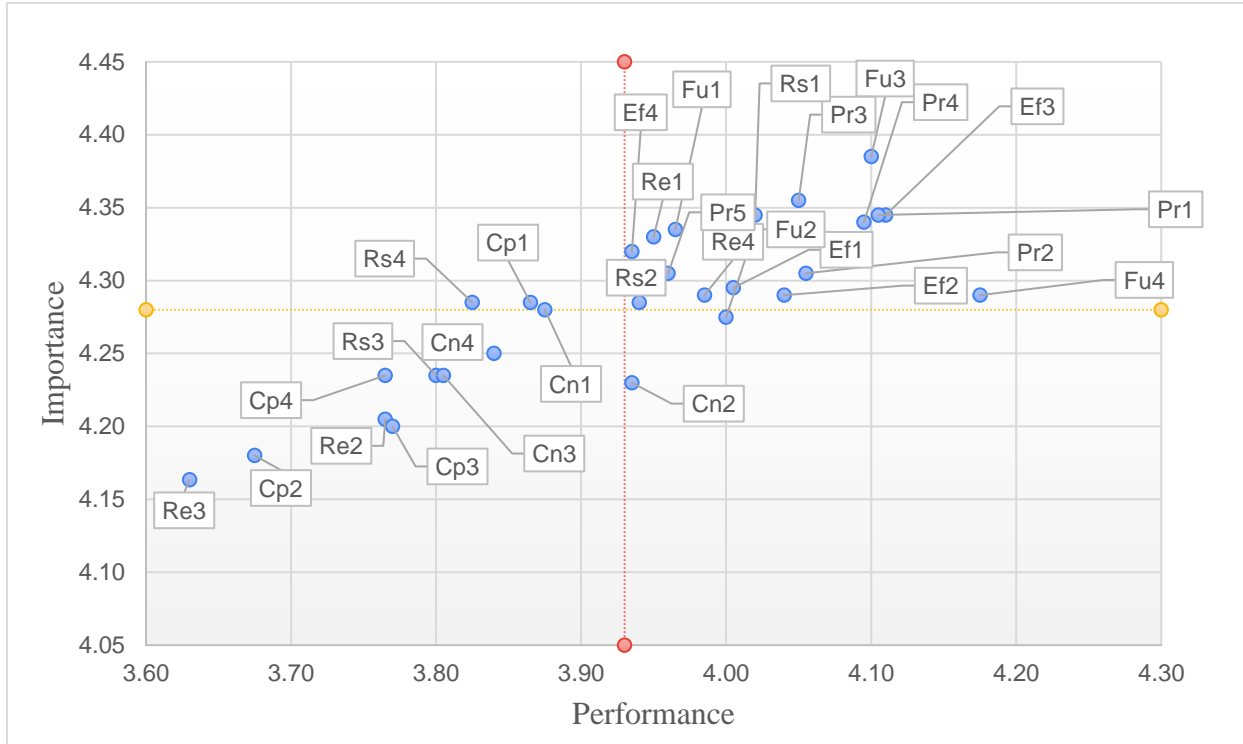


Figure 2. Cartesius Quadran BRImo

DISCUSSION

Gap Analysis

According to table 5, all service qualities of the BRImo application are negative, with an average value of -0.35. This table shows how large the difference is between the level of expectations and performance for each service quality attribute. The larger the gap number, the greater the discrepancy between expectations and actual performance. The attribute with the biggest negative gap value is at rank 29, and it has the code Re3 (transactions with the BRImo application are error-free), with a gap value of -0.53. This demonstrates that the BRImo program still has problems, resulting in poor performance according to user assessments. Meanwhile, in the assessment of the 7 aspects of BRImo application services, the compensation dimension has the biggest negative gap value, at -0.46. This demonstrates that the compensation service feature in the BRImo application performs poorly according to user assessments. A negative gap result shows that all aspects of the service offered failed to fulfill user expectations. Attributes with a negative value imply that there are gaps and issues with these attributes because the consumer believes they are still unsatisfied or cannot match user expectations.

