Analysis of Service Quality Level of Financing in Bank BTN Syariah Using the Fuzzy SERVQUAL Method (Case Study: Financing Unit of Bank BTN Syariah Balikpapan Branch)

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ARTICLE INFORMATION

ABSTRACT

Bank Tabungan Negara (BTN) Balikpapan is a financial institution that collects funds from the public and channels them in the form of credit. The objective of this research is to measure the service quality at Bank BTN Syariah Balikpapan using the SERVQUAL, conduct an analysis using the Fuzzy method to obtain single values that represent each attribute of perceptions and expectations, and formulate improvement proposals to enhance the quality of financing services. The highest gap was found in attribute Q1 "Adequate equipment and technology" with a Gap value of 20.66 (137.38%), while the lowest gap in service quality was found in attribute Q21 "Employees who provide personal attention to customers" with a gap value of -48.51 (38.60%). This indicates that attribute Q21 is an important aspect that needs improvement due to the negative gap between customer expectations and perceptions. Furthermore, the overall measurement of service quality in the financing unit yielded an average gap value of -0.77 (Good Enough). Based on the fuzzy Servqual method, several attributes with the lowest negative gaps in the service quality of Bank BTN Syariah were identified. Proposed improvements include conducting Experiential Training to enhance personal relationship approach with customers, adding training with banking knowledge content to improve the financing process, and providing additional rewards to employees who achieve the desired improvements in service.

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1. INTRODUCTION

The need for home ownership financing that relieves the community certainly provides its own opportunities for banks as providers of funds (funding). In accordance with the main principle of a bank is the collection and distribution of funds. Funds that have been collected from various sources, which should be allocated to productive businesses so that the bank makes a profit. During the overall observation of the service, it was found that not all processes were running optimally.

Customers complained about the lengthy data processing at the analysis stage and the slow completion of files, making it difficult for their files to be processed. These issues sometimes lead customers to compare BTN Syariah Bank's services when there is uncertainty about the acceptance of their credit. Furthermore, measuring service quality is crucial due to the financing unit's failure to achieve its target at the beginning of 2022 until now. This research also aims to obtain improvement recommendations and increase financing realization. It was observed that no previous service quality measurement had been conducted at Bank BTN Syariah Balikpapan.

Therefore, this study aims to measure the service quality at the financing unit of Bank BTN Syariah Balikpapan using the SERVQUAL method, conduct analysis using the Fuzzy method to obtain single values that represent each attribute's perceptions and expectations based on SERVQUAL data, and formulate improvement proposals to enhance the quality of financing services at the bank. Hence, this research aims to measure the service quality at the financing unit of Bank BTN Syariah Balikpapan to assess the level of service provided, serving as a reference for enhancing financing quality.

The method used in service quality research is the SERVQUAL method. The SERVQUAL method defines the level of service from how far the difference is between reality and expectations for services that financing customers. While the Fuzzy concept is used to help respondents give a more objective value, namely when the respondent gives a good value, then how good the respondent means, whether it is good that leads to very good or good that leads to moderate. From the results of the Fuzzy technique, the Fuzzyfication value will be obtained for the lower limit, middle limit and upper limit values of a statement on the attribute and then a single value is obtained from the defuzzyfication results. The gap value will be seen from the results of defuzzification of expectations minus perceptions on each attribute. The Fuzzy SERVQUAL method can be concluded, is a combined method where the benefit is to prevent the problem of uncertain or vague individual views on the assessment of

perceptions and desired expectations. Therefore, this research used the Fuzzy SERVQUAL method. From previous research, there has never been a measurement of service quality of BTN Syariah Balikpapan using Fuzzy SERVQUAL method.

2. LITERATURE REVIEW
Service is something that can be used in the market to be noticed, obtained, used, or consumed that can satisfy wants or needs. Products include physical objects, services, people, places, organizations, and ideas. So it can be explained that service marketing is providing services by producers to consumers in the sense that the services provided cannot be seen, felt, heard or touched when purchased or consumed (Handoko, 2017). A customer measures service quality based on their understanding of the technical results of the service they receive. (Imbari, 2018).

