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Measuring bank service quality and recommendations for improvement: A case of Indonesia

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Abstract

The purpose of this study was to assess service quality and recommend improvements to the Indonesian Islamic Bank. A modified bank SERVQUAL and Service Performance Control Matrix (SPCM) were used in this study. The service quality was evaluated based on customer perceptions and their desired and minimum levels of expectations. This study used a set of questionnaires with a 35-item scale comprising seven dimensions: effectiveness and assurance, access, price, tangibles, service portfolio, reliability, and compliance. The data was collected using a survey, and 193 responses were received. The findings disclosed that the bank customer's perception of the service provided exceeded their minimum expectations but fell short of their desired expectations. By mapping the service performance into the matrix, it was determined that no services fell within the excellent zone, three services were classified in the problematic zone, and the majority of services fell within the improvement zone. The focus was placed on the problematic zone, which consisted of an insufficient number of bank tellers, a lengthy line, and inadequate parking space. However, no Islamic compliance issues were discovered within the problematic zone. Several recommendations were made to bank management to address the service problems, including encouraging customers to use digital banking services, expanding the number of drive-thru Automated Teller Machines (ATMs), and examining the appropriateness of bank staff engaging with customers, particularly during the busiest period of the month.

Keywords: Gap analysis, Indonesia, Islamic bank, Service industry, Service performance control matrix, Service quality.

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Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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1. Introduction

Quality has been a priority for over a century and has evolved continuously in response to changing customer demands. Therefore, the organizations must understand their customers' needs and include quality indicators based on customers' views of their product or service. In this case, reliable customer information becomes essential for quality improvement. The organization takes a variety of approaches in its quest to provide goods and services that satisfy the demands of customers in both the manufacturing and service industries. Despite the fact that firms have implemented quality management approaches, they continue to face challenges in meeting customer needs. This obstacle also exists in service businesses such as banks or financial institutions, hospitals, hotels, and many others. These organizations encountered difficulties quantifying their services due to the intangibility, inseparability, and heterogeneity of the service itself [1].

Expectations were defined as consumers' views about the service that businesses should provide, while perceptions were defined as customers' comparisons between expectations and the actual provision of services, [Parasuraman, et al. \[1\]](#) and [Parasuraman, et al. \[2\]](#). According to [Parasuraman, et al. \[1\]](#), if clients' impressions of the service exceed their expectations, the service is termed excellence. The service is considered adequate if it meets the customers' expectations, and if it fails to meet the customer's expectations, it will be classified as inadequate [1]. In recent years, customers have continued to place an emphasis on product or service quality as a factor in their purchase decisions. Customers purchase products or services if they believe they will meet their needs. However, customers may feel that the product or service they purchased falls short of their expectations, leaving them dissatisfied. If firms do not carefully address these issues, they will lose customers, which may have an adverse effect on sales. Therefore, in order to improve its product or service appropriately, a company must incorporate quality as a competitive strategy and measure it periodically from the customer's perspective.

This paper aims to report on a survey that was conducted at an Islamic banking company in Indonesia using a form-based questionnaire. The primary goal of the study was to understand how bank customers felt about and what they expected from the services they received. The perceptions and expectations instrument used in this study was a modification of the SERVQUAL [2], Bank Service Quality (BSQ) model [3], and the CARTER model [4]. There were several justifications for conducting this research, including the fact that Indonesia has a large Muslim population with the potential to increase the market share of Islamic banks; the need to determine customers' perceptions and expectations using appropriate instruments; and the need to propose improvements based on the survey results. The following are some concise justifications for the research that was undertaken:

In Indonesia, the banking sector is categorized into two: commercial banking and Islamic banking. In 2021, the Muslim population in Indonesia accounted for 231 million people, or around 86.7 percent of the country's overall population, according to statistics from [5]. In light of this fact, the Indonesian Islamic banking sector has the potential to grow significantly. The fact that Islamic banks do not pay interest (*riba*) on money deposits or collect interest on loans, therefore complying with Islamic laws, is a major factor in their acceptance by the majority of Indonesian Muslims. According to data provided by the Financial Services Authority or *Otoritas Jasa Keuangan (OJK)* in Indonesia [6] Islamic banks were first established in 1991. Since it was first established, the number of Islamic banks and Islamic financial services and businesses had increased to 12 by 2021, with total assets of 605.3 trillion Indonesian Rupiah and a market share of 6.41 percent. As a sector that plays a vital role in the Indonesian economy, Islamic banks should maintain their commitment to exceeding the expectations of their customers through the services they provide, which may help to increase their market share.

