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The Gap Analysis of Public Servqual (Case Study of Bus Rapid Transit's Customer on Makassar)

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ABSTRACT. **Public transportation such as Bus Rapid Transit (BRT) was an alternative solution in reducing traffic congestion in major cities of Indonesia. Trans Mamminasata BRT was one of the urban transportation as part of the government program to provide mass transit for the people of Makassar. An aims of this study were to 1) test the difference of average value between perceived service with expected service on each dimension of servqual (reliability, responsiveness, tangibles, assurance, and empathy); 2) test the gap between perceived service and expected service; and 3) test the priority indicator servqual in the improvement effort for Trans Mamminasata management in order to fulfill the expected service for the community. The approach used in this research was quantitative, with a cross-sectional design. Data collection techniques in this study were using questionnaires. So sampling technique was using non-probability sampling, with purposive sampling method. There were two variables perceived service and expected service consisting of five dimensions, namely: reliability, responsiveness, tangibles, assurance, and empathy. Paired T-test was used to test H1, H2, H3, H4, and H5. Wilcoxon Signed-Rank test was used to test H6. So Importance-Performance Analysis was used to test the servqual priority indicators. The results showed that H2, H3, H4, H5, and H6 were accepted, while H1 was rejected. Performance Analysis indicates that there were no indicators in A quadrant. Meanwhile, 20 indicators were in B quadrant, 12 indicators were in C quadrant, and one indicator in C quadrant.**

KEYWORDS: Servqual, Bus Rapid Transit, Trans Mamminasata.

I. INTRODUCTION

The importance of service quality was experienced in the public sector. Public awareness of rights has increased, so the public wants excellent service quality. Public service was a service provided by the government as a state organizer for the community to satisfy the community needs itself, and it has a goal to improve the community welfare [15]. In essence, the state, in this case, the government should be able to satisfy the community needs. These needs must be understood not necessarily individually, but the actual needs were expected by society.

The emergence of non-motorize transportation issue indicated the friction of transportation behavior pattern; then the government implemented a more easily realized sustainable transportation system based on the use of public transportation mode [2]. Transportation sector restructuring has a significant impact on the economy, as it involves mobility and community accessibility. Currently, transportation in major cities of Indonesia has a very variable public transport network.

The urban mass-transport model was designed to provide services with a variety of schedule options. However, the quality of public transport services in Indonesia was still very less; it was evident that there were still many public transport passengers crowding and the low responsibility of drivers in driving the vehicle, so not a few cases of accidents involving public transport drivers. The focus of urban transport system services was a critical thing in improving the performance and improving the quality of public services in the urban system to satisfy the needs of the community, so that it can become a communication tool between customers and service providers in an effort to improve the quality of services, to measure off service performance, monitoring and evaluation of the public services performance in the implementation of urban transport system.

Public transportation was always directed to the economic center that was usually located in urban areas, so the streets in the city to become traffic jam, and it is not smooth. The mandate of Law Number 2 the Year 2009 stating that the government was obliged to provide Mass Road Based Public Transportation Facilities. Public transportation in Makassar has been controlled by urban transportation (in Makassar its called pete-pete), but its presence does not bring a solution to overcome traffic jam in Makassar, due to its small capacity and its have a large number, and indiscipline its drivers.

One of the policies of South Sulawesi Provincial Government to overcome the increasingly complex transportation problem was to develop mass transportation system with Bus Rapid Transit (BRT) concept which was expected to be an alternative solution in reducing traffic jam. Trans Mamminasata was a BRT mass transit service in Makassar City which started operation in March 2014, and it connects the Maros, Makassar, Gowa and Takalar regions.

However, BRT Trans Mamminasata received less response in the community. It indicated the passing of BRT Trans Mamminasata passengers, and the reduced number of buses operated from 30 units (2017) to be 15 units (2018), even in mid-2018 there were only seven units were operating in II corridor and III corridors. The lack of passengers was due to an uncertain departure schedule, so

some passengers choose another mode of transportation, such as pete-pete or online taxi.