Achieving customer satisfaction is an important goal in managing a business because the success of customer strategies depends on meeting their satisfaction. One benefit of achieving customer satisfaction is the possibility of customers making repeat transactions. Customer satisfaction can be described as the feeling of pleasure or disappointment that arises when comparing the performance of a product with their expectations. If the product meets expectations, customers will feel satisfied, but if it doesn't, they may feel dissatisfied or even disappointed (Debora, 2022).

The Servqual method is a frequently used approach to measuring service quality. Quality assessment for physical products differs from the service industry. The analysis begins by distributing questionnaires to consumers, where each question item has two responses on a Likert scale, indicating whether the customer considers the aspect important or not, and how well the service is implemented, good or bad (Prananda, Lucitasari, & Abdul Khannan, 2019). According to Kurnia (2018), perception is the process of individuals organizing and interpreting their sensory impressions in order to give meaning to their environment. Perception is defined as an individual process of selecting, organizing, and interpreting stimuli into a meaningful and comprehensive picture of

the world. Stimuli captured by the five senses, such as products, packaging, advertisements, prices, etc. Perception is an individual process for selecting, organizing, and interpreting information inputs to create a meaningful picture of the world. Meanwhile, expectation theory shows that the strength of desire or attraction is followed by the results obtained by individuals. Expectations are what consumers think service providers should provide. Expectations will arise when consumers need a good or service. Expectations can be seen based on habits and past experiences. SERVQUAL can not only be used to find gaps in consumer expectations and perceptions but can also be used to find the level of service quality using the formula ((Widyarto, Djamal, & Adhim, 2018).

$$Quality\ (Q) = \frac{Perceived}{Expected}$$

If Q ≥ 1, then the quality of service is said to be good, and if Q < 1, the quality of service is said to be poor. (Widyarto et al., 2018)

According to Tjiptano in Arslan (2022), Tangibles is the physical appearance of the Bank's ability to respond to customer requests immediately. Assurance is the Bank's ability to convince customers, usually the Bank's knowledge related to the sharia of products and the security of transactions. Empathy is the Bank's ability to understand or feel the problems of the customer. Fuzzy SERVQUAL is a Fuzzy set theory that provides a means of presenting uncertainty which is a tool for modeling uncertainty related to vagueness, uncertainty and lack of information about certain elements of the problem at hand (Kartika & Suprayogi, 2017).

According to Suranti in Panggalo, Tosungku, & Fathimahhayati (2022)), This combined fuzzy servqual method prevents the problem of uncertain or (vague) individual views on the assessment of desired perceptions and expectations. It also requires a rational approach by creating an interval in space that is capable of representing uncertain assessments. In fuzzy serice quality processing, there are three stages in the triangular fuzzy number theory, namely determining fuzzy sets, fuzzification, and defuzzification. The following are the steps of the fuzzy servqual algorithm Determining fuzzy sets for linguistic variables and measurement scales. At this stage, the fuzzy sets that will be used to represent linguistic variables and measurement scales in the servqual fuzzy model are determined.

1. *Fuzzyfication* stage. This stage involves the formation of triangular *fuzzy* numbers for perception values and customer expectation values. The *fuzzification* process is carried out using the Overall Effectiveness Measure (OEM) formula which produces lower bound (a), middle bound (b), and upper bound (c) values for each *fuzzy* variable being processed. (Ligoresi et al., 2017). Theformula used.
$$a_m = \frac{a_m 1 + a_m 2 + \ldots + a_m i}{N}$$
$$b_m = \frac{b_m 1 + b_m 2 + \ldots + b_m i}{N}$$
$$c_m = \frac{c_m 1 + c_m 2 + \ldots + c_m i}{N}$$