The SERVQUAL instrument constructed by [Parasuraman, et al. \[2\]](#) was constantly evolving in response to the measured services. Owing to the study's focus on Islamic banks, the instrument used included compliance with Islamic laws as one of its dimensions [4]. The other dimensions were modified from [Bahia and Nantel \[3\]](#), which were shown to be effective in addressing the study objective.

2. Literature Review

According to [Zameer, et al. \[7\]](#) service quality was an important factor in any service institutions because it distinguishes them from their competitors depending on how their customers evaluate the service they received. [Parasuraman, et al. \[2\]](#) constructed SERVQUAL, a measurement scale used in the service business to assess how customers perceive and expect services. The instrument is widely utilized as a research instrument by researchers worldwide. Several researchers have used or modified the SERVQUAL dimensions and measurement items to fit their research needs. For example, researchers have redeveloped instruments to suit the banking sectors [Bahia and Nantel \[3\]](#); [Othman and Owen \[4\]](#); [Aldlaigan and Buttle \[8\]](#); [Karatepe, et al. \[9\]](#) and [Kayeres and Abdur Razzaque \[10\]](#) other researchers have redeveloped instruments with an added cultural dimension to suit specific countries [Ladhari, et al. \[11\]](#); [Tsoukatos and Rand \[12\]](#); [Gracia, et al. \[13\]](#) and [Kassim and Abdullah \[14\]](#). The use of modified SERVQUAL in various service industries has been reported in several academic papers [Ali and Naeem \[15\]](#); [Izogo and Ogba \[16\]](#); [Datta and Vardhan \[17\]](#); [Moslehpour, et al. \[18\]](#); [Lai, et al. \[19\]](#) and [Ponnaiyan, et al. \[20\]](#). Furthermore, some researchers have conducted studies on service quality in Islamic financial institutions and the variables that influence it, such as customer loyalty, trust, and/or satisfaction [Ali and Raza \[21\]](#); [Haron, et al. \[22\]](#); [Kashif, et al. \[23\]](#); [Alnaser, et al. \[24\]](#); [Fida, et al. \[25\]](#) and [Amin and Isa \[26\]](#). These previous studies are briefly discussed below.

A study conducted by [Bahia and Nantel \[3\]](#) intended to develop a scale for assessing the perceived quality of financial institutions. Data was gathered from respondents via a questionnaire survey. There were 102 items in the initial

questionnaire, divided into 15 dimensions of service quality that assessed respondents' expectations of what a bank should deliver and their actual experiences with the institution. Following a factor analysis and orthogonal rotation, six dimensions were retained, namely "effectiveness and assurance," "access," "price," "tangibles," "service portfolio," and "reliability." Othman and Owen [4] have constructed a measurement scale of service quality for Islamic banking by adding compliance to the SERVQUAL dimensions and naming it "CARTER." Aldlaigan and Buttle [8] created and validated the System and Transactional Service Quality (SYSTRA-SQ), a 21-measurement scale comprised of four service quality dimensions. Karatepe, et al. [9] have undertaken research to create instruments for measuring banks' service quality. The instrument was also tested in that study, which included 1,220 bank customers in Cyprus. The measurement scale included 20 items divided into four dimensions: service environment, interaction quality, reliability, and empathy. Another study exploring service quality has been done in Bangladeshi banks [10]. The SERVQUAL was used, and the dimensions were classified into three categories: core, relational, and tangible. Findings of this study showed that relational quality was the most significant construct for antecedents and mediation compared to other service qualities; for example, customers emphasised relations with the bank staff rather than the bank's core service quality.