The reduction of the number of BRT Trans Mamminasata fleet was due to Perum DAMRI Makassar as the operator suffered a loss during the operation of BRT Makassar, and the most significant loss in 2017 amounted to Rp 3 billion. The assumption was if a bus unit requires an operational cost of around Rp 500 thousand per day (with details Rp 400 thousand for diesel, and Rp 100 thousand for driver and conductor's income, excluding food allowance). If there were about five buses in operation, so Perum DAMRI Makassar needs at least Rp 2.5 million per day. Meanwhile, BRT income only ranges of Rp 500 thousand per day. The operational cost of the BRT fleet was inversely proportional to the revenue of Perum DAMRI Makassar.

One of the reasons causing Perum DAMRI Makassar to suffer losses was because the attractiveness of people choosing BRT as transportation needs was still low. Although BRT's one-time tariff was Rp 5,000, - it was cheap for long distances, plus priority channels for BRT in every corridor, but community interest in using BRT Mamminasata was low. BRT Trans Mamminasata only stops at BRT's shelter to up and down passengers (South Sulawesi Transportation Agency has built 110 shelters to support BRT facility). It was not as easy and flexible as urban transport that can take up and down passengers anywhere, although it often creates a traffic jam at peak hours.

Based on its problem, this study will analyze the gap of public service quality with a case study on Trans Mamminasata's customer in Makassar. The aims of this research were 1) to analyze the difference of mean value between perceived service with expected service on each servqual dimension (reliability, responsiveness, tangibles, assurance, and empathy); 2) to analyze the gap between perceived service and expected service; and 3) to analyze the priority scale of servqual indicators in an effort to improve the management of BRT Trans Mamminasata in order to satisfy the expected service.

The results of this study were expected to be useful for : 1) development of marketing management science, especially public services; 2) development of valid, reliable and easy instruments for measuring the quality of public services, especially for citizen; and 3) scientific review for policymakers in order to improve the quality of public services.

II. LITERATURE REVIEW

Public Servqual

Citizen in the information era wants all services faster, more effectively, and efficiently. So, the implementation of public services was required to provide excellent service. The government was required to adapt as a form of responsibility to the citizen. The change can not be changed instantly, but it takes time for governments to improve public services quality.

Customer satisfaction was a crucial aspect of an organization. It has become a central concept in marketing theory and practice, as well as essential for private and public sector activities. However, customer satisfaction was not an easy thing to achieve because of the tight competition. Not all of the organizations (private or government) already understand and know its potential in satisfying the needs and desires of customers, in the context of the public sector, the customer was the community as users of services provided by government agencies. Public services organized by the government were influenced by several factors, internal factors in the government as service providers, and external factors that exist within the community as the recipient of service [17].

The service quality approach often used as the basis for marketing research was the servqual model developed by Parasuraman and Zeithaml [14]. There were two main factors that affect the quality of services, 1) expected service, and 2) services received. There were five dimensions in providing excellent service (excellent):

1. Tangible, including physical facilities, equipment, employees, and communication infrastructure.
2. Empathy, including ease of doing relationships, excellent communication, personal attention, and understanding customer needs.
3. Responsiveness, i.e., employees help customers in providing excellent service.
4. Reliability, namely: the ability to provide services promised immediately, accurately, reliably, and satisfying.
5. Assurance, namely: provide services that include knowledge, skills, courtesy, and credible nature possessed by employees.

The result of Setyawan's research [18] indicates that there was no difference between the average value of perceived service and the expected service on the dimensions of each servqual dimension (reliability, responsiveness, tangibles, assurance, and empathy). It means that customer expectations have a significant role as a standard comparison in evaluating the quality and satisfaction of the services it receives. Based on the concept, it can be formulated the research hypothesis as:

H_1: there was no difference of mean value between perceived service and expected service on the dimension of reliability

H_2: there was no difference of mean value between perceived service and expected service on the dimension of responsiveness

H_3: there was no difference of mean value between perceived service and expected service on the dimension of tangible

H_4: there was no difference of mean value between perceived service and expected service on the dimension of assurance

H_5: there was no difference of mean value between perceived service and expected service on the dimension of empathy

Servqual Gap

The conceptual model of servqual was a formulation to satisfy customer satisfaction [9]. In servqual model, there was a gap analysis model, that was the difference between perceived service and expected service. Perceived service was a subjective assessment by the customer for their experience consuming goods or services. Expected service was a standard or reference of the customer with experience of consumption of goods or services.

