Analysis of Service Quality on Mustahiq Satisfaction using Importance Performance Analysis (IPA) and Kano Model: Case Study on Baitul Mal

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Abstract: Baitul Mal is a social institution, which is engaged in charity of zakat fund raising for the sake of socially patterned and sustainable. In its service Baitul Mal must be prosecuted to prioritize satisfaction of mustahiq, so that progress in the quality of service and able to improve the mustahiq economy and also giving a positive impact on the survival of Baitul Mal.For the purpose ofresearcher, this paper on the service quality will be observed by using the method of Importance PerformanceAnalysis (IPA) and Kano model. This method is used in order to know the attributes that should be upgraded in accordance with the wishes of mustahiq.The result indicates that, these methods allow us to know the priority attributes that must be improved its performance by the Baitul Mal it is the Amil of Baitul Mal Kota Lhokseumawe act based on islamic morality, Amil Baitul Mal Kota Lhokseumawe solve themustahiqproblem related to zakat program on time, Baitul Mal Kota Lhokseumawe always serve mustahiq effectively, Amil Baitul Mal Kota Lhokseumawe has knowledge about zakat, the Zakat given by Baitul Mal Kota Lhokseumawe has fulfilled the necessity of mustahiq, Zakat given by Baitul Mal Kota Lhokseumawe can improve the prosperity of mustahiq and Amil Baitul Mal Kota Lhokseumawe do not distinguish between mustahiq one and others.

1 INTRODUCTION

Baitul Mal is a social institution in charity zakat fund raising. The service in the Baitul Mal is a very important thing tobe underscored. The creation of service quality will certainly create satisfaction with mustahiq. In fulfilling the mustahiq satisfaction required the quality of service as well as possible and high commitment from the amil, because mustahiq is the main target in the distribution of zakat and able to prosper the life of the mustahiq to be better.

Therefore, it is necessary to conduct research on Baitul Mal regarding the quality of services provided. It is because the quality of service will have so many positive impacts for the survival of Baitul Mal.

2 RESEARCH PURPOSE

The purpose of this research is as follows:
To know what is the main priority attributes in service quality of Baitul Mal Kota Lhokseumawe. To find out what is categories of Kano attribute as the main priority in service quality of Baitul Mal Kota Lhokseumawe. To know the integration of Importance Performance Analysis (IPA) method and Kano model in Baitul Mal Kota Lhokseumawe.

3 RESEARCH CONTRIBUTION

The contribution in this research which can be obtain as follow:
1. It able to assist in improving the quality of services that have been applied previously.
2. It is providing insight or information about the condition of satisfaction mustahiq on service quality.

4 LITERATURE REVIEW

4.1 Definition of Zakat

In terms of language, zakat has several meanings, namely al-barakatu (blessing), al-nama (growth and

development), al-tharatu (purity) and al-salahu (goodness) .

On the behalf of jurisprudence, zakat is a number of property that is obligated by Allah to be handed over to the rightful. Zakat is part of the property with certain conditions required by Allah SWT, to be shared to the rightful to receive it, with certain conditions.

Zakat is māliyah ijtimā'iyyah service that has an important, strategic and decisive position, from the point of doctrine and the development of the welfare of the people. Zakat is included in the pillars of Islam, so it is considered ma'lum minad-din bi al-darurah (known automatically) and is an absolute part of one's religion. Even in the Qur'an there are also verses that equate the level of prayer and the obligation of zakat.

There is al-Qura'an's verse of zakat in different terms. It has been mentioned by ma'rifah (zakat treasure) as much as 30 times and it is 8 times of which are in the surah makkiyyah and 22 times in madaniyyah. Then 28 verses related to the obligation to perform the prayer. This makes the position of zakat high enough and important in the Islamic Shari'ah. Zakat can also cultivate mustahiq and muzakki relationships, enhancing ukhuwah islamiyyah and reducing poverty. The Qur'an also states that Zakat is the main indicator of one's obedience to the teachings of Islam, which will gain the happiness of life, gain the grace and help of Allah SWT. A person who fulfills the obligatory obligation is one who wishes to cleanse oneself and his soul from various bad qualities, such as selfishness, greed and at the same time desire to always cleanse, purify and develop his possessions.