Ladhari, et al. [11] performed a study with the objective of measuring service perceptions among Tunisian and Canadian bank customers, in particular, to identify the level of service and which dimension contributed more to satisfaction and loyalty in both countries. SERVQUAL's five dimensions were used, but only customer perceptions were measured. The results indicated that there were significant differences between Tunisian and Canadian service perceptions in all categories. It was found that Canadian bank customers have higher mean service perceptions than Tunisian bank customers. Based on the regression analysis, all dimensions, with the exception of tangible, have a significant impact on customer satisfaction in Tunisia. In addition, responsiveness, reliability, and empathy influenced the loyalty of Tunisian bank customers. In Canada, it was discovered that empathy, reliability, responsiveness, and assurance all had a significant impact on customer satisfaction. Only empathy and dependability were found to have a significant impact on loyalty at the 0.05 level. According to the findings of this study, reliability and empathy were the best predictors of satisfaction and loyalty for Canadian customers. In contrast to Tunisian customers, reliability and responsiveness were the most influential predictors of both satisfaction and loyalty. Several other researchers have emphasized culture as a dimension that customers consider. For example, [12] discovered a correlation between Hofstede's cultural dimensions and SERVQUAL dimensions, while Gracia, et al. [13] highlighted culture as a critical factor in determining the quality of e-services and their impact on customers' e-loyalty intentions. In their study, Kassim and Abdullah [14] took into account the cultural differences between Malaysia and Qatar.

Ali and Naeem [15] looked into the relationship between customer service performance in commercial and Islamic banks in Pakistan. They used the original Parasuraman's SERVQUAL, but with an added compliance dimension. According to the findings, the dimensions of responsiveness and assurance were more important to commercial bank customers than other dimensions. In Islamic banks, customers ranked reliability and compliance as the most important dimensions. In the author's opinion, comparing Islamic and commercial banks using the above dimensions was less appropriate because commercial banks are not based on Islamic laws. A study was conducted in Pakistan with the objective of measuring customer satisfaction in Islamic banks using a modified SERVQUAL, which included a compliance dimension [21]. The findings revealed that Pakistani bank customers' perceptions of all service quality dimensions had a positive and significant impact on customer satisfaction. In addition, it was found that compliance had the greatest impact on customer satisfaction, followed by tangibles, responsiveness, assurance, reliability, and empathy. The impact of the PAKSERV model on customer satisfaction, loyalty, and trust among Malaysian Islamic banking customers was also examined in research conducted by Haron, et al. [22]. Prior studies have also been undertaken by Kashif, et al. [23] and Alnaser, et al. [24] on customer satisfaction and loyalty using the PAKSERV model. The results of this study revealed that, with the exception of reliability, all dimensions of PAKSERV have significantly influenced customer satisfaction in Malaysian Islamic banking, and the customer satisfaction was strongly influenced by the customer loyalty Kashif, et al. [23]. Alnaser, et al. [24] found that customer satisfaction in Palestinian Islamic banking was significantly influenced by all six PAKSERV dimensions, and that customer satisfaction was significantly influenced by customer loyalty. The impact of service quality on customer loyalty and customer satisfaction in Islamic banking in the Sultanate of Oman was conducted by Fida, et al. [25]. The regression analysis showed that only two SERVQUAL dimensions, empathy and responsiveness, had significant and positive impacts on customer satisfaction. Amin and Isa [26] conducted a study in Malaysia to look at customer perceptions of service quality and the connection between service quality and customer satisfaction. This study found that reliability and empathy had the greatest positive effect on consumer satisfaction in Islamic banking in Malaysia. Additionally, there was a positive correlation between service quality and customer satisfaction at Islamic banks in Malaysia.

A review of service quality instruments in previous studies has been used as basis to select several dimensions that were thought suitable for measuring services in Islamic banks (see Table 1).

