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EVALUATING SERVICE QUALITY OF SECURITIES TRADING APPLICATIONS: A CASE STUDY OF APPLICATION X USING E-SERVQUAL AND IPA

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ABSTRACT

Application X is an application for conducting securities transactions launched by Securities Y. Application X frequently experiences disruptions that hinder transactions, resulting in a 55.74% decrease in transaction volume. This study aims to analyze the gap between users' perceptions and expectations of the service quality of the application and provide suggestions for improvement priorities for Application X. The E-Servqual method is used to evaluate user satisfaction with the service quality of the application, while the Importance Performance Analysis (IPA) method is used to determine the improvement priorities. The results show that users' expectations of the service quality of the securities application are 4.81, while users' perceptions of the service quality of Application X are only 3.64, resulting in a gap value of -1.17, meaning it does not meet expectations. The level of conformity of Application X is 75.72%, indicating that the application has not met expectations. The improvement priorities based on the IPA method include the RDN fund top-up process being quick, the application is accessible at any time, resolving user issues quickly, having a clear system failure handling process, displaying an accurate portfolio, making it easier for users to find the desired stock information, displaying accurate transaction fees in the Trade Confirmation, and ensuring the smooth operation of PIN and password authentication.
Keywords: E-Servqual, Importance Performance Analysis, Perception, Expectation

ABSTRAK

Aplikasi X merupakan Aplication untuk melakukan transaksi perdagangan efek yang diluncurkan oleh Sekuritas Y. Aplikasi X sering mengalami gangguan yang menghambat transaksi hingga menyebabkan penurunan transaksi sebesar 55,74%. Penelitian ini bertujuan untuk menganalisis kesenjangan antara persepsi dan ekspektasi pengguna terhadap kualitas layanan Aplication dan memberikan usulan prioritas perbaikan bagi Aplikasi X. Metode E-Servqual digunakan untuk mengevaluasi kepuasan pengguna terhadap kualitas layanan Aplication, sementara metode Importance Performance Analysis (IPA) digunakan untuk menentukan prioritas perbaikan. Hasil penelitian menunjukkan ekspektasi pengguna terhadap kualitas layanan aplikasi sekuritas adalah 4,81, sementara persepsi pengguna terhadap kualitas layanan Aplikasi X hanya 3,64, menghasilkan nilai gap -1,17, yang artinya belum memenuhi ekspektasi. Tingkat kesesuaian Aplikasi X adalah 75,72%, yang menunjukkan aplikasi belum memenuhi ekspektasi. Prioritas perbaikan berdasarkan metode IPA meliputi proses top up dana RDN yang cepat, aplikasi dapat diakses kapan saja, menyelesaikan masalah pengguna dengan cepat, proses penanganan kegagalan sistem yang jelas, menampilkan portofolio yang akurat, memudahkan pengguna menemukan informasi saham yang diinginkan, menampilkan feetransaksi secara akurat di Trade Confirmation, dan memungkinkan proses autentikasi PIN dan password berjalan lancar.
Kata kunci: *E-Servqual, Importance Performance Analysis, Persepsi, Ekspektasi*

INTRODUCTION

Securities Y is specifically designed to meet the investment needs of the community in a particular region by providing brokerage services focused on individuals who have an ID card from that region. The main revenue of Securities Y comes from the buy and sell fees imposed on every securities transaction, which is a common business model in the brokerage industry.

To facilitate the public in making transactions in the capital market industry, Securities Y launched Application X. Application X is a digital application that functions as a platform for conducting online stock trading transactions. Application X allows users to access the stock market in a more efficient and integrated manner, providing convenience for buying and selling stocks and is equipped with analysis features. Although Application X has been functioning as a tool to facilitate access to the stock market for customers, Securities Y acknowledges that this application still has untapped potential.

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According to an interview with one of the managers, there have been several complaints from customers regarding the application, especially in May and June 2024. In 2024, Application X experienced transaction instability. Transactions declined by 45% in May and by 55.7% in June. This aligns with the results of user reviews on the Google Play Store, where complaints about the application going down were evident. Some users expressed complaints regarding the application's accessibility, where the app frequently encountered errors, preventing users from accessing it for several days, indicating that this problem is not temporary but recurring, affecting user comfort.