2. Defuzzification stage. At this stage, the values that have been fuzzified will be converted into a single value using the defuzzification calculation process. The defuzzification results will be used as input in the assessment of customer perceptions and expectations, which is carried out by calculating the crisp fuzzy value, namely by calculating the average of the lower limit value (a), the middle value (b), the upper limit value (c). (Ligoresi et al., 2017)
$$Crisp\ Fuzzy = \frac{a+b+c}{3}$$

3. Service Quality (Servqual) The Servqual method is used to determine the criteria that need to be improved in service based on the difference between customer perceptions and expectations. If the results of the assessment of customer perceptions exceed their expectations (P> H), then the service is considered very satisfying.
Gap) = (perceived value - expected value)

If the difference between the perceived value and customer expectations is zero (P = H), then the service is considered satisfactory. However, if the difference between the perceived value and customer expectations is negative (P < H), then the service is considered unsatisfactory (Falmon, 2020).

3. RESEARCH METHOD

This research was conducted at the BTN Syariah Branch Bank by distributing questionnaires to customers who have done financing during the 2022 period. Sample determination using non probability sampling technique. The technique used is purposive pampling and also the number of samples taken using the slovin formula with a sample size of 100 out of 600 customers as a population.
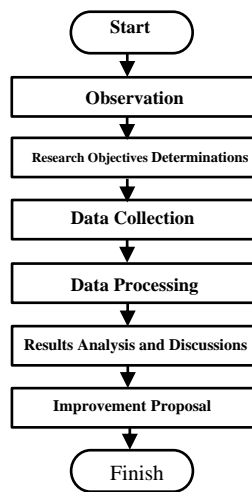
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Figure 1. Research flowchart

The data processing stage is carried out after obtaining data from the previous stage. At this stage consists of several tests and calculations including the following:

1. Data collection process

    The process is conducted in accordance with the research needs, involving field observation, direct distribution of questionnaires to customers of Bank BTN Syariah Balikpapan, and documentation techniques to collect supporting data through documents, interviews, and reading literature on SERVQUAL and Fuzzy methods for quality improvement. The collected data include primary data, such as customers' perceptions and expectations regarding service quality in dimensions such as tangible, reliability, responsiveness, assurance, and empathy, as well as customers' demographic data. In addition, secondary data, including organizational profile and structure, as well as the total

number of customers, were also obtained for this study.

2. Determination of the Number of Respondents

    According to Sugiyono (2009), In a study, if the population is considered too large, the author can narrow the population by calculating the sample size using the slovin technique so that it is representative and the results can be generalized. In using the slovin formula, the value of e (margin of error) where the slovin formula can use an e value of 1%, 5% and 10% to determine the confidence level of the research population. This study used the slovin formula with an error rate or margin of error of 5% (0.05), taking the 5% error rate because if the percentage of tolerance for error is smaller, the sample size data is more accurate, where the use of the value of e = 0.1 (10%) for large populations (Sugiyono, 2009).

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{600}{1+600(0,1)^2}$$

$$n = \frac{600}{6,01} = 99 = 100$$

3. Validity Test

    To ensure the validity of the questionnaire on customer perceptions and expectations, a validation process was carried out to determine whether the questions contained service quality, this method is the most widely used. in the questionnaire is considered valid or not. The validity test is carried out so that the answers obtained from this questionnaire can be used in research (Engkus, 2019).

    The validity test process can be carried out by two methods, namely manually or using computerized statistical applications. One of the conditions that must be met for a measuring instrument to be considered valid is if the r-count value is greater than the r-table value (Handoko, 2017). Validity checking is carried out with the aim of evaluating the accuracy of each question distributed. In this study, to get the r-count value, software was used. It is known that the results of the validity test at the performance level and the level of

importance are declared valid because Rhasil> Rtabel.

4. Reliability Test

The measuring instrument is said to be reliable if the measuring instrument Realiability test is to test whether the results of a questionnaire or questionnaire can be trusted or not. Instrument reliability testing can be done externally or internally. Externally it can be done with test retest (stability), eguivalent, and a combination of both. The reliability test is a continuation of the validity test, where the items tested are only valid items. The reliability test was carried out at a significant level of 0.06, meaning that the instrument can be reliable if the alpha value is large (>) from the critical r product moment. Then the questionnaire items used are reliable or consistent (Engkus, 2019).