The people who are entitled to receive zakat consist of eight groups, namely:

1. Fakir, ie people who do not have anything or can not meet half of the needs.
2. Poor, that people can meet half the needs.
3. Amil, the person appointed to take care of zakat.
4. Muallaf, the new convert to Islam while his faith is strong.
5. Slave, the servant who has been promised his master that he may redeem himself with money or other property.
6. Gharimin, the people who have debts, the people who bear the burden of debt to improve human relations or to meet their personal needs both rich and poor.
7. Fisabilillah, it is jihad and everything needed with jihad activities, such as recruitment of war troops, the establishment of factories and the arms industry and so on.

8. Ibn Sabil, it is all those who run out of life stock on the way and can not bring his needs from his village, although he is a treasure in his village.

4.2 Definition of Service Quality

The service quality is how far the difference between the reality and expectations of the mustahiq for the service they receive. The quality of service can be identified by comparing the mustahiq perceptions of the services they actually receive.

4.3 *Importance Performance Analysis (IPA)*

The Importance Performance Analysis (IPA) method was first introduced by Martilla and James (1977) with the aim of measuring the relationship between the perception of mustahiq and the priority of product/service quality improvement, also known as quadrant analysis. Importance Performance Analysis (IPA) has been generally accepted and used in various fields of study because of its ease of application and display of analytical results that facilitate performance improvement proposals.

Figure 1. *Importance Performance Analysis* (IPA) diagram

Figure1 is IPA matrix which has four quadrants to analyze the performance of interests. There are th explanation for each quadrant [9].

1. Quadrant I (Main Priority)
   The first quadrant symbolized as the region that contains the factors that are considered important by the customer but the level of satisfaction obtained is still low.
2. Quadrant II (Maintain Achievement)
   In the second quadrant this is the area that contains the factors that are considered important by the customer and the factors that are felt relatively high.

3. Quadrant III (Low Priority)
   In this third quadrant is the area that contains the factors that are considered less important by the customer and in fact the performance is not too special. It is because the benefits are very small customers.
4. Quadrant IV (Excessive)
   In this quadrant the area contains the factors that are considered less important by the customers and felt too excessive. Then, itis belong to this quadrant can be reduced in order to the company can save cost.

The model of *Importance Performance Analysis* (IPA) can be seen as follow:

a. Determining the level of conformity

$$Tk_i = \frac{K_i}{H_i} \times 100\%$$

(1)

b. Calculates the average for each attribute

$$\overline{X_i} = \frac{\sum X_i}{n}$$

(2)

$$\overline{Y_i} = \frac{\sum Y_i}{n}$$

(3)

c. Calculates the average of all attributes of interest $\overline{\overline{Y}}$ and performance $\overline{\overline{X}}$ levels that limit the Cartesian diagram.

$$\overline{\overline{X}} = \frac{\sum \overline{X_i}}{k}$$

(4)

$$\overline{\overline{Y}} = \frac{\sum \overline{Y_i}}{k}$$

(5)

d. Mapping into Cartesian diagram.

4.4 Kano Model

Kano model developed by Noriaki Kano (1984) which aims to categorize the attributes of products and services based on how well the product is able to satisfy the needs mustahiq.

Service attributes can be divided into several, as follow[9]:

1. *Must be*or*basic needs* (M)

Mustahiq considers that the attributes present in this category are a necessity in the product. Mustahiq will not be satisfied if the attributes that exist in this category are not met.

2. *One dimensional*or*performance needs* (O)
   Mustahiq satisfaction will increase if the attributes that exist in this category are given, but mustahiq also will not be satisfied if the attributes that exist in this category does not exist.

3. *Attractive*(A)
   Mustahiq will feel satisfied if the attributes that exist in this category are given, but mustahiq will not be disappointed if the attributes in this category are not given.

4. *Indifferent* (I)
   Mustahiq does not care about the attributes offered so that the presence or absence of these attributes will not affect the increase or decrease in the level of satisfaction mustahiq.

5. *Questionable* (Q)
   Sometimes mustahiq is satisfied or absent with the presence of attributes in this category, so it is not clear whether the attributes in this category are expected or not expected by mustahiq or in other words a denial in the mustahiq answer to the given question.

6. *Reverse* (R)
   Mustahiq not satisfied if there are attributes in this category, but mustahiq will be satisfied if the attribute in this category does not exist.