Considering the large potential possessed by Application X, with only around 5.6% of the population in the served area becoming investors, it indicates a significant opportunity for Application X to increase both the number of customers and transactions. However, the expected development has not yet been fully achieved, suggesting possible challenges or obstacles that need to be addressed to ensure the company can grow in line with its capacity and available opportunities.

Customer satisfaction relates to feelings of happiness or disappointment that a person experiences after comparing the actual performance of a product they have experienced with the performance they expected (Kotler, Keller, & Chernev, 2022). If the performance is lower than expected, it will cause customers to feel disappointed; if the performance meets expectations, customers will feel satisfied, and if the performance exceeds expectations, customers will feel very happy or highly satisfied. Customer satisfaction is an aspect that companies must pay particular attention to. Customer satisfaction is a key factor for consumers in making repeat purchases, which can increase sales volume and profits for the company in the long term (Emilia & Sanjaya, 2023). Based on that, the influence of customer satisfaction and service quality becomes one of the factors affecting consumer satisfaction.

The Service Quality (Servqual) method is a method used to evaluate and assess service quality based on indicators within all dimensions used, resulting in a gap value by finding the difference between consumer perceptions of the services they receive and their expectations of those services (Manyaga & Hacioglu, 2021). Electronic Service Quality (E-Servqual) is an extension of Service Quality applied to electronic media (Maziyah & Vitasari, 2022). Essentially, Electronic Service Quality (E-Servqual) is a method for evaluating service quality used by companies like Service Quality, but this method is applied to services provided via electronic media. This model was first developed by Parasuraman, Zeithaml, & Malhotra in 2005. This method involves seven variables that cover various aspects of electronic service quality: efficiency, fulfillment, system availability, responsiveness, compensation, privacy, and contact (Parasuraman, Zeithaml, & Malhotra, 2005).

Previous research conducted by Agustina & Suyatno (2024) used the Electronic Service Quality and Importance Performance Analysis (IPA) methods to evaluate customer satisfaction with the service quality of the BTN Mobile application. Lolok, Marini, & Lotte (2024) also used the Service Quality and IPA to analyze the service quality of mobile banking. Moreover, Novendra et al. (2022) used Service Quality and Importance Performance Analysis methods to analyze customer satisfaction with the service quality of the KB Bukopin Mobile Banking application. Prihatiningrum & Zuraidah (2022) used the Service Quality and Importance Performance Analysis methods to analyze the service quality of the mobile banking application for Bank Bjb Tangerang branch customers. The IPA method was first introduced by Martilla and James in 1997 (Tjiptono & Chandra, 2022). The IPA method is used to determine aspects or performance indicators needed by the company to improve the service quality provided from the users' perspectives (Rafi, Nuha, & Makky, 2023). This method is useful for evaluating the correlation between consumer expectations and perceptions to identify the improvements that should be prioritized to enhance service or product quality, known as quadrant analysis (Hsu, 2020). The conclusion drawn is that The E-Servqual and IPA methods are relevant for evaluating the service

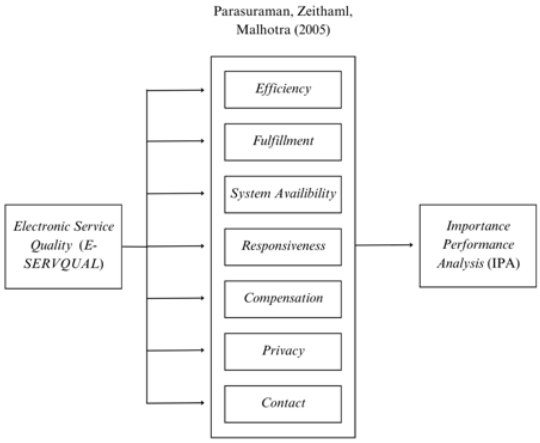
quality of banking applications and determining improvement priorities.

To evaluate and improve the service quality of Application X, this study integrates two methods: E-Servqual and IPA. By combining the E-Servqual model with IPA, this study aims to explore in-depth users' perspectives on the service quality of Application X and identify the improvement priorities needed for the application. Through insights from users, it is hoped that Securities Y can develop the application to meet market needs better, enhance competitiveness, and provide a better experience for investors. Improving the quality of Application X is expected to increase customer satisfaction, which in turn will drive an increase in transactions and ultimately bring greater profits to the company.