Perceived service and expected service should be identical, but in reality, there was a large gap. So it becomes the marketer's job to build a bridge between the two and make an effort to narrow or close the gap that occurs. There were five types of gaps that must be bridged to satisfy customer satisfaction [12]:

1. The first gap (management perception) was the gap between customer expectations and company management perceptions. The gap as a result of company management misunderstood what customers expect.
2. The second gap (quality specification) was the gap between the company's management perceptions toward customer expectations and service quality specifications. The gap as a result of the lack of accurate translation of company management perceptions on the expectations of company customers into the form of benchmark servqual.
3. The third gap (service delivery) was the gap between service quality specifications and service delivery to customers. The gap was as a result of the inability of a human resources company to satisfy the standard servqual has been established.
4. The fourth gap (marketing communication) was the gap between service delivery to customers and external communication. The gap was created because the company was not able to satisfy the promises that were communicated externally through various promotion.
5. The fifth gap (perceived service) was the gap between customer expectations and the reality of service received. The gap was as a result of not fulfilling customer expectations with reality.

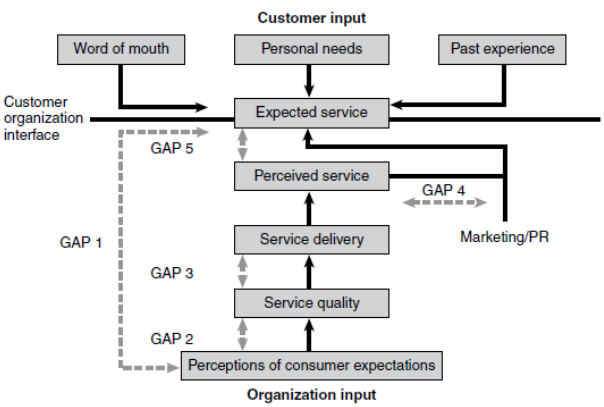

Figure 1. Servqual Gap Model
(Source: Parasuraman, Zeithaml & Berry, 1985)

The gap analysis has several benefits [12]: 1) companies can assess the gap between the company's actual performance with expected company performance standards; 2) the company knows the required for performance improvements to minimize the gap, and 3) the results of gap analysis can be used as one of the basis in related decision-making priorities and costs required to satisfy established service standards in order to fulfill customer satisfaction. The positioning of customer perceptions toward the servqual depends on the nature of the gap between the expected service and the perceived service. The result of Setyawan's research [18] indicates there was a gap between expected service and perceived service. This study will only test servqual discrepancy at the fifth gap (perceived service), which was the gap between perceived service and expected service. Based on the concept, it can be formulated the research hypothesis as:

H_6: there was a gap between perceived service and expected service.

Importance-Performance Analysis

Importance-Performance Analysis was first proposed and introduced by Martilla and James [10] as a means by which to measure customer satisfaction toward a product or service. The IPA approach recognizes satisfaction as the function of two components such as the importance of a product or service to a client, and the performance of a business in providing of service or product [10].

IPA not only to evaluate the performance of a product or services but also to appraise the importance of that it as a determining factor in satisfaction to the respondent. The combined customer ratings for those two components, then they provide an overall view of satisfaction with clear directives for management to focus its resources.

The IPA method has proven to be a generally applicable tool which was relatively easy to administer and interpret resulting in extensive use among researchers and managers in various fields and was a way to promote the development of effective marketing programs because it facilitates the interpretation of data and increases usefulness in making strategic decisions.