1. Specify the Kano category by using Blauth's formula [5]:
   - If the values of (O + A + M)> the sum of values (I + R + Q), then the determination of the Kano category is obtained from the largest value of (O, A, M).
   - If the values of (O + A + M) <number of values (I + R + Q), then the determination of the Kano category is obtained from the greatest value of (I, R, Q).
   - If the sum of values (O + A + M) = the sum of values (I + R + Q), the Kano category is obtained from the greatest value among all Canoe categories (O, A, M, I, R, Q).

2. Calculating coefficient Satisfaction Mustahiq (CSC) so that the level of satisfaction mustahiq can be known by the formula If Better Than (IBT) and If Worse Than (IWT):

$$IBT = \frac{A + O}{A + O + M + I}$$

(6)

$$IWT = -\frac{M + O}{A + O + M + I}$$

(7)

5 METHOD

The method used in this research is taken with case study method through interview to mustahiq which become respondent by using questioner. Sampling is done by non-random sampling technique that is procedure of selecting sample based on consideration certain characteristic which suitable and needed to answer the research questionas. The characteristics of sample taken in this research isfakir that is as much as 87 respondents. The sampling selection using Slovin formula where 90% confidence level and error term around 10%.

6 RESEARCH RESULT

The study was conducted at Baitul Mal in Kota Lhokseumawe. From the results of the research, the distribution of questionnaires with the number of respondents based on slovin method formula where the 90% confidence level and error rate of 10% test Validity and Reliability performed, known all the attributes declared valid and reliable so that data can be used as research instrument. For the average level of performance and importance of each attribute can be seen in Table **1.**

Table 1: Calculation Result of Suitability Level

Attribute	Performance Score (K_i)	Interest Score (H_i)	Level of Performance	Level of Interest
TAN1	345	349	3,97	4,01
TAN2	362	345	4,16	3,97
TAN3	349	360	4,01	4,14
TAN4	334	362	3,84	4,16
TAN5	350	359	4,02	4,13
TAN6	355	372	4,08	4,28
REL7	312	352	3,59	4,05
REL8	354	337	4,07	3,87
REL9	353	332	4,06	3,82
REL10	351	352	4,03	4,05
REL11	360	346	4,14	3,98
REL12	307	343	3,53	3,94
REL13	290	344	3,33	3,95
ASS14	282	345	3,24	3,97
ASS15	329	356	3,78	4,09
ASS16	322	352	3,70	4,05
ASS17	355	355	4,08	4,08
ASS18	289	348	3,32	4,00
ASS19	291	353	3,34	4,06
EMP20	313	347	3,60	3,99
EMP21	350	349	4,02	4,01
EMP22	335	334	3,85	3,84
EMP23	307	332	3,53	3,82
EMP24	304	323	3,49	3,71
Average			**3,8**	**4,0**

6.1 Importance Performance Analysis (IPA) Method

For the Cartesian diagram of Importance Performance Analysis (IPA) can be seen in Figure 2.
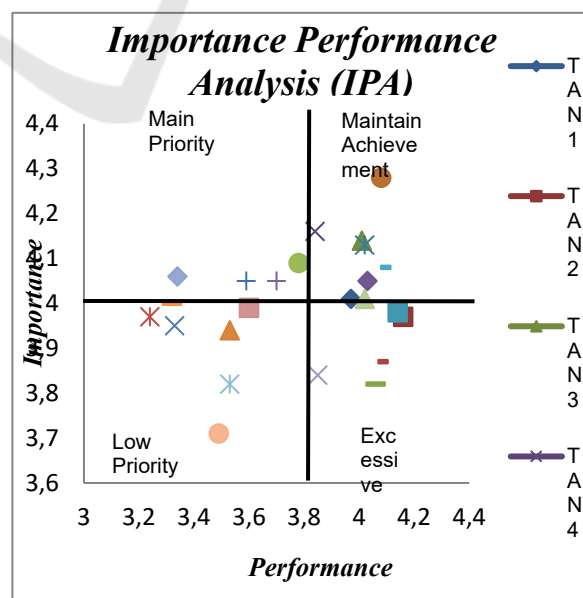

Figure 2: *Importance Performance Analysis* (IPA) Diagram

Attributes that are included in the quadrant of the main priority are attributes that are considered important but their performance is still considered less that can be seen in Table 2.