CONCEPTUAL FRAMEWORK

The conceptual framework in this study is constructed based on Figure 1. According to Tjiptono & Chandra (2019), service quality is a measure of how well customer expectations are met by the level of service provided. In today's digital era, service quality is not only provided by human resources but can also be delivered electronically, leading to the emergence of electronic service quality (E-Servqual). E-SERVQUAL is the service provided through the internet network as an expansion of a website's ability to facilitate shopping, purchasing, and distribution activities as effectively and efficiently as possible (Magdalena & Jaolis, 2018). According to Sidharta et al. (2021), electronic service quality plays a significant role in increasing customer loyalty and retaining customers in business. Applications are one of the main components in the electronic domain. Therefore, the service quality of applications is an aspect that needs to be considered in attracting and retaining users in today's digital era. With the increasing number of available applications, users are becoming more selective in choosing which applications to use. Hence, understanding the users' perspectives and improving the application's service quality has become a primary priority for companies to remain competitive.

Figure 1. Conceptual Framework



Source: Processed by Author

According to Parasuraman, Zeithaml, & Malhotra (2005), the criteria for assessing electronic service quality consist of 7 dimensions, which are divided into two scales: the core scale, which includes efficiency, fulfillment, system availability, and privacy, and the recovery scale, which includes responsiveness, compensation, and contact. The E-Servqual model proposed by Parasuraman, Zeithaml, & Malhotra (2005) is the most comprehensive and integrated online service quality model because it consists of relevant dimensions and can comprehensively meet the needs of evaluating electronic-based service quality (Tjiptono & Chandra, 2019).

The IPA method complements E-Servqual by providing strategic guidance in determining improvement priorities to enhance the service quality of the application. The IPA method, also known as quadrant analysis, measures the relationship between customer expectations and perceptions, which is then used to determine the priority improvements for product or service quality (Repi, Massie, & Soegoto, 2014). According to Syaifullah, Wijaya, & Husodo (2018), the IPA method is highly appropriate and effective for analyzing customer satisfaction. The IPA method involves a detailed analysis process, starting from measuring overall customer satisfaction and ultimately identifying service attributes that require improvement and attributes that need to be maintained.

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METHOD

Based on the audience and use of research, this study is categorized as applied research, which is conducted in specific situations with a particular aim of finding solutions to problems, in this case, improving the service quality of the application (Sekaran & Bougie, 2020). Based on its purpose, this study adopts a descriptive approach, which is conclusive in nature and aims to describe a phenomenon, often explaining market characteristics or functions. In this study, the focus is on describing customer satisfaction and the service quality of the application in detail (Sekaran & Bougie, 2020).

The data collection techniques used questionnaires, interviews, and a literature review. Interviews were conducted with one of the managers and investment analysts at Application X to understand the issues or challenges faced by the company, such as recurring customer complaints and the decrease in transactions. Questionnaires were used to collect data on user perceptions and expectations of Application X. The distribution of questionnaires was facilitated by Securities Y, who sent them to users through WhatsApp broadcasts. The literature review aims to explore relevant theories and concepts, such as the E-Servqual model and the IPA method. Additionally, the literature review allows the researcher to identify previous studies and understand the methodologies used, as well as construct the theoretical framework supporting the data analysis.

Population and Sample

The population in this study consists of 5,004 users of Application X. The sampling technique used is probability sampling, specifically Simple Random Sampling, which is a method of sample selection conducted randomly (Sekaran & Bougie, 2020). The sample size is determined using the Slovin formula as follows:

$$n = \frac{N}{1+Ne^2} \quad \ldots(1)$$

Where n = the required sample size, N = the population size, and e = the margin of error or the error that can be tolerated. The margin of error used is 10%. Therefore, the sample in this population is 98 users of Application X.

Operationalization of Variables

The operationalization of variables are structured based on the seven dimensions of E-Servqual according to Parasuraman, Zeithaml, and Malhotra (2005), namely efficiency, fulfillment, system availability, responsiveness, compensation, privacy, and contact.