Customer Satisfaction Index Analysis

According to the results of the Customer Satisfaction Index (CSI) calculation in table 14, the overall user satisfaction value for the service quality of all service attributes in the BRImo application is 78.68%. This value in the CSI criteria is between 66.00-80.99, indicating that users are satisfied with the BRImo application service. This value indicates that the majority of users are content with the BRImo application's services, but 21.32% are dissatisfied with its performance. Meanwhile, according to table 15, the overall user satisfaction value for service quality across all dimensions of BRImo application services

is 78.58%. This value in the CSI criteria is between 66.00 and 80.99, indicating that users are satisfied with the BRImo application service.

Importance Performance Analysis

1. Quadrant A displays the features that BRImo application users value the most, yet the performance offered still falls short of user expectations, resulting in low user satisfaction. It is known that there are two service attributes that fit into quadrant A: Rs4 from the responsiveness dimension and Cp1 from the compensation dimension.
2. The attributes in quadrant B must be maintained since they are vital to users, and the performance given has fulfilled user expectations, resulting in reasonably high satisfaction levels. There are 17 service attributes in quadrant B, including services with attribute codes Ef1, Ef2, Ef3, Ef4 (efficiency dimension), Re1, Re4 (reliability dimension), Fu1, Fu2, Fu3, Fu4 (fulfillment dimension), Pr1, Pr2, Pr3, Pr4, Pr5 (privacy dimension), and Rs1, Rs (responsiveness dimension).
3. Quadrant C is a low-performance quadrant where consumers view qualities to be unimportant, hence features in this quadrant do not require prioritization. This quadrant contains nine service traits, identified by the attribute codes Re2, Re3 (reliability dimension), Rs3 (responsiveness dimension), Cp2, Cp3, Cp4 (compensation dimension), and Cn1, Cn3, Cn4 (contact dimension).
4. Quadrant D contains less critical features, yet its performance exceeds user expectations, resulting in a reasonably high level of satisfaction. This quadrant contains one property, identified by the code Cn2 (contact dimension).

CONCLUSION

Based on the analysis and discussion previously described, the following can be concluded:

1. The average gap value for BRImo application services is -0.35, as determined by gap analysis calculations for all attributes. Thus, based on the measurements performed on 29 service parameters, it is possible to infer that the overall quality of BRImo application services remains lower than user expectations.
2. Based on CSI study, the total level of customer satisfaction of BRImo application services is 78.68%, which falls within the CSI criteria range of 66.00 to 80.99. This demonstrates that while the amount of consumer satisfaction is in the satisfied category, it is still not optimal overall.
3. According to the IPA quadrant analysis, the attributes that need to be corrected and improved can be seen in quadrant A: Rs4 (the BRImo application tells customers what to do if a transaction is not processed) and Cp1 (the BRImo application offers a refund service if there is an error and a transaction that does not work properly).

SUGGESTION

Based on the research that has been conducted, researchers provide several suggestions as follows:

1. There is a need to improve and increase the quality of service in the BRImo application, particularly in the aspects of service and dimensions with the greatest negative gaps. This is to ensure that the future quality of BRImo application services meets client expectations.
2. There is a need to improve service quality in order to raise customer satisfaction. Currently, the level of customer satisfaction is still in the satisfied category, but there is a potential to improve service quality so that it can reach the very satisfied category. This is done because consumer perceptions and expectations fluctuate over time.

3. There is a need to improve service quality priorities in quadrant A, where this quadrant is the key attribute that customers value but whose performance is currently lacking. It is advised that service improvements be implemented in quadrant B as a long-term opportunity because this service attribute is superior in the perspective of clients. For quadrant C, organizations should focus on developing service quality so that these service attributes are perceived as significant by customers, and then reconsider them by examining the traits that have a large or little influence on the advantages received by customers. Finally, the organization must reconsider if the quadrant D attributes are efficient or not.