Table 2: Service attributes which included in *main priority*

Dimension	Attribute Code	Questions
Reliability	REL7	Amil Baitul Mal Kota Lhokseumawe solve the mustahiq problem related to zakat program on time
Assurance	ASS15	Amil Baitul Mal Kota Lhokseumawe can explain the information to the mustahiq clearly
	ASS16	Amil Baitul Mal Kota Lhokseumawe has knowledge of zakat
	ASS18	Zakat given Baitul Mal Kota Lhokseumawe has fulfilled the necessity of mustahiq
	ASS19	Zakat given Baitul Mal Kota Lhokseumawe can improve the welfare of mustahiq

The attributes of Baitul Mal service which are included in the category of preserving the performance and must be maintained in accordance with the wishes mustahiqthat can be seen in Table 3.

Table 3: Service attributes which included inmaintain achievement

Dimension	Attribute Code	Questions
Tangible	TAN1	Baitul Mal Kota Lhokseumawe has adequate building
	TAN3	Baitul Mal Kota Lhokseumawe has a clean building
	TAN4	Amil Baitul Mal Kota Lhokseumawe shows Islamic morals

	TAN5	Baitul Mal Kota Lhokseumawe has a neat building
	TAN6	Baitul Mal Kota Lhokseumawe has a service room in accordance with its function
Responsivness	RES10	Baitul Mal Kota Lhokseumawe always serve mustahiq quickly
Assurance	ASS17	Baitul Mal Kota Lhokseumawe has enough amil, so there is always a substitute if anyone is unable to attend
Emphaty	EMP21	Amil Baitul Mal Kota Lhokseumawe does not distinguish between mustahiq with one another.

The attributes of Baitul Mal service included in low priority category with low importance level and in fact the performance is not very special with low satisfaction level that is seen in Table 4.

Table 4: Service attributes which included in low priority

Dimension	Attribute Code	Questions
Responsivness	RES12	Amil Baitul Mal Kota Lhokseumawe is always willing to help the mustahiq who are in trouble
	RES13	Amil Baitul Mal Kota Lhokseumawe always listen to complaints mustahiq
Assurance	ASS14	Amil Baitul Mal Kota Lhokseumawe can explain the information to the mustahiq in detail
Emphaty	EMP20	Amil Baitul Mal Kota

EMP23	Lhokseumawe is always willing to provide latest information to mustahiq	
EMP24	Amil Baitul Mal Kota Lhokseumawe always understands what the mustahiq complained about	
	Amil Baitul Mal Kota Lhokseumawe always understands what the mustahiq wants	

The attributes of Baitul Mal service included in the category of excessive with low importance level and felt mustahiq too excessive that can be seen in Table 5.

Table 5: Service attributes which included in Excessive

Dimension	Attribute Code	Questions
Tangible	TAN2	Baitul Mal Kota Lhokseumawe has a comfortable building
	REL8	Amil Baitul Mal Kota Lhokseumawe is always in the office during working hours
Reliability	REL9	Baitul Mal Kota Lhokseumawe has an easy registration procedure to become mustahiq
	REL11	Amil Baitul Mal Kota Lhokseumawe can answer the questions posed by mustahiq
Emphaty	EMP22	Amil Baitul Mal Kota Lhokseumawe is always willing to help the mustahiq who are in trouble

6.2 Kano Model

To calculate the value of the mustahiq satisfaction coefficient with *If Better Than* (IBT) and *If Worse Than* (IWT), as follows:

Table 6: The mustahiq satisfaction coefficient using Kano

Attribute	A	M	O	R	Q	I	IBT	IWT
TAN1	0	10	77	0	0	0	0,89	-1,00
TAN2	0	11	76	0	0	0	0,87	-1,00
TAN3	0	13	74	0	0	0	0,85	-1,00
TAN4	2	57	27	0	0	1	0,33	-0,97
TAN5	0	13	74	0	0	0	0,85	-1,00
TAN6	0	19	68	0	0	0	0,78	-1,00
REL7	1	63	23	0	0	0	0,28	-0,99
REL8	0	16	71	0	0	0	0,82	-1,00
REL9	1	21	64	0	0	1	0,75	-0,98
REL10	5	45	37	0	0	0	0,48	-0,94
REL11	50	21	10	0	0	6	0,69	-0,36
REL12	33	17	24	0	0	13	0,66	-0,47
REL13	35	13	24	0	0	15	0,68	-0,43
ASS14	24	25	21	0	0	17	0,52	-0,53
ASS15	18	31	31	0	0	7	0,56	-0,71
ASS16	0	58	29	0	0	0	0,33	-1,00
ASS17	3	21	61	0	0	2	0,74	-0,94
ASS18	3	68	16	0	0	0	0,22	-0,97
ASS19	3	69	15	0	0	0	0,21	-0,97
EMP20	10	20	41	0	0	16	0,59	-0,70
EMP21	8	59	18	0	0	2	0,30	-0,89
EMP22	22	18	26	0	0	21	0,55	-0,51
EMP23	30	32	20	0	0	5	0,57	-0,60
EMP24	16	40	23	0	0	8	0,45	-0,72
Total							13,95	19,66
Average							0,6	-0,8