The questionnaire is said to be reliable if the result is greater than the table (result> table), with the table. The reliability test value on the expectation attribute is 0.951 and the perception attribute is 0.957 which is greater than the 0.6 criterion, the attribute relationship level is in the reliable category,

meaning that each attribute used has reliability which shows consistency as a measuring tool for research.

4. RESULT AND DISCUSSION

Calculation of Service Quality with the SERVQUAL method is done by calculating the average value of the total value of perception and expectation data on a Likert scale of 1-5 (Handoko, 2017). The Likert scale on the level of importance with information 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The following are the results of perception and expectation data with a total of 100 respondents.

Service Quality at the Financing Unit of Bank BTN Syariah Balikpapan

Table 1 presents data on the average level of performance and the level of importance of the service quality of the Samarinda Hasanah Clinic in each dimension, namely empathy, tangibles, security, efficiency, and improvement. This calculation is done by dividing the total value of each dimensional attribute by the number of sample respondents as many as 100 people. The results of this calculation can be seen in Table 1 below.

Table 1. Statement attributes for perception and expectation assessment

Code.	Dimensions	Attributes	P	H
Q1		Existing equipment and technology are adequate	4.2	3.21
Q2		Visually appealing physical facilities	3.71	3.79
Q3	Tangible	Service employees are well-groomed	3.5	4.95
Q4		Materials related to financing services (pamphlets with thestatement "fixed installments, long term and low down Payment") are visually appealing	3.21	4.28
Q5		An agreement to do something at a specified time and tofulfill it	3.27	3.77
Q6		Customers have problems, the Bank will earnestly helpsolve them	2.56	4.21
Q7	Reliability	Service financing unit right from the start	3.15	4.28
Q8		The financing unit provides services in accordance with thepromised time	4,2	4.43
Q9		Always strive for error-free records	3,71	4.5
Q10		Tell the customer when the service will be delivered	3,5	4.22
Q11	Responsivness	Provide fast service to customers	3,21	4.71
Q12		Always willing to help customers	3,27	4.08
Q13		Never too busy to respond to customer requests	2,56	4.27
Q14	Assurance	Able to make customers trust them	3,15	3.72

Code.	Dimensions	Attributes	P	H
Q15		Customers feel safe in making transactions	4.21	4.49
Q16		Consistently courteous to customers	4.06	4.2
Q17		Have sufficient knowledge to answer any customer Questions	3.48	4.2
Q18		Provide advice or input to customers related to financing (both installments that are in accordance with opinions and What financing products are in accordance with needs)	2.78	4.2
Q19		Provide individualized attention to customers	2.99	4.1
Q20		Has convenient operating hours for all customers	3.94	4.2
Q21	Emphaty	Having employees who give personal attention to Customers	2.22	4.24
Q22		Always put the interests of customers first	4.71	3.78
Q23		Able to understand the specific needs of its customers	2.99	4.49
		Total	-0.77	

Source : (Tjiptono, 2019)

Based on the table above for the total quality of service with a total average of -0.77.

Tabel 2. Score value and category

Value	Category
(-4) ─ (-3)	Very unfavorable
(-2,99) ─ (-2)	Not good
(-1,99) ─ (-1)	Not good enough
(-0,99) ─ 0	Good enough
0 ─ 1	Good

Based on observations made from the results of distributing questionnaires containing 23 questions both perceptions and expectations regarding service quality in the financing unit, the results obtained from the questions asked, where the value of the average of each perception and expectation is calculated based on the total average then the gap value is -0.77 (Good Enough) from the Likert scale from a value of -4 to a maximum value of 1.
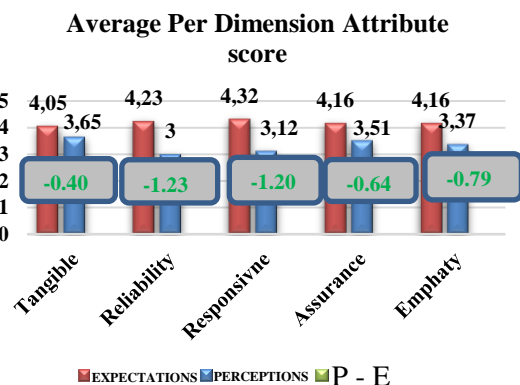
Average Per Dimension Attribute score

Figure 2. Average score of attribute assessment per dimension on perceptions and expectations (service quality).