REFERENCES

- Alnaim, A. F., Sobaih, A. E. E., & Elshaer, I. A. (2022). Measuring the Mediating Roles of E-Trust and E-Satisfaction in the Relationship between E-Service Quality and E-Loyalty: A Structural Modeling Approach. *Mathematics*, 10(13). <https://doi.org/10.3390/math10132328>
- Ariff, M. S. M., Yun, L. O., Zakuan, N., & Jusoh, A. (2012). Examining Dimensions of Electronic Service Quality for Internet Banking Services. *Procedia - Social and Behavioral Sciences*, 65(ICIBSoS), 854–859. <https://doi.org/10.1016/j.sbspro.2012.11.210>
- Ariff, M. S. M., Zavareh, F. B., Zakuan, N., & Isak, N. (2013). Electronic Service Quality of Iranian Internet Banking. *Review of Integrative Business & Economics Research*, 2(2), 555–571.
- Dabestani, R., Shahin, A., Saljoughian, M., & Shirouyehzad, H. (2016). Importance-performance analysis of service quality dimensions for the customer groups segmented by DEA: The case of four star hotels. *International Journal of Quality and Reliability Management*, 33(2), 160–177. <https://doi.org/10.1108/IJQRM-02-2014-0022>
- Databoks. (2023). *Transaksi Digital Banking di Indonesia Tumbuh 158% dalam 5 Tahun Terakhir*. <https://databoks.katadata.co.id/datapublish/2023/07/05/transaksi-digital-banking-di-indonesia-tumbuh-158-dalam-5-tahun-terakhir>
- Elsharnouby, T. H., & Mahrous, A. A. (2018). Customer Participation In Online Co-creation Experience: The Role of E-service Quality. *Journal of Research in Interactive Marketing*, 34(1), 1–5.
- Ferdinand, A. (2014). *Metode Penelitian Manajemen* (5th ed.). Universitas Diponegoro.
- Fishman, J. (2020). *How Reviews and Ratings Affect App store Optimization (ASO)*. Stormaven. <https://www.stormaven.com/academy/user-reviews-ratings-affect-aso/>
- Irawan, H. (2004). *Indonesia Customer Satisfaction : Membedah Strategi Kepuasan Pelanggan Merek Pemenang ICOSA*. PT Alex Media Computindo.
- Islam, R., Ahmed, S., Rahman, M., & Al Asheq, A. (2021). Determinants of Service Quality and Its Effect On Customer Satisfaction and Loyalty: An Empirical Study of Private Banking Sector. *TQM Journal*, 33(6), 1163–1182. <https://doi.org/10.1108/TQM-05-2020-0119>
- Khan, M. A., Zubair, S. S., & Malik, M. (2019). An Assessment of E-service Quality, E-satisfaction and E-loyalty: Case of Online Shopping in Pakistan. *South Asian Journal of Business Studies*, 8(3), 283–302. <https://doi.org/10.1108/SAJBS-01-2019-0016>
- Kotler, P., & Keller, K. L. (2016). *Manajemen Pemasaran* (12th ed.). PT.Indeks.
- MediaIndonesia. (2024). *Punya 31,6 Juta User, BRImo Jadi Aplikasi Mobile Banking Terbanyak Diunduh di 2023*. https://mediaindonesia.com/ekonomi/650855/punya-316-juta-user-brimo-jadi-aplikasi-mobile-banking-terbanyak-diunduh-di-2023#google_vignette
- Oliveri, E. (2023). *What Happens When App Rating Is Low*. Appbot. <https://appbot.co/blog/what-happens-when-app-rating-is-low/>
- Pranitasari, D., & Sidqi, A. N. (2021). Analisis Kepuasan Pelanggan Elektronik Shopee menggunakan Metode E-Service Quality dan Kartesius. *Jurnal Akuntansi Dan Manajemen*, 18(02), 12–31. <https://doi.org/10.36406/jam.v18i02.438>
- Raza, S. A., Umer, A., Qureshi, M. A., & Dahri, A. S. (2020). Internet banking service quality, e-customer satisfaction and loyalty: the modified e-SERVQUAL model. *TQM Journal*, 32(6), 1443–1466. <https://doi.org/10.1108/TQM-02-2020-0019>
- Rita, R., & Fitria, M. H. (2021). Analisis Faktor-Faktor UTAUT dan Trust Terhadap Behavioral Intention Pengguna BNI Mobile Banking Pada Pekerja Migran Indonesia. *Jesya (Jurnal Ekonomi & Ekonomi Syariah)*, 4(2), 926–939. <https://doi.org/10.36778/jesya.v4i2.453>