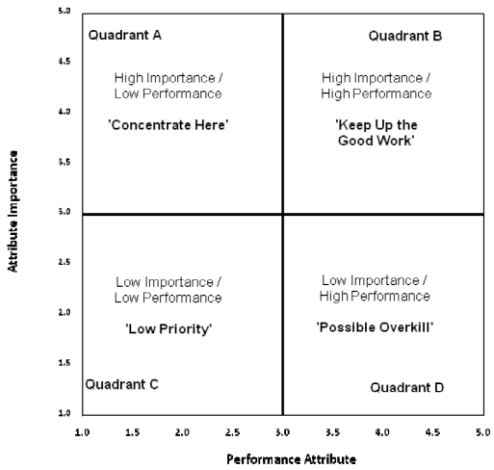

Figure 2. Importance-Performance Matrix
(Martilla & James, 1977)

The four quadrants in IPA were characterized as [10]:

- Quadrant A. Concentrate here - high importance, low performance: requires immediate attention for improvement and were major weaknesses;
- Quadrant B. Keep up with the good work - high importance, high performance: indicate opportunities for achieving or maintaining a competitive advantage and were major strengths;
- Quadrant C. Low priority - low importance, low performance: were minor weaknesses and did not require additional effort;
- Quadrant D. Possible overkill - low importance, high performance: indicate that business resources committed to these attributes would be over skill and should be deployed elsewhere.

Dirgantara and Sambodo [5] research indicate that consumer satisfaction was be observed from company performance analysis. The result of Importance Performance Analysis model analysis by calculating the accepted reality value with consumer expectation value to the product or service, then it will be known the level of consumer satisfaction. Based on the concept, it can be formulated the research hypothesis as what were indicators should be prioritized for improvement by Trans Mamminasata management in order to satisfy the community's expected service?.

III. METHODS

Research Design

An approach in this research was quantitative by using numbers as a representation of the information obtained in the study [1]. The research design was cross-sectional; the observation was only done once in accordance with the time determined by the researcher by looking at the relationship between the dependent and independent variables [19]. In this study, researchers were distributing questionnaires to respondents at the same time or period.

Data Collection Technique

Data collection techniques for hypothesis testing using questionnaires, data collection techniques conducted by giving a set of questions or written statement for the respondent to answer it (Yulianto, 2016). Questionnaires to test the hypothesis using a closed question (closed question), which was prepared by providing complete answers, so that respondents only give a mark on the answer chosen [19].

Population and Sample

The population in this study was all of the community as users of Trans Mamminasata transportation mode. The sample was people who have used Trans Mamminasata transport modes at least 2 (two) times on the same route.

Sampling Technique

The sampling technique was non probability sampling; it was not giving equal opportunity or opportunity for every member of the population to be chosen as sample [19]. Primary election of non-probability sampling because not all communities can be a sample, only the community of Trans Mamminasata users with specific criteria that can be respondents. The non probability sampling method was purposive sampling technique, sampling technique of data source with certain consideration by the researcher [19]. The selection of purposive sampling technique was based on the consideration of the people who have used Trans Mamminasata transportation modes at least 2 (two) times on the same route, so that the respondent can illustrate the perceived service and expected service based on the experience that they have received when using Trans Mamminasata transportation mode. The sample size of this study based on the theory of Sekaran [16] was ten times the number of variables. There were five dimensions perceived service, and five dimensions of expected service, so the sample size of 100 [(5 + 5) x 10].

Research Variable

The variables in this study consist of perceived service and expected service. Perceived service variables were measured using instruments developed by Parasuraman and Zeithaml [14] through five dimensions (reliability, responsiveness, tangibles, assurance, and empathy) with five items of Likert scale between (1) very unimportant to (5) very important. The expected service variables were measured using instruments developed by Parasuraman and Zeithaml [14] through five dimensions (reliability, responsiveness, tangibles, assurance, and empathy) with five Likert scale items between (1) not very good too (5) excellent.

Validity and Reliability Test

The instrument validity test using Confirmatory Factor Analysis (CFA), which was a process of identifying the relevant constructs on a particular phenomenon [3]. This research uses loading factor value equal to 0.40, so if the indicator was greater than it was valid [8]. The loading factor value of 0.4 was better and in accordance with the rule of thumb [7]. Meanwhile, the reliability test was done by using correlation cronbach's alpha, and it was a process of identification of reliability and consistency of research instrument. Cronbach's alpha correlation values were considered acceptable between 0.6 to 0.8 [4]. Testing the validity and reliability in this study using SPSS program.