Based on the diagram above, the results of the attributes can be seen and divided into five dimensions. The result of the average score is calculated based on the gap between expectation and perception dimensions. The improvement of financing service quality of Bank BTN Syariah Balikpapan can be done by taking into account the result of assessment in those five dimensions.

1. The Tangible dimension with a gap value of -0.40, which is the highest score based on these calculations, shows that banks have successfully used technology and provided satisfactory physical services.
2. Assurance with a gap value of -0.64, although it is good enough, banks need to ensure that service guarantees to customers continue to be improved. This includes providing trust and certainty to customers regarding transactions, products, and information provided.
3. Empathy with a gap value of -0.79, meaning that banks can continue to increase personal attention to customers by prioritizing their individual needs and preferences.
4. Responsiveness with a gap value of -1.2, banks need to improve the ability of employees to provide services that are more timely, responsive, and proactive in helping customers.
5. Reliability with a gap value of -1.23, banks must focus on the accuracy and reliability of the services provided. Ensure that the promised service time is fulfilled and solve customer problems effectively.

Fuzzy SERVQUAL Rating

After calculating using the Fuzzy servqual value, the gap value is obtained, gap 5 is used to calculate the gap between expectations and perceptions on the quality of service received by customers. The fuzzy servqual method itself is a combined method between fuzzy techniques and service quality where the benefit is to prevent the problem of uncertain or vague individual views on the assessment of desired perceptions and expectations. Fuzzy is used to help respondents give a more objective value, namely when the respondent gives a good value, then how good the respondent means, whether it is good that leads to very good or good that leads to moderate. The following are the results of calculations based on the assessment between perceptions and expectations using the fuzzy servqual method obtained. For the assessment results can be seen in Table 3. as follows.

Table 3. Service quality gap value attributte

Attribute	Defuzzyfication		Gap	Percentage (%)	Ranking
	Expectation	Perception			
Q1	55,26	75,92	20,66	137,38	23
Q2	69,76	67,75	-2,01	97,12	21
Q3	90,84	62,50	-28,34	68,80	12
Q4	79,67	55,25	-24,42	69,35	13
Q5	66,93	54,42	-12,51	81,31	16
Q6	78,51	39,00	-39,51	49,68	2
Q7	79,67	53,75	-25,92	67,46	10
Q8	82,17	44,25	-37,92	53,85	3
Q9	83,34	57,00	-26,34	68,39	11
Q10	76,34	49,75	-26,59	65,17	8
Q11	86,84	49,75	-37,09	57,29	5
Q12	74,59	62,75	-11,84	84,12	17
Q13	77,68	50,00	-27,68	64,37	7
Q14	68,01	51,50	-16,51	75,72	14
Q15	83,17	78,50	-4,67	94,38	19
Q16	78,26	74,17	-4,09	94,77	20
Q17	78,34	59,67	-18,67	76,16	15
Q18	78,34	44,50	-33,84	56,80	4
Q19	75,09	49,75	-25,34	66,25	9
Q20	78,34	71,67	-6,67	91,48	18
Q21	79,01	30,50	-48,51	38,60	1
Q22	69,51	86,83	17,32	124,92	22
Q23	83,17	49,75	-33,42	59,81	6

Based on the Table 3, it can be seen that the results of the calculation of the gap between perceptions and expectations totaling 23 attributes and then calculated the average per attribute, where the highest average result is obtained on the attribute of superior Bank has adequate equipment and existing technology (Q1) with a gap value of 20.66 (137.38%) where the results of the positive assessment of customers towards technological equipment in the financing unit of Bank BTN Syariah Balikpapan show that the bank has succeeded in presenting effective and useful technological solutions for customers. This success not only improves service quality, but also reflects the bank's commitment in adopting innovation.