Effectiveness and assurance refer to customer feelings about bank services, such as "feeling of security," "delivering as promised," "confidence," "well-trained personnel," and "recognition of regular clients"[3]. Access refers to the ability to provide bank facilities to customers; such Automated Teller Machines (ATMs) are easy to find, "waiting is not too long"[3]. Price refers to a well-informed service fee to consumers, an acceptable fee for bank account administration [3]. Tangibles refer to the physical appearance of bank offices, such as decoration, waiting area, parking space, and so on [2]. Service portfolio refers to the ability to provide service, for example, mobile banking, available 24 hours a day through a call centre if customers need it [3]. Reliability refers to the capacity to provide the promised service consistently and accurately Parasuraman, et al. [2] and Zaim, et al. [27]. According to Hossain, et al. [28], customers feel the bank is reliable if the

bank personnel are sincere in solving problems and have a proper filling procedure. Compliance refers to the ability to fulfil Islamic law for bank services and products [4].

Table 1.
Dimension of service measurement.

Dimensions	Prior models
Effectiveness and assurance	BSQ
Access	BSQ
Price	BSQ
Tangibles	SERVQUAL
Service portfolio	BSQ
Reliability	SERVQUAL
Compliance	CARTER

3. Methods

3.1. Data Gathering Technique

A survey was conducted using questionnaire forms that were distributed directly to respondents to be filled out. To protect the confidentiality of the respondents, the survey was conducted anonymously.

This study involved respondents who were customers and had been using Islamic banking services at the time the survey was conducted. They must also be existing customers of the Islamic bank in order to be eligible to participate. To conduct the survey, 200 customers were randomly chosen from among those who visited the bank throughout the data collection period. In order to ensure that there was no bias in the responses, the researchers made it clear to the respondents that they were under no pressure to complete the questionnaire and that there were no right or incorrect answers. Out of a total distribution of 200, 193 questionnaires were completed.

3.2. Questionnaire Design

The instrument was first constructed in English and then subsequently rewritten into Indonesian for clearer understanding and ease of completion by respondents. The questionnaire had two parts: A and B. Part A contained respondents' profile items such as age, job, educational qualification, and length of time using bank services. Part B included questions about perceptions of the received service as well as minimum and desired service expectations.

Part B of the questionnaire consists of closed-ended statements using Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This questionnaire used the service dimensions from previous models developed by [Parasuraman, et al. \[2\]](#); [Bahia and Nantel \[3\]](#) and [Othman and Owen \[4\]](#) with modifications to the statement items to make them more appropriate for the Indonesian context. An example in the tangibles dimension was adding a statement with regard to the availability of a spacious prayer room in the bank offices. In Indonesia, public buildings such as hospitals, train stations, airports, government offices, and even banks have a prayer room to accommodate Indonesians who wish to pray.

The following [Table 2](#) contains a comprehensive list of all the questionnaire items (in Part B) that were used.

Table 2.
Questionnaire items.

Dimensions	Items
Effectiveness and assurance	1. The bank ensures the confidentiality of all customer information
	2. Excellent and consistent service
	3. The security of transactions is preserved
	4. The bank's reputation is excellent
	5. Fast service
	6. When a complaint arises, employees can suggest the best solution
	7. Employees' accuracy in relation to their jobs
	8. Employees' capacity to deliver explanations concerning bank products and services
	9. Staff who are pleasant and courteous
Access	10. The application of modern technology to assure high-quality service
	11. There is no long queue
	12. A sufficient number of tellers
	13. ATMs are conveniently located
Price	14. It is simple to locate the bank's office
	15. All fees charged are clearly explained (For example: Monthly charging fees, administration fees, etc.)
	16. Each time a transaction occurs, the bank always informs the customer of the amount charged
	17. Low fees for interbank transactions
Tangibles	18. Low monthly service fee
	19. Nicely decorated waiting area