Table 1. Operationalization of Variable E-Servqual

Dimension	Indicator	Code
Efficiency	The application has fast-loading processes.	A1
	The application makes it easy for users to find the desired stock information.	A2
	The application is always accessible anytime)	A3
	The application allows transactions to be made anywhere.	A4
Fulfillment	The application displays transaction fees accurately on the Trade Confirmation.	B1
	The application allows	B2

	transaction proof to be downloaded easily.	
	The application displays accurate portfolio information.	B3
System Availability	The application has a fast process for top-up funds in RDN until funds appear in the system.	C1
	The application has an easy transaction verification process.	C2
	The application allows smooth PIN and password authentication processes.	C3
	The application deducts balances according to the transaction amount.	C4
	The application has a feature that works well.	C5
Privacy	The application protects user data.	D1
	The application uses a PIN and password for all activities.	D2
Responsiveness	The application provides a customer complaint service that can be contacted anytime the user encounters an issue.	E1
	The application resolves user issues quickly.	E2
	The application provides follow-up on issues when users file complaints.	E3
Compensation	The application has a clear policy regarding fund refunds for failed transactions.	F1
	The application has a clear process for handling system failures.	F2
Contact	The application has an online	G1

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	channel that can be used when customers need information related to products and services.

Source: Processed by Author

The use of the Likert scale follows the indicators on the variables. The Likert scale is a scale used to measure the degree of agreement or disagreement of a subject with the given statement. This scale typically ranges from 1 (strongly disagree) to 5 (strongly agree) and has a neutral midpoint (Sekaran & Bougie, 2020).

Table 2. Measurement of Variables

Score	*Importance Level* (Expectation)	*Performance Level* (Perception)
1	Very Unimportant	Strongly Disagree
2	Unimportant	Disagree
3	Neutral	Neutral
4	Important	Agree
5	Very Important	Strongly Agree

Source: Processed by Author

E-Servqual Method

The E-Servqual analysis is carried out by calculating the gap between user expectations and perceptions to measure the level of customer satisfaction with the service quality of application X, which is then described descriptively. The gap value in E-Servqual is obtained by finding the difference between user expectations and perceptions of the application (Abdullah, 2022). To analyze this gap value, the following formula is used (Tjandra, Suhartono, Kelvin, & Sharon, 2023):

$$Gap\ E\text{-}Servqual = \underline{P} - \underline{E} \quad \ldots(2)$$

Where $\underline{P}$ = average perception score, $\underline{E}$ = average expectation score

The following are the gap value assessment criteria in E-Servqual (Balistha et al., 2022):

a. Gap Electronic Service Quality (E-Servqual) < 0, meaning the application's performance does not meet user expectations.
b. Gap Electronic Service Quality (E-Servqual) > 0, meaning the application's performance exceeds user expectations.

Importance Performance Analysis (IPA) Method

In the Importance Performance Analysis method, the formula to determine the level of conformity is as follows (Prihatiningrum & Zuraidah, 2022):

$$TKi = \frac{Xi}{Yi}\ x\ 100\% \quad \ldots(3)$$

Where TKi = level of conformity, Xi = perception score, and Yi = expectation score.

Here are the interpretations of the level of conformity (Pranitasari & Sidqi, 2021):

a. Level of conformity > 100%, indicating that the quality of service provided is higher than expected by the consumers. Thus, the service can make consumers very satisfied.
b. Level of conformity = 100%, indicating that the quality of service provided is exactly as expected by the consumers. Thus, the service can make consumers satisfied.
c. Level of conformity < 100%, indicating that the quality of service provided is lower than expected by the consumers. Thus, the service is not yet able to make consumers satisfied.