Data Analysis Technique

Data analysis technique of this research was adjusted with the research hypothesis, which uses a different technique, such as:

1. Testing of H_1, H_2, H_3, H_4, and H_5 with Paired T-test.
   The Paired T-test was a parametric difference test on two paired data, comparing whether there was an average difference between two groups of data paired from the same data source [6]. The assumption was if the probability value of Sig (2-tailed) < 0.05 then the hypothesis was accepted
2. Testing H_6 with Wilcoxon Signed-Rank test.
   Wilcoxon Signed-Rank test was a nonparametric test for measuring the significance of the differences between 2 groups of ordinal or ordinal data pairs but was abnormally distributed [11]. Wilcoxon Signed-Rank test functionates to test the differences between paired data,

to test the comparison between two prior and after observations, and identify the effectiveness of treatment. The assumption was if the probability value (Asymp.Sig) < 0.05, then the hypothesis was accepted.

3. We are testing the questions related to the priority of servqual indicator with IPA. Importance Performance Analysis was used to measure the level of customer satisfaction on service performance. Customer satisfaction was measured by comparing the expected service with perceived service [20]. Importance Performance Analysis uses a Cartesian diagram (Importance-Performance Matrix) to map out indicators on service quality dimensions. There were two parameters used, such as the horizontal axis (X), and a vertical axis (Y). The X-axis represents a perceived service that can provide satisfaction, while the Y-axis represents the expected service.

IV. RESULTS AND DISCUSSION

Questionnaires Distribution

Data were collected from June to July 2018. The number of questionnaires distributed to the respondents was 250, while the questionnaire returned 250, its meaning respond to the rate of 100%. From 250 there were 45 questionnaires that some question items were not filled by respondents (25), and there were respondents who were first using BRT (20), so it was not included in the data processing. The sample size of this research was 100, so with the amount of data 205 (250 - 45) has been appropriate the statistical rules for next testing.

Respondents Characteristics

Based on the results of data processing indicates female respondents (165) more than male respondents (40). Meanwhile, respondents aged ≤ 20 years of 80 people, age> 20 - ≤ 30 years of 88 people; age> 30 - ≤ 40 years of 25 people; age> 40 - ≤ 50 years of 8 people; and age> 50 years of 4 people. It means that most of the Trans Mamminasata bus users aged ≤ 30 years of 82%. The education level of most respondents was SMA/SMK/MA (60%) and S1 (20%). Job title of respondents were college students (36%), private (20%), and students (17%). Respondents who had used BRT twice of 110 people (54%), three times of 27 people (13%), and more than three times of 68 people (33%). The reason respondents chose to use BRT was comfortable (34%), cheap (33%), efficient (20%), and safe (13%).

Validity Test Results

The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.827 it indicates that the instrument was valid because of it in accordance with the limit of 0.40 (0.827 > 0.40). Bartlett's Test of Sphericity with Approx. Chi-Square of 1059.172 and significant at 0,000, it can be concluded if the results of the validity test with confirmatory factor analysis indicate valid data, then data can be done for subsequent analysis.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,827
Bartlett's Test of Sphericity	Approx. Chi-Square	1059,172
	df	45
	Sig.	,000

(Source: primary data, 2018)

The rotation result indicates that the dimensions of expected reliability (0.764), expected responsiveness (0.811), expected tangible (0.723), expected assurance (0.755), and expected empathy (0.732) were grouped in factor 1. Whereas the dimensions perceived reliability (0.659), perceived responsiveness (0.685), perceived tangible (0.865), perceived assurance (0.808), and perceived empathy (0.656) were grouped in factor 2. So it can be concluded that the expected construct has unidimensionality, as well as the perceived constructor, in other words, the expected dimensions were all valid and all perceived dimensions were also valid.