Based on the results of the calculation of the mustahiq satisfaction coefficient, the results obtained *If Better Than* (IBT) and *If Worse Than* (IWT), for each attribute. Then the graph of Kano's mustahiq satisfaction coefficient can be seen in Figure 3.
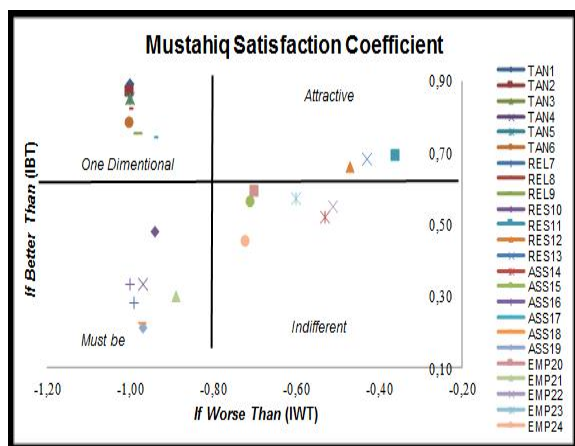
Figure 3: The Diagram of mustahiq satisfaction

Based on the above mustahiq satisfaction coefficient diagram, the attributes of Baitul Mal service can be grouped in each dimension. The attributes are included in one dimentional there are 8 attributes, attributes are included in the category of attractive there are 3 attributes, attributes included in the category must be there are 7 attributes, attributes belonging to the category of indifferent there are 6 attributes.

Integration of attributes on Importance Performance Analysis (IPA) and Kano model can be seen in Table 7

Table 7: Integration of *Importance Performance Analysis* (IPA) and Kano Model

Attribute Code	Services	IPA Categories	Kano Categories	Improvement
REL7	Amil Baitul Mal Kota Lhokseumawe solve the mustahiq problem related to zakat program on time	Main Priority	M	Enhancing
ASS15	Amil Baitul Mal Kota Lhokseumawe can explain the information to the mustahiq clearly	Main Priority	I	Enhancing
ASS16	Amil Baitul Mal Kota Lhokseumawe has knowledge of zakat	Main Priority	M	Enhancing
ASS18	Zakat given Baitul Mal Kota Lhokseumawe has fulfilled the necessity of mustahiq	Main Priority	M	Enhancing
ASS19	Zakat given Baitul Mal Kota Lhokseumawe	Main Priority	M	Enhancing

Attribute Code	Services	IPA Categories	Kano Categories	Improvement
	can improve the welfare of mustahiq			
TAN1	Baitul Mal Kota Lhokseumawe has adequate building	Maintain Achievement	O	Maintain
TAN3	Baitul Mal Kota Lhokseumawe has a clean building	Maintain Achievement	O	Maintain
TAN4	Amil Baitul Mal Kota Lhokseumawe shows Islamic morals	Maintain Achievement	M	Maintain
TAN5	Baitul Mal Kota Lhokseumawe has a neat building	Maintain Achievement	O	Maintain
TAN6	Baitul Mal Kota Lhokseumawe has a service room in accordance with its function	Maintain Achievement	O	Maintain
RES10	Baitul Mal Kota Lhokseumawe always serve mustahiq quickly	Maintain Achievement	M	Maintain
ASS17	Baitul Mal Kota Lhokseumawe has enough amil, so there is always a substitute if anyone is unable to attend	Maintain Achievement	O	Maintain
EMP21	Amil Baitul Mal Kota Lhokseumawe does not distinguish between mustahiq with one another	Maintain Achievement	M	Maintain
RES12	Amil Baitul Mal Kota Lhokseumawe is always willing to help the mustahiq who are in trouble	Low Priority	A	Reducing
RES13	Amil Baitul Mal Kota Lhokseumawe always listen to complaints mustahiq	Low Priority	A	Reducing
ASS14	Amil Baitul Mal Kota Lhokseumawe can explain the information to the mustahiq in detail	Low Priority	I	Reducing
EMP20	Amil Baitul Mal Kota Lhokseumawe is always willing to provide latest information to mustahiq	Low Priority	I	Reducing
EMP23	Amil Baitul Mal Kota Lhokseumawe	Low Priority	I	Reducing