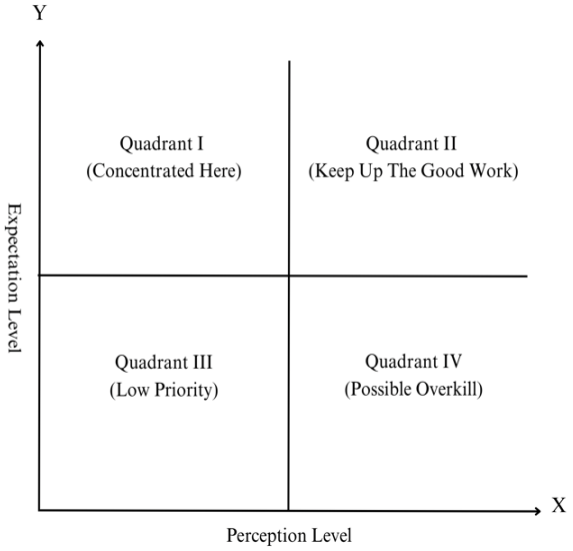
The Cartesian diagram is used to evaluate the relationship between the level of expectation and the level of perception experienced by customers. The Cartesian diagram is divided into four sections by two perpendicular intersecting lines, where $\underline{X_1}$ Is the average perception score and $\underline{X_1}$ It is the average expectation score. To determine the intersection point ($\underline{X_1}$ dan $\underline{Y_1}$) that forms the crossing of the two lines, the following formula can be used:

$$\underline{X} = \frac{\sum_{i=1}^{n} \underline{X_1}}{k} \text{ dan } \underline{Y} = \frac{\sum_{i=1}^{n} \underline{Y_1}}{k} \quad ,,,(4)$$

Where $\underline{X}$ = average perception score, $\underline{Y}$ = average expectation score, k = number of attributes.

Each indicator will be mapped into one of the four quadrants in the diagram based on the average expectation score and average perception score. This helps to identify which indicators belong to each quadrant, each having a different meaning (Tjitrohartoko & Saraswati, 2020).

Figure 2. IPA Quadrant



Source : Hsieh, Yang, Chu, & Hsiao (2021)

RESEARCH DISCUSSION AND RESULTS

E-Servqual Calculation

The analysis using the E-Servqual method is conducted by measuring the gap between the users' perception of the application's performance and the users' expectations when using the securities application.

Table 3. Result of E-Servqual Gap Calculation

Dimension	Attributes	P	E	Gap	Average
Efficiency	A1	3,13	4,78	-1,65	-1,46
	A2	3,42	4,82	-1,4	
	A3	2,55	4,86	-2,31	
	A4	4,34	4,84	-0,5	
Fulfillment	B1	3,50	4,85	-1,35	-1,59
	B2	2,93	4,64	-1,71	
	B3	3,16	4,88	-1,72	
System Availability	C1	2,28	4,87	-2,59	-1,17
	C2	4,46	4,79	-0,33	
	C3	3,52	4,85	-1,33	
	C4	4,46	4,86	-0,40	
	C5	3,56	4,79	-1,23	
Privacy	D1	4,43	4,86	-0,43	-0,33
	D2	4,48	4,70	-0,22	
Responsiveness	E1	4,39	4,83	-0,44	-1,40
	E2	2,53	4,82	-2,29	
	E3	3,27	4,73	-1,46	
Compensation	F1	4,23	4,82	-0,59	-1,20
	F2	3,00	4,82	-1,82	
Contact	G1	4,41	4,78	-0,37	-0,39
	G2	4,38	4,78	-0,4	
Average Gap Score					**-1,17**

Source: Processed by Author

As shown in Table 3, the average gap score for the service quality of Application X shows a negative value of -1.17, meaning that the service quality provided by Application X is unable to meet the users' expectations. Looking at each dimension, all dimensions show negative gap scores. This indicates that all the evaluated dimensions of service quality in Application X have not successfully met users' expectations.

Fulfillment is the dimension with the largest gap score of -1.59, meaning that the Fulfillment dimension is the most deficient in meeting users' expectations compared to the other dimensions. This may be caused by several factors, such as users experiencing inaccuracies in the stock portfolio they own, particularly in terms of real-time stock price values. Users highly require accurate portfolio data since it serves as a reference for making transactions and investment planning. In addition, users also report that transaction receipts, which should be automatically sent to their email once the Indonesia Stock Exchange's operating hours end, often take several days or sometimes are not sent at all. Transaction receipts that are easily downloadable are very important to users because these receipts provide a sense of security, as users have proof in case they encounter any issues.