Dimensions	Items
	20. There is a spacious prayer room
	21. Clean restrooms are available
	22. There is an available suggestion box
	23. While customers are waiting, facilities (Such as television, newspapers, Wi-Fi, mineral water, and so on) are available to them
	24. A sufficient number of seats
	25. A sufficient parking space
	26. There is Closed-Circuit Television (CCTV) surveillance
Service Portfolio	27. Mobile banking, phone banking, internet banking, and SMS banking are all available services.
	28. Services for debit cards are available.
	29. A helpful call centre service
Reliability	30. Accuracy of the filling system
	31. No service errors
Compliance	32. The bank operates in accordance with Islamic law and principles
	33. Various Islamic products and services are offered (Example: <i>Mudarabah</i> , <i>musharakah</i> , etcetera)
	34. The profit sharing mechanism for investment products is clear
	35. Banks do not apply interest on deposits or loans

3.3. Questionnaire Testing for Reliability and Validity

Before being used in the main survey, each item on the questionnaire was tested for reliability. The Cronbach's alpha value for all dimensions in the three categories of respondents' evaluation was greater than 0.7 (see Table 3), indicating that the item was considered reliable for use in the main survey [29].

Table 3.
Results of a reliability test of service quality dimensions.

No	Dimension	Number of items	Cronbach's alpha		
			DE	ME	P
1	Effectiveness and assurance	9	0.957	0.931	0.928
2	Access	5	0.926	0.838	0.795
3	Price	4	0.947	0.861	0.823
4	Tangibles	8	0.964	0.932	0.875
5	Service portfolio	3	0.913	0.889	0.786
6	Reliability	2	0.931	0.914	0.869
7	Compliance	4	0.906	0.909	0.859

The content validity of the instrument was confirmed by academics and bank experts in terms of their relevance to service quality measurements, particularly in Islamic banks.

3.4. Analysis Procedure

To design relevant improvement initiatives for the bank, it was customary to do a gap analysis on customers' expectations and perceptions. With regards to customers' expectations, this study considered two levels of expectations of bank customers: desired service expectations and minimum service expectations. The consideration of these two types of expectations was used in the Service Performance Control Matrix (SPCM) model developed by Hossain and Ahmed [30], which incorporated models from prior studies Hung, et al. [31]; Chen, et al. [32] and Lin, et al. [33]. Table 4 explains the procedure for evaluating service performance.

Table 4.
Procedure to evaluate service performance.

Comparing perception and expectation	Performance index	Nature of performance	Service improvement strategy
$P \geq DE$	Excellent	Expectation exceeded	Sustain as it is
$P \geq RE$; $RE \neq DE$	Maintain	Expectation met	Maintain strictly
$P \geq ME$; $ME \neq RE$	Improvement	Need met	Require improvement
$P < ME$	Problematic	Need unmet	Prompt action

Note: P = Perception of service; ME = Minimum expectation; RE = Real expectation; DE = Desired expectation.
RE = (DE+ME)/2.

Source: Hossain and Ahmed [30].

4. Findings

4.1. Demographic of Respondents

The majority of respondents' (39.9%) were professionals, followed by students (33.2%), business people (33%) and others working in a variety of other occupations. The following are the respondents' educational backgrounds: 57 percent of respondents held a bachelor's degree, 25.9 percent had a high school diploma, 9.3 percent held a postgraduate degree, 6.2 percent held a diploma, and 1.6 percent held other qualifications. Table 5 summarizes the descriptive analysis findings.

Table 5.

Summary of demographic and general information of samples.

Demographic and general information	Number	Percent
Age (Years old)		
< 25	82	42.5
25-30	45	23.3
31-40	28	14.5
41-50	21	10.9
>50	17	3.6
Job		
Professional employees	77	39.9
Businessman/Entrepreneur	33	17.1
University students	64	33.2
Others	19	9.8
Educational qualifications		
High school	50	25.9
Diploma	12	6.2
Bachelor degree	110	57
Postgraduate degree	18	9.3
Others	3	1.6
Length of time using bank service (Months)		
< 3	49	25.4
6-Mar	15	7.8
12-Jul	21	10.9
>12	108	56

4.2. Service Gap Analysis

Table 6 indicates that the service fell short of the customer's desired expectations across all dimensions, as shown by a negative gap value for each dimension.