- Rod, M., Ashill, N. J., Shao, J., & Carruthers, J. (2009). An examination of the relationship between service quality dimensions, overall internet banking service quality and customer satisfaction: A New Zealand study. *Marketing Intelligence and Planning*, 27(1), 103–126. <https://doi.org/10.1108/02634500910928344>
- Saraswati, G. D., & Agustina, F. (2021). Analisis Kualitas Layanan Aplikasi Indodax Dengan Menggunakan Metode E-Serqual Dan Importance Performance Analysis (IPA). *Jurnal Ilmiah Komputasi*, 20(3), 425–433. <https://doi.org/10.32409/jikstik.20.3.2735>
- Sari, P. F., & Suyatno, D. F. (2023). Pengukuran Kualitas Layanan Pada Aplikasi Tiktok Shop Menggunakan Metode E-Serqual Dan IPA (Importance Performance Analysis). *Journal of Emerging Information Systems and Business Intelligence*, 4(2), 126–135.
- Sugiyono. (2014). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Susnita, T. A. (2020). Pengaruh Kualitas Pelayanan dan Kepuasan Pelanggan Terhadap Loyalitas Pelanggan pada Hotel Libra Kadipaten Kabupaten Majalengka. *Juripol (Jurnal Institusi Politeknik Ganesha Medan)*, 3(1), 73–84. <https://doi.org/10.33395/juripol.v3i1.10485>
- TBA. (2024). *Top Brand Index Fase 1 2024 Kategori Banking dan Finance*. Top Brand Index. https://www.topbrand-award.com/top-brand-index/?tbi_year=2024&category=banking-dan-finance
- Ting, O. S., Ariff, M. S. M., Zakuan, N., Sulaiman, Z., & Saman, M. Z. M. (2016). E-Service Quality, E-Satisfaction and E-Loyalty of Online Shoppers in Business to Consumer Market; Evidence form Malaysia. *IOP Conference Series: Materials Science and Engineering*, 131(1). <https://doi.org/10.1088/1757-899X/131/1/012012>
- Tjiptono, F. (2012). *Service Management Mewujudkan Layanan Prima* (2nd ed.). ANDI.
- Tjiptono, F. (2014). *Pemasaran Jasa*. ANDI.
- Tsao, W. C., Hsieh, M. T., & Lin, T. M. Y. (2016). Intensifying Online Loyalty The Power of Website Quality and The Perceived Value of Consumer/Seller Relationship. *Industrial Management and Data Systems*, 116(9), 1987–2010. <https://doi.org/10.1108/IMDS-07-2015-0293>
- Wu, Y. L., Chang, M. C. S., Yang, P. C., & Chen, Y. J. (2008). The Use of E-SQ to Establish the Internet Bank Service Quality Table. *International Conference on Industrial Engineering and Engineering Management, I*, 1446–1450. <https://doi.org/10.1109/IEEM.2008.4738110>
- Zemblytė, J. (2015). The Instrument for Evaluating E-Service Quality. *Procedia - Social and Behavioral Sciences*, 213, 801–806. <https://doi.org/10.1016/j.sbspro.2015.11.478>
- Zhang, Y. (2013). *Measuring Service Quality of Online Banking in China*. http://pub.lib.aalto.fi/en/ethesis/pdf/13374/hse_ethesis_13374.pdf