In addition, there is the Efficiency dimension, which has the second-largest gap score after Fulfillment. The Efficiency dimension has a slightly smaller gap score of -1.46, indicating that after Fulfillment, Efficiency is the dimension that

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most fail to meet user expectations. Some users have stated that Application X often becomes inaccessible, especially during the night and on holidays. Many users have busy schedules during the day and prefer to check their portfolios and analyze stocks at night, but the application is unavailable. Furthermore, the app is also inaccessible at times during the Indonesia Stock Exchange's operating hours, preventing users from conducting transactions and other activities. The ability to access the app at any time is very important for users, as stock transactions require thorough preparation and real-time execution. Additionally, users also mentioned that the app often has a slow loading process. Although the app's quick loading process has the lowest expectation score, it is still considered very important by users. A slow loading process causes users to miss the right timing or opportunity to execute stock transactions. The low perception score for this indicator contributes to a larger gap value.

Following Efficiency, there is the Responsiveness dimension with a slightly lower gap score of -1.40. This indicates that aside from Fulfillment and Efficiency, the Responsiveness dimension is also one of the dimensions that most fail to meet user expectations. The large gap value in this dimension could be caused by users feeling that they have to wait too long to resolve issues they encounter while using Application X. However, fast resolution of problems is something that users consider very important. Additionally, some users feel that Application X often fails to provide follow-up on the complaints they submit. Follow-up is considered very important by users because it allows them to track the progress of the resolution of their complaints.

On the other hand, the Privacy dimension has the smallest gap score of -0.33, indicating that this dimension is the one that most meets the user's expectations. This is because Application X has performed very well in terms of using PINs and passwords for all activities, which users consider very important as it provides security guarantees. Additionally, Application X Sekuritas is also rated highly for protecting user data, as users have not experienced issues related to data breaches, which is also considered very important. However, the negative gap value indicates that there is still room for improvement in this dimension in order to meet users' expectations fully.

Calculation of The Level of Conformance

After calculating the gap level using the E-Servqual method, data from respondents will be analyzed using the Importance Performance Analysis (IPA) method to calculate the level of conformance. The level of conformance describes the degree of customer satisfaction with the current service quality of Application X. The calculation of the level of conformance is performed to see if the analysis results will be the same when using a different method.

Table 4. Results of the Conformance Level Calculation

Dimension	Attributes	P	E	TKi	Average
Efficiency	A1	307	468	65,60%	69,68%
	A2	335	472	70,97%	
	A3	250	476	52,52%	
	A4	425	474	89,66%	
Fulfillment	B1	343	475	72,21%	66,76%
	B2	287	455	63,08%	
	B3	310	478	64,85%	
System Availability	C1	223	477	46,75%	75,70%
	C2	437	469	93,18%	
	C3	345	475	72,63%	
	C4	437	476	91,81%	
	C5	349	469	74,41%	
Privacy	D1	434	476	91,18%	93,17%
	D2	439	461	95,23%	
Responsiveness	E1	430	473	90,91%	70,83%
	E2	248	472	52,54%	
	E3	320	464	68,97%	
Compensation	F1	415	472	87,92%	75,11%
	F2	294	472	62,29%	
Contact	G1	432	468	92,31%	91,99%
	G2	429	468	91,67%	
Average Conformance Level					**75,72%**

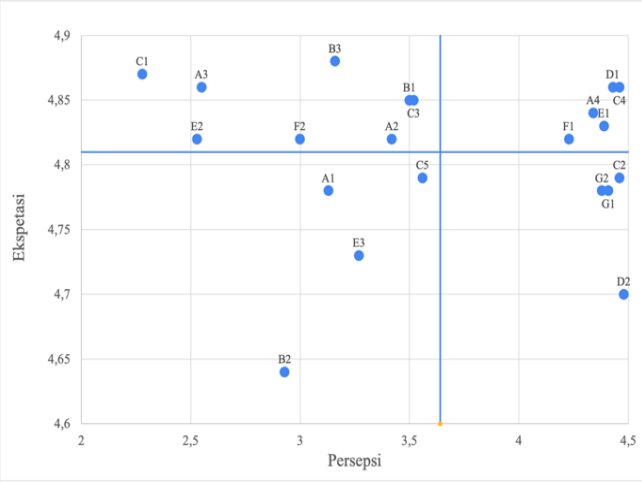
Source: Processed by Author

Overall, all indicators show a conformance level below 100%, meaning the quality of service provided by Application X has not yet met the users' expectations. This is in line with the calculations using the E-Servqual method, which

also shows that the service quality of Application X still does not meet the users' expectations.