Table 6.

Gap value between perception and desired expectation of service.

Dimension	Mean		Service gap
	DE	P	
Effectiveness and assurance	4.60	4.06	-0.54
Access	4.60	3.70	-0.90
Price	4.54	3.70	-0.84
Tangibles	4.56	3.71	-0.85
Service portfolio	4.67	3.98	-0.69
Reliability	4.63	3.88	-0.75
Compliance	4.63	3.85	-0.78

As shown in Table 7, the gap value obtained for perception and minimum expectations are positive, indicating that the bank's services were meeting the minimum customer expectations.

Table 7.

Gap value between perception and minimum expectation of service.

Dimension	Mean		Service gap
	ME	P	
Effectiveness and assurance	3.64	4.06	0.43
Access	3.56	3.70	0.14
Price	3.54	3.70	0.16
Tangibles	3.58	3.71	0.13
Service portfolio	3.63	3.98	0.35
Reliability	3.61	3.88	0.28
Compliance	3.63	3.85	0.21

4.3. Performance Evaluation of Bank Services

To determine the appropriate improvements that bank management should make in terms of services to its customers, the SPCM shown in Table 8 was used to map the performance of current services based on the perceptions and expectations of customers. As can be observed in Table 8, three items fall into the problematic zone, specifically items 11, 12, and 25 of the questionnaire. There is only one item in the maintenance zone, and that is item number 9. The remaining items are grouped in the improvement zone. While none of them fell into the excellent zone.

Table 8.

Service performance evaluation zone.

Performance evaluation zone			
Problematic	Improvement	Maintain	Excellent
$P < ME$	$P \geq ME; ME \neq RE$	$P \geq RE; RE \neq DE$	$P \geq DE$
11, 12, 25	1, 2, 3, 4, 5, 6, 7, 8, 10, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35	9	None
Prompt action to recover service performance	Seeking improvement of service performance	Maintain service performance strictly	Sustain service performance as it is
Service strategy implementation zone			

Table 9 shows the details of the measurement of each item as well as the determination of the performance zone.

Table 9.

Results of mean responses, service gap, and zone category.

No	Items	Mean				Service gap		Rule	Zone*
		DE	RE (DE+ME)/2	ME	P	DE (P-DE)	ME (P-ME)		
Effectiveness and assurance									
1	The bank ensures the confidentiality of all customer information	4.684	4.179	3.674	4.155	-0.528	0.482	$P \geq ME; ME \neq RE$	I
2	Excellent and consistent service	4.560	4.093	3.627	4.005	-0.554	0.378	$P \geq ME; ME \neq RE$	I
3	The security of transactions is preserved	4.679	4.171	3.663	4.145	-0.534	0.482	$P \geq ME; ME \neq RE$	I
4	The bank's reputation is excellent	4.585	4.106	3.627	4.067	-0.518	0.440	$P \geq ME; ME \neq RE$	I
5	Fast service	4.492	4.031	3.570	3.855	-0.637	0.285	$P \geq ME; ME \neq RE$	I
6	When a complaint arises, employees can suggest the best solution	4.565	4.070	3.575	4.010	-0.554	0.435	$P \geq ME; ME \neq RE$	I
7	Employees' accuracy in relation to their jobs	4.528	4.088	3.648	4.016	-0.513	0.368	$P \geq ME; ME \neq RE$	I
8	Employees' capacity to deliver explanations concerning bank products and services	4.622	4.114	3.606	4.005	-0.617	0.399	$P \geq ME; ME \neq RE$	I
9	Staff who are pleasant and courteous	4.720	4.223	3.725	4.285	-0.435	0.560	$P \geq RE; RE \neq DE$	M
Access									
10	The application of modern technology to assure high-quality service	4.622	4.119	3.617	3.984	-0.637	0.368	$P \geq ME; ME \neq RE$	I
11	There is no long queue	4.544	3.984	3.425	3.368	-1.176	-0.057	$P < ME$	P
12	A sufficient number of tellers	4.513	4.013	3.513	3.461	-1.052	-0.052	$P < ME$	P
13	ATMs are conveniently located	4.694	4.171	3.648	3.902	-0.793	0.254	$P \geq ME; ME \neq RE$	I
14	The application of modern technology to assure high-quality service	4.611	4.117	3.622	3.788	-0.824	0.166	$P \geq ME; ME \neq RE$	I
Price									
15	All fees charged are clearly explained (For example: monthly charging fees, administration fees, etc.)	4.591	4.085	3.580	3.824	-0.767	0.244	$P \geq ME; ME \neq RE$	I