Good technology tools help simplify the transaction process and provide convenience to customers in managing their financing. By continuously developing and updating the existing technology, Bank BTN Syariah Balikpapan can continue to meet customer expectations and remain the first choice in modern and reliable financing services. Furthermore, the result of the calculation of the average attribute which has the lowest assessment is at the financing service attribute of Bank BTN Syariah Balikpapan which has employees who give personal attention to the customers (Q21) with the value of -48.51 (38.60%) where the problem of this attribute is to realize how important personal attention is in the financing service of Bank BTN Syariah Balikpapan. Not all customers can get personal attention for their needs in the service process. This results in many customers feeling that the decisions taken by the bank only cover the customers' needs in general, without giving specific attention to their individual needs. Banks need to take concrete steps to increase personal attention to customers so that they feel valued and listened to. With increased communication between banks and customers through various channels, such as phone calls, emails, or in-app messages, banks can better understand individual customer.

Proposed Improvements

In determining the proposed improvements, banks must conduct an in-depth analysis of the attributes that require more attention. By adjusting the proposed improvements to the bank's capabilities and addressing several attributes at once, the bank can achieve

efficiency in service improvement efforts. The proposed improvements that have been made can be seen as follows.

1. Proposed improvements to attribute Q21

In this study, the Q21 attribute is how the Bank's financing services have employees who give personal attention to customers, where at this attribute based on fuzzy servqual calculations get a gap value of -48.51 (38.60%) and this attribute is the top priority for proposed improvements in this study. The provision of the lowest service assessment by customers is due to the lack of personal attention given to customers. Not all customers can get personal attention to their needs in the service process. This results in many customers feeling that decisions taken by the bank only cover the needs of customers in general, without giving specific attention to their individual needs.

Based on the problem, the proposed improvement is Experiental Training which aims to add experience to the personal training relationship approach from the bank to the customer (Sianturi, 2017). Previously, the bank only conducted training in the form of Content-Based Training where the implementation was considered passive and also only based on expert opinion. The view used is one-way where the participants only learn to listen, even though the structure is structured and good enough, but there are times when a bank gets some problems outside the structured material where the scope of settlement has been determined.

As a suggestion, Bank BTN Syariah Balikpapan can apply Experiental Training in an effort to improve empathy dimension in service to customers. Experiental Training has the following advantages:
a. Active: The training actively engages participants through simulations and role plays, so that they can be directly involved in the learning process.
b. Interactive: Participants can actively participate and interact with fellow participants. They can share their experiences and knowledge, and learn from each other from different perspectives.
c. Experience-oriented: Experiental Training emphasizes learning through action and

hands-on experience. Participants are given the opportunity to practice empathy skills in real or simulated situations that are similar to the bank environment of customer needs.

In the context of Bank BTN Syariah Balikpapan, adopting Content-Based activities that tend to be passive, based on expert opinion, autocratic, and focused on specific learning objectives, may not be as effective as Experiental Training in building empathy dimension in customer service. Personalized attention, which involves participants in an active, interactive and experience-oriented manner, may be more effective in enhancing empathy and responsiveness to customer needs. Thus, adding personal attention activities in the training approach of Bank BTN Syariah Balikpapan may be a better alternative than content-based activities.

2. Proposed improvements to attributes Q8 and Q11.

In this research, attribute Q8 i.e. bank financing unit provides services in accordance with the promised time where at this attribute based on fuzzy servqual calculation gets a gap value of -37.92 (53.85%), the assessment shows that the financing unit needs to pay greater attention to the time factor in an effort to provide services to customers. Then in this research, attribute Q11, namely financing service employees of Bank BTN Syariah Balikpapan provide fast service to customers where at this attribute based on fuzzy servqual calculation gets gap value of -37.09 (57.29%), the assessment of time factor becomes important for customers who have limited time in completing their interests at the bank. Customers may have time constraints that must be respected and prioritized in an effort to improve service. The inability to provide services quickly can result in customer dissatisfaction, loss of business opportunities, and potentially a decline in the bank's image.