Table 2. Rotated Component Matrix

	Component	
	1	2
Expected Reliability	,764	,289
Expected Responsiveness	,811	,365
Expected Tangible	,723	,257
Expected Assurance	,755	,287
Expected Empathy	,732	,265
Perceived Reliability	,192	,659
Perceived Responsiveness	,142	,685
Perceived Tangible	,319	,865
Perceived Assurance	,268	,808
Perceived Empathy	,116	,656

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 3 iterations.
(Source: primary data, 2018)

Reliability Test Results

Reliability test results of perceived service

The reliability statistics table indicates the value of Cronbach's Alpha in the five dimensions perceived service of 0.738. It means the instrument was reliable.

Table 3. Reliability Statistics of Perceived Service

Cronbach's Alpha	N of Items
,738	5

(Source: primary data, 2018)

The Item-Total Statistics table indicates the Corrected item-total Correlation value is perceived reliability (0.627), perceived responsiveness (0.635), perceived tangible (0.659), perceived assurance (0.692), and perceived

empathy (0.633) between 0.6 to 0.8 it means of the five dimensions perceived service was acceptable results.

Table 4. Item-Total Statistics of Perceived Service

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
Perceived Reliability	14,3556	3,692	,627
Perceived Responsiveness	14,3551	3,698	,635
Perceived Tangible	14,2210	3,734	,659
Perceived Assurance	14,2107	3,476	,692
Perceived Empathy	14,1298	3,608	,633

(Source: primary data, 2018)

Reliability test results of expected service

The reliability statistics table indicates the value of Cronbach's Alpha in the five dimensions expected service of 0,800 it means the instrument was reliable.

Table 5. Reliability Statistics of Expected Service

Cronbach's Alpha	N of Items
,800	5

(Source: primary data, 2018)

The Item-Total Statistics table indicates the Corrected item-total Correlation value is expected reliability (0,785), expected responsiveness (0,617), expected tangible (0,655), expected assurance (0,658), and expected empathy (0,651) between 0.6 to 0.8 it means of the five dimensions expected service was acceptable results

Table 6. Item-Total Statistics of Expected Service

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation
Expected Reliability	15,6400	4,306	,785
Expected Responsiveness	14,4483	3,527	,617
Expected Tangible	15,4512	3,981	,655
Expected Assurance	15,4507	3,807	,658
Expected Empathy	15,3610	3,804	,651

(Source: primary data, 2018)

Gap Analysis Results

The results indicate that all of the gap values on responsiveness dimensions (-1.20), tangible (-0.04), assurance (-0.03), and empathy (-0.04) were negative. Only gap values on the reliability dimension indicate positive (0.01). Although the results indicate the gap value by comparing the mean between the perceived service and the expected service on the five servqual dimensions resulting in a negative gap value, but Parasuraman, Zeithaml and Berry [13] state if the <-1 gap was good, and result > -1 means the quality of service provided was not good. Based on the result indicates there was no difference between perceived service value and expected service value on responsiveness, tangibles, assurance, and empathy dimension. Its means H_2, H_3, H_4, and H_5 were accepted. Meanwhile, the reliability dimension indicates there was a difference between perceived service value and expected service value. Its mean H_1 was rejected.

Table 7. Gap Analysis

Dimension	Average Perceived	Average Expected	Gap (E – P)
Reliability	3,45	3,46	0,01
Responsiveness	4,64	3,45	-1,20
Tangible	3,64	3,60	-0,04
Assurance	3,62	3,59	-0,03
Empathy	3,73	3,69	-0,04
Total	**24,48**	**24,29**	**-0,20**

(Source: primary data, 2018)

Based on the results of the Paired Samples, Correlations indicates the value of Sig. (2-tailed) dimensions responsiveness (0,000), tangible (0.237), assurance (0.455), and empathy (0.361) < 0.05 so H2, H3, H4 and H5 were accepted. On the reliability, dimension indicates the value of Sig. (2-tailed) 0,720 > 0,05 it means H1 was rejected. The result on all of servqual dimensions indicates if the Sig value. (2-tailed) 0.000 > 0,05 it means there was no difference between perceived service value and expected service value.