EMP24	always understands what the mustahiq complained about Amil Baitul Mal Kota Lhokseumawe always understands what the mustahiq wants	Low Priority	I	Reducing
TAN2	Baitul Mal Kota Lhokseumawe has a comfortable building	Excessive	O	Reducing
REL8	Amil Baitul Mal Kota Lhokseumawe is always in the office during working hours	Excessive	O	Reducing
REL9	Baitul Mal Kota Lhokseumawe has an easy registration procedure to become mustahiq	Excessive	O	Reducing
RES11	Amil Baitul Mal Kota Lhokseumawe can answer the questions posed by mustahiq	Excessive	O	Reducing
EMP22	Amil Baitul Mal Kota Lhokseumawe is always willing to help the mustahiq who are in trouble	Excessive	I	Reducing

Based on the mapping of Importance Performance Analysis (IPA) and Kano model, there are 5 attributes that must be improved by attribute code REL7, ASS15, ASS16, ASS18, and ASS19. 8 service attributes retained by the attributes of the TAN1, TAN3, TAN4, TAN5, TAN6, RES10, ASS17, and EMP21.11 service attributes that must be reduced to satisfy the mustahiq satisfaction based on the results obtained with attribute codes TAN2, REL8, REL9, RES11 , RES12, RES13, ASS14, EMP20, EMP22, EMP23, and EMP24.

7 CONCLUSION

Based on the results and discussion that has been done, it can be concluded:

1. For the Importance Performance Analysis (IPA) method of service attributes in the main priority which is considered important but the performance is still less satisfactory for the recipient of zakat (mustahiq) is Amil Baitul Mal Kota Lhokseumawe solve the mustahiq problem related to zakat program on time (REL7), Amil Baitul Mal Kota Lhokseumawe can explain information to mustahiq clearly (ASS15), Amil Baitul Mal Kota Lhokseumawe has knowledge about zakat (ASS16), Zakat given Baitul Mal Kota Lhokseumawe has fulfilled the necessity of mustahiq (ASS18), and Zakat given Baitul Mal Kota Lhokseumawe is capable of improving the mustahiq's welfare (ASS19).

2. Service attributes in the main priorities based on Kano category include Amil Baitul Mal Kota Lhokseumawe solve the mustahiq problem related to zakat program on time (Must be), Amil Baitul Mal Kota Lhokseumawe can explain information to mustahiq clearly (Indifferent), Amil Baitul Mal Kota Lhokseumawe has knowledge of zakat (Must be), Zakat given Baitul Mal Kota Lhokseumawe has fulfilled the mustahiq (Must be), and Zakat given by Baitul Mal of Lhokseumawe can improve the mustahiq welfare (Must be).

3. Based on the results of integration of Importance Performance Analysis (IPA) and Kano Model, there are 5 attributes that must be improved in Baitul Mal such as Amil Baitul Mal Kota Lhokseumawe solve the mustahiq problem related to zakat program on time (REL7), Amil Baitul Mal Kota Lhokseumawe can explain information to the mustahiq clearly (ASS15), Amil Baitul Mal Kota Lhokseumawe has knowledge about zakat (ASS16), Zakat given Baitul Mal Kota Lhokseumawe has fulfilled the necessity of mustahiq (ASS18), and Zakat given Baitul Mal Kota Lhokseumawe can improve prosperity mustahiq (ASS19).

RECOMMENDATION

Based on the research that has been done, the authors provide the following suggestions:

1. It is expected that the Amil Baitul Mal can improve its service attribute performance based on expectations from Mustahiq.

2. This research can be continued by analyzing the factors causing the low performance of some important service attributes, so that the improvement of Baitul Mal service quality can be put forward as public sector.

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