No	Items	Mean				Service gap		Rule	Zone*
		DE	RE (DE+ME)/2	ME	P	DE (P-DE)	ME (P-ME)		
16	Each time a transaction occurs, the bank always informs the customer of the amount charged	4.591	4.088	3.585	3.762	-0.829	0.176	$P \geq ME; ME \neq RE$	I
17	Low fees for interbank transactions	4.477	3.979	3.482	3.554	-0.922	0.073	$P \geq ME; ME \neq RE$	I
18	Low monthly service fee	4.487	3.997	3.508	3.642	-0.845	0.135	$P \geq ME; ME \neq RE$	I
Tangibles									
19	Nicely decorated waiting area	4.554	4.065	3.575	3.824	-0.731	0.249	$P \geq ME; ME \neq RE$	I
20	There is a spacious prayer room	4.539	4.049	3.560	3.560	-0.979	0.000	$P \geq ME; ME \neq RE$	I
21	Clean restrooms are available	4.544	4.047	3.549	3.689	-0.855	0.140	$P \geq ME; ME \neq RE$	I
22	There is an available suggestion box	4.523	4.036	3.549	3.762	-0.762	0.212	$P \geq ME; ME \neq RE$	I
23	While customers are waiting, facilities (Such as television, newspapers, Wi-Fi, mineral water, and so on) are available to them	4.560	4.065	3.570	3.684	-0.876	0.114	$P \geq ME; ME \neq RE$	I
24	A sufficient number of seats	4.570	4.093	3.617	3.689	-0.881	0.073	$P \geq ME; ME \neq RE$	I
25	A sufficient parking space	4.539	4.039	3.539	3.492	-1.047	-0.047	$P < ME$	P
26	There is Closed-Circuit Television (CCTV) surveillance	4.648	4.166	3.684	3.974	-0.674	0.290	$P \geq ME; ME \neq RE$	I
Service Portfolio									
27	Mobile banking, phone banking, internet banking, and SMS banking are all available services.	4.689	4.166	3.642	4.057	-0.632	0.415	$P \geq ME; ME \neq RE$	I
28	Services for debit cards are available.	4.653	4.137	3.622	3.969	-0.684	0.347	$P \geq ME; ME \neq RE$	I
29	A helpful call center service	4.668	4.142	3.617	3.912	-0.756	0.295	$P \geq ME; ME \neq RE$	I
Reliability									
30	Accuracy of the filling system	4.684	4.155	3.627	3.964	-0.720	0.337	$P \geq ME; ME \neq RE$	I
31	No service errors	4.575	4.080	3.585	3.803	-0.772	0.218	$P \geq ME; ME \neq RE$	I
Compliance									
32	The bank operates in accordance with Islamic law and principles	4.606	4.124	3.642	3.772	-0.834	0.130	$P \geq ME; ME \neq RE$	I
33	Various Islamic products and services are offered (Example: <i>Mudarabah</i> , <i>musharakah</i> , etcetera)	4.653	4.163	3.674	3.995	-0.658	0.321	$P \geq ME; ME \neq RE$	I
34	The profitsharing mechanism for investment products is clear	4.637	4.122	3.606	3.834	-0.803	0.228	$P \geq ME; ME \neq RE$	I
35	Banks do not apply interest on deposits or loans	4.617	4.111	3.606	3.782	-0.835	0.175	$P \geq ME; ME \neq RE$	I

Note: *Zone: P = Problematic; I = Improvement; M = Maintain.