Importance Performance Analysis (IPA) Quadrant

Figure 3. IPA Quadrant



Source: Processed by The Author

Detailed explanation of each quadrant representing areas to improve in enhancing the service quality of Application X:

1. Quadrant I (Concentrated Here)
   Indicators in Quadrant I are those that should be prioritized for improvement for Application X because these indicators are considered important by users, but the performance provided is still unsatisfactory. Indicators in this quadrant play a significant role in influencing user satisfaction. There are eight indicators in Quadrant I, namely: A2 (the application makes it easy for users to find the desired stock information), A3 (the application is always accessible anytime), B1 (the application displays transaction fees accurately on the Trade Confirmation), B3 (the application displays accurate portfolio information), C1 (the application has a fast process for top-up funds in RDN until funds appear in the system), C3 (the application allows smooth PIN and password authentication processes), E2 (the application resolves user issues quickly), F2 (the application has a clear process for handling system failures).
2. Quadrant II (Keep Up The Good Work)
   Indicators in Quadrant II need to be maintained because they are considered important by users, and the performance provided generally meets user expectations or, in other words, the performance is already able to satisfy customers. There are five indicators in Quadrant II, namely: A4 (the application allows transactions to be made anywhere), C4 (the application deducts balances according to the transaction amount), D1 (the application protects user data), E1 (the application provides a customer complaint service that can be contacted anytime the user encounters an issue), F1 (the application has a clear policy regarding fund refunds for failed transactions).
3. Quadrant III (Low Priority)
   Indicators in Quadrant III are those with low performance and are not considered very important by users, so their improvement is not prioritized. There are four indicators in Quadrant III, namely: A1 (the application has fast loading processes), B2 (the application allows transaction proof to be downloaded easily), C5 (the application has a feature that works well), E3 (the application provides follow-up on issues when users file complaints).
4. Quadrant IV (Possible Overkill)
   Indicators in Quadrant IV are those that are not considered very important by users, but the performance provided is satisfactory, so these indicators are seen as excessive. There are four indicators in Quadrant IV, namely: C2 (the application has an easy transaction verification process), D2 (the application uses PIN and password for all activities), G1 (the application has an online channel that can be used when customers need information related to products and services), G2 (the application has a phone line (not talking to a machine) that can be used when customers need

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information related to products and services).

Indicators in Quadrant I are those that need to be prioritized for improvement as they are important to users but are not yet satisfactory in performance, significantly influencing user satisfaction, namely attributes A2, A3, B1, B3, C1, C3, E2, F2. Quadrant II contains indicators that meet user expectations and should be maintained, as they are deemed important and already satisfy users, namely attributes A4, C4, D1, and E1. Quadrant III includes indicators with low performance and less importance to users, so their improvement is not a high priority, namely attributes A1, B2, C5, and E3. Lastly, Quadrant IV features indicators that, while performing well, are not crucial to users and may be seen as excessive, namely attributes C2, D2, G1, and G2.

CONCLUSION

Overall, the service quality of Application X is assessed as not meeting user expectations, as indicated by the negative gap value of -1.17. This is in line with the results of the suitability level calculation using the IPA method. The suitability level calculation also shows that, overall, the service quality of Application X has not met what is considered important by users, as reflected by the suitability level of <100%, which is 75.72%.

Based on the IPA quadrant, several areas need to be prioritized for improvement in Application X to enhance its service quality. Priority improvements can be seen in Quadrant I, which includes A2 (the application makes it easy for users to find the desired stock information), A3 (the application is always accessible at any time), B1 (the application displays transaction fees accurately on the Trade Confirmation), B3 (the application displays an accurate portfolio), C1 (the application has a fast top-up process for RDN funds until funds appear in the system), C3 (the application allows smooth PIN and password authentication processes), E2 (the application resolves user issues quickly), F2 (the application has a clear process for handling system failures).

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