In conclusion, banking knowledge training provides significant benefits to employees and banks. Employees will gain a deeper understanding of banking products, services and processes, enabling them to provide better service to customers. They can also improve efficiency in the financing process and provide

more responsive services.

Banking knowledge training has an important role in improving employee knowledge, accelerating the financing process, and avoiding errors in financial data records. Proper training will help banks provide better services, improve operational efficiency, and build customer trust.

3. Proposed improvements to attributes Q18 and Q6

In this study, attribute Q18 regarding financing service employees of Bank BTN Syariah Balikpapan provide advice or input to customers related to financing gets a gap value of -33.84 (56.80%) based on fuzzy servqual calculation. This shows that the assessment of the role of employees in providing advice and input to customers still needs to be improved. When employees can provide valuable advice and assist customers in choosing financing that suits their needs, the benefits are wider. Providing feedback to customers beyond direct product material can help customers make better decisions regarding financing. Employees can help customers understand their needs, identify risks, and evaluate suitable financing options. Then at the Q6 attribute, namely if the customer has a problem, the financing unit of Bank BTN Syariah Balikpapan will be eager to help solve it at this attribute based on fuzzy servqual calculation getting a gap value of -39.51 (49.68%) assessment on the bank's availability and ready to help customers in solving the problems or obstacles they face.

Based on the description of the attributes above, the proposed improvement that can be given is to provide additional rewards to employees who have successfully achieved achievements related to attributes that need to be improved in service. According to Sianturi, (2017), In addition, additional rewards can also create a positive work environment. Employees will feel encouraged to work collaboratively, share knowledge, and help each other in facing service challenges.

According to Nawawi (2010) in (Mora, Zati, & Sova, 2019) the types of compensation provided can be as follows.
a. Direct Compensation. Rewards or rewards

called wages or salaries are defined as payments in the form of money for the performance of work.
b. Indirect Compensation. Indirect compensation is a number of rewards intended to provide peace of mind for workers and their family members.
c. Incentives. Incentives are rewards given to motivate workers to have high work productivity, which is not fixed or at any time.

5. CONCLUSION

The overall results of measuring perceptions and expectations regarding service quality in the financing unit, obtained the results that from the questions asked, where the value of the average of each perception and expectation is calculated based on the total average then the gap value is -0.77 on a Likert scale from a value of -4 to a maximum value of 1. Analysis of the average gap from the results of customer perceptions and expectations, obtained an average gap value of -0.77. The value of -0.77 is in the good category. Therefore, it can be concluded that the overall service quality of financing unit of Bank BTN Syariah Balikpapan is good. Service quality at Bank BTN Syariah based on fuzzy Servqual method can be concluded that the statement attributes used in the research have negative gap values where the highest gap value per attribute is obtained with the lowest ranking percentage of 38.6% with attribute code Q21 (having employees who give personal attention to customers) has a gap of -48,51 means that complaints submitted by customers are an important attribute that needs to be improved because the gap between expectations and the reality received by customers is negative and the lowest gap value with the highest percentage rank of 137.38% is at the attribute coded Q1 (having adequate equipment and technology) with a gap value of 20.66 means that the physical form at Bank BTN Syariah is an attribute that makes customers feel quite satisfied compared to other attributes.

Based on the fuzzy Servqual method, several attributes with the lowest negative gaps in the service quality of Bank BTN Syariah were found. Proposed improvements include Experiental Training activities to improve the

personal relationship approach with customers, additional training with banking knowledge material to improve the financing process, providing additional rewards to employees who successfully achieve achievements that need to be improved in service. Additional rewards can also create a positive work environment with encouragement to work collaboratively, share knowledge, and help each other in facing service challenges

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