5. Discussions and Conclusions

Indonesia is the world's biggest Muslim country, with a Muslim population of 231 million in 2023; therefore, the Islamic banking sector in Indonesia has the potential to expand significantly [5]. According to research conducted in several countries, there are several reasons why customers choose Islamic banks, including social branding, service quality, and meeting Islamic obligations [34].

The main objective of this study was to measure an Islamic bank's service level from the viewpoint of its customers. The gap analysis was used to examine differences between perception and minimum or desired service expectations. Thus, the SPC matrix was used to prioritize the improvement of bank services. The Indonesian Islamic bank customers who were

using the services at the time of the survey filled out a total of 193 questionnaires. Findings showed that $P > ME$ and $P < DE$ for all seven dimensions. This means that the bank customer's perceived service met their minimum expectations, but the perceived service was below their desired expectations.

Based on the service performance control matrix, the evaluation showed that no service was in the excellent zone and the majority of the bank's services were in the improvement zone based on customers' views. Although the services provided in the improvement zone met the minimum customer expectations, the bank must improve these services to meet the desired customer expectations. This is because customers' expectations towards product or service are constantly changing, and as a result, their expectations of the services offered are also increasing. The focus of improvement is given to the problematic zone, i.e., "a sufficient number of tellers," "there is no long queue," and "a sufficient parking space." These items are under the "access" and "tangibles" dimensions. This is also confirmed by service gap analysis using the $P - ME$ and $P - DE$ gap formulas, which showed that the average service value for these two dimensions is the lowest when compared to the other dimensions, at 0.14, 0.13, and -0.90, -0.85, respectively, for the "access" and "tangibles" dimensions.

Findings of this study are similar to previous studies on service quality measurement, which also identified customer dissatisfaction with service waiting times Kayeser and Abdur Razzaque [10] and Duku, et al. [35]. Additionally, staff inadequacy is consistent with a prior study conducted by Alnaser, et al. [24]. With regards to the scarcity of parking spaces, this study is identical to others performed in the Sultanate of Oman and highlights this as a critical issue that bank management must address [25]. Also, the same issue is found in other research conducted in Ghana [36].

The use of samples from only one Islamic bank office in Indonesia limits the scope of this study. Future research should consider involving more customers in order to gather more perspectives on bank services.

6. Managerial Implications

The lack of response from bank customers demonstrates the urgency with which the bank's management must take corrective action. For instance, ordinary people in Indonesia prefer to drive their own vehicles rather than use public transportation, so parking spaces must be a concern. Therefore, bank management should consider the alternative to this situation. Among other things, it is important to encourage the use of digital services by customers in order to reduce the number of individuals that visit the bank. In terms of the situation in Indonesia, there are still a significant number of people who do not understand how to use digital services provided by banks. Opening a new account digitally is one example; even the majority of commercial and Islamic banks in Indonesia are already providing this service; it is just that few customers use it. Customers must be educated in this particular respect, and also informed about the security of opening an account digitally. Furthermore, increasing the number of drive-thru ATMs is beneficial in order to reduce consumer reliance on ATMs located on bank premises, thereby reducing the number of parked vehicles.

In addition to educating bank customers to use digital services, the bank's management must continue to consider the adequacy of the personnel dealing with customers, i.e., customer service staff and tellers. Management must take account of the busiest times of the month when serving customers, including specific hours, days, and dates. For instance, at the start of each month, on the first day, if it is not a holiday, retired civil officials in Indonesia will come to the bank to collect pension funds directly from a teller. This is unavoidable because the average retiree is elderly and unfamiliar with digital banking services, resulting in long lines. To overcome this "long queue" problem, the bank should consider dividing the services given by teller staff during a specific time period, such as the beginning of each month, so that some personnel focus on retirees while others serve regular customers. Thus, on regular days, management can regulate the sufficiency of teller staff to serve customers effectively. For example, during the lunch hour (12:00–1pm), it is preferable to maintain teller adequacy, as some customers use their office break time to visit the bank to complete their necessities.

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