Table 8. Paired Samples Test

	Paired Differences					T	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Expected Reliability - Perceived Reliability	-,01463	,58308	,04072	-,09493	,06566	-,359	204	,720
Expected Responsiveness - Perceived Responsiveness	1,17659	,69848	,04878	1,08040	1,27277	24,118	204	,000
Expected Tangible - Perceived Tangible	,03951	,47728	,03333	-,02621	,10524	1,185	204	,237
Expected Assurance - Perceived Assurance	,02976	,56944	,03977	-,04866	,10817	,748	204	,455
Expected Empathy - Perceived Empathy	,03854	,60312	,04212	-,04452	,12159	,915	204	,361
Expected Service - Perceived Service	-85,53854	33,12374	2,31346	-90,09990	-80,97717	-36,974	204	,000

(Source: primary data, 2018)

Wilcoxon Signed-Rank Test Results

Based on the test indicates the Negative Ranks of 12, Positive Rank of 193, and Ties of 0. It means 12 respondents have experienced a decrease in Expected Service, 193 respondents were experienced an increase in Expected Service, and 0 respondents did not change.

Table 9. Ranks

		N	Mean Rank	Sum of Ranks
Perceived Service - Expected Service	Negative Ranks	12[a]	10,25	123,00
	Positive Ranks	193[b]	108,77	20992,00
	Ties	0[c]		
	Total	205		

a. Perceived Service < Expected Service
b. Perceived Service > Expected Service
c. Perceived Service = Expected Service

(Source: primary data, 2018)

The Wilcoxon Signed-Rank Test results indicate a Z value of -12.270 with a probability value (Asymp Sig 2 tailed) of 0,000 < 0,050 so that H_6 was accepted. It means there was a gap between expected service and perceived service.

Table 10. Test Statistics

	Perceived Service - Expected Service
Z	-12,270[b]
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test
b. Based on negative ranks.

(Source: primary data, 2018)

Importance of Performance Analysis Results

Based on the Importance-Performance Matrix image can be interpreted as:

1. Quadrant A
   Quadrant A means an indicator that was considered necessary by the customer, but not performed well by the company. The results of data processing indicate no indicator was it in quadrant A.
2. Quadrant B
   Quadrant B represent indicators that were considered essential and satisfy customers that have been well implemented by the company. Thus, the indicators need to be maintained by BRT Trans Mamminasata management (Table.11).
3. Quadrant C
   Quadrant C was an indicator that was considered less valuable by the customer and not implemented well by the company. Thus, the indicator can not be ignored, and it has a priority scale of improvement for BRT Trans Mamminasata management (Table.12).

Table 11. Quadrant B Indicators

Indicator	Quadrant	Average Perceived	Average Expected	Gap	Score
The gap distance between the bus door and the shelter door at the time of passengers drop or elevate were it not make difficult of the passengers	B	3,72	3,63	(0,08)	102%
The temperature inside the bus was according to the specified standard (not hot and not cold)	B	3,83	3,83	0,00	100%
The lighting inside the bus was according to the specified standard (no glare and no dark)	B	3,82	3,80	(0,02)	101%
The passengers in the shelter were according to maximum capacity	B	3,87	3,82	(0,05)	101%
The passengers in the bus were according to maximum capacity	B	3,88	3,74	(0,14)	104%
The passengers were easy to get to the shelter, either when they were using private vehicles or public transportation (pete-pete/ojek/taxi)	B	3,62	3,67	0,05	99%
The bus was free of dirt (including dust, garbage, and smell)	B	3,68	3,63	(0,04)	101%
The floor of the bus was clean	B	3,78	3,77	(0,01)	100%
The interior of the bus was clean	B	3,85	3,81	(0,03)	101%
The outside exterior of the bus was clean	B	3,74	3,79	0,05	99%
Security in the shelter was assured	B	3,32	3,41	0,09	97%
Security in the bus was assured	B	3,73	3,68	(0,05)	101%
Safety in the bus was assured	B	3,71	3,67	(0,04)	101%
Safety along the bus line was assured	B	3,73	3,61	(0,12)	103%
The driver was friendly and attentive to the passengers	B	3,80	3,71	(0,10)	103%
The ticket officer was friendly and attentive to	B	3,78	3,60	(0,18)	105%

(Source: primary data, 2018)

Table 12. Quadrant C Indicators

Indicator	Quadrant	Average Perceived	Average Expected	Gap	Score
The bus has an accuracy of departure time between buses from the designated time	C	3,27	3,30	0,03	99%
The time it takes the bus to drop passengers from bus to shelter, and elevate passengers from shelter to the bus was appropriate	C	3,54	3,51	(0,03)	101%
The bus trip from one shelter to the next shelter was on time	C	3,28	3,41	0,13	96%
A bus operating was on time	C	3,25	3,32	0,07	98%
Passengers were easy to get information about Trans Mamminasata	C	3,30	3,40	0,11	97%
Passengers do not require a long time to take Trans Mamminasata	C	3,37	3,40	0,03	99%
Passengers were easily submitting their complaints or advised	C	3,60	3,47	(0,13)	104%
The shelter was free of dirt (including dust, garbage, and smell)	C	3,22	3,32	0,10	97%
The floor and interior shelter was clean	C	3,34	3,26	(0,08)	102%
Window, wall, door and roof or ceiling of the shelter were clean	C	3,38	3,26	(0,12)	104%
The temperature inside the shelter according to the established standard (not hot and not cold)	C	3,47	3,34	(0,13)	104%
Lighting within the shelter in accordance with established standards (not glare and not dark)	C	3,47	3,33	(0,14)	104%
Buses were well worth the way	C	3,65	3,60	(0,04)	101%

(Source: primary data, 2018)

4. Quadrant D
   Quadrant D represents an indicator that was considered less valuable by the company but executed by excessive by the company. Thus, the excessive indicator was implemented by BRT Trans Mamminasata management, so it was better to allocate its resources for priority.

Table 13. Quadrant D Indicator

Indicator	Quadrant	Average Perceived	Average Expected	Gap	Score
Passengers were easy to report lost or to report finding items	D	3,66	3,51	(0,15)	104%

(Source: Primary data 2018)

Based on the IPA's results indicate that there were no indicators in quadrant A, 20 indicators were in quadrant B, 12 indicators were in quadrant C, and 1 was an indicator in quadrant C.

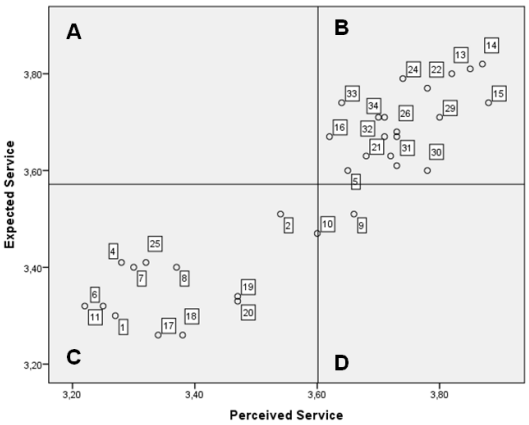

Figure 3. Result of Importance Performance Analysis (Source: primary data, 2018)

V. CONCLUSION

Based on the results of analysis and discussion, it can be concluded H_2, H_3, H_4, H_5, and H_6 were accepted, while H_1 was rejected. The results of Importance Performance Analysis indicate that there were no indicators in quadrant A. Meanwhile, 20 indicators were in quadrant B, 12 indicators were in quadrant C, and one indicator was in quadrant C.

This research uses cross-sectional design with primary data collection time in one period. It was suggested that the next research use the longitudinal design so its data collection in a long time, it was expected to get different research result. The study only tested the fifth gap (perceived service), then it was suggested to test the first gap (management perception), second gap (quality specification), third gap (service delivery), and fourth gap (marketing communication), it is more comprehensive. The data analysis technique only uses Paired T-test, Wilcoxon Signed-Rank test, and Importance Performance Analysis. Subsequent research was suggested using the technique Satisfaction Consumer Index so that the results more varied. Respondents who were the sample of this study only in Makassar City, it was suggested if next research takes samples from other regions (Maros, Gowa, and Takalar), so that the data distribution more variation.

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