Public Transport City Bus In Surakarta: A Servqual Inside-Out

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Abstract
Urban public transport has a very important role in serving city need for transportation and provides public convenience to carry out their activities. The purpose of this research is to know and to analyze service quality of city bus public transport in Surakarta. To determine the quality of transportation service, several dimensions were used such as reliability, accessibility, comfortable, tangible, and assurance. The method used was descriptive statistics. The data were collected through a survey of 150 city bus passengers from 5 bus companies. Quality measurement of the Importance and Performance Analysis (IPA) which compares the user's perception of the interests of the user views the passenger's perception on service performance. The results from using the Cartesian Diagram are 7 attributes in quadrant A which means performance is lower than the interest / expectations of consumers and 2 attributes in quadrant B which means that the performance of services relevant to the interests / expectations of consumers. Whereas in Quadrant C there is only 1 attribute, where the interests of the service and performance are equally low, and in quadrant D there are 4 attributes, which in this quadrant mentions that high performance yet is considered less important attribute for the user. With regard to the outcome of the Cartesian Diagram, where most of the attributes are in quadrant A (attributes to improve); it is recommended for these attributes should be a top priority and should be carried out to solve in order to meet the expectations of consumers / users of public transport buses.
Keyword: urban transport, quality of service, service dimension.

1. Introduction
1. 1. Background of Study
Maintaining and arranging public service has been governed in Chapter 16 of Law No. 32 of 2004 on Local Government, as well as in Law No. 25 of 2009 on Public Service. Those Laws state that governing public services is the responsibility of the Government. Some public needs (public goods), among others, which governed by Government are energy, electricity, drinking water, and public transportation service, for the basic needs of the people, but in reality not all those public services were provided by the government, due to the limited budget. Transport needs have been a very important issue in Indonesia and been the primary needs of modern society, especially when it concerns the public transport. Public transport services regarding matters of government role(s) in Indonesia have been arranged through Administrative Reform Minister Newsletter Number: SE/10/M.PAN/07/2005 dated 7th July 2005 on Public Service Improvement Priority Register. The arrangements are on: 1). Administration of the population; 2). Police; 3). Industries; 4). Trade and Cooperatives; 5). Customs and Taxes; 6). Health; 7). Immigration; 8**). Transportasion**; 9). Employment; 10). Land and housing; 11). Education; and 12). Investment.

The term 'transport' or often referred to as "freight", in Indonesia concerns about transportation arranged on Law of the Republic of Indonesia Number 22 of 2009 on Road Traffic and Transport. It was mentioned in Clause 1 (3) that: "Transport" is "migration of people and or goods from one place to another by using a vehicle in road traffic". More in Clause 7 (1) which stated that the "maintenance of traffic and road transport services in the nature of the society are governed by the government, local government, corporation, and or community". This means that provision of public transport is the responsibility of government / local government.

Comprehensive public transport availability significantly influences the mobility of a city. In regard to the maintenance of urban public transport, then the Minister of Transportation Regulation No. KM 49 of 2005 on the National Transportation System (SISTRANAS, 2005) asserted that: "........ the government must maintain an urban public transportation system with service performance reflects achievement of the normative aspects of road transport maintenance purposes."

Although in both legal documents have been declared the purpose of transportation services which are safe, effective and efficient comfortable, but the downside of public transportation in Indonesia in general is characterized by the vague and poor service performance / quality, the imbalance between demand and supply of

fleet services / facilities. Ineffectiveness is characterized by a lack of accessibility, capacity / availability, and uncomfortable. So far, public transportation has not served the needs of its citizens with safe, convenient, inexpensive and mass matters. Urban public transport has a very important role in serving the urban transport and provides convenience for people to carry out activities around all the different locations in all urban areas. The existence of urban public transport is necessary especially for people who do not have personal transportation or cannot drive their own vehicle which is as confirmed by Nugroho and Okto (2007: 2).

Though public transport is still needed, but the condition of public transport (especially city bus) in general is not feasible. The bus ages, in average, are approximately ten years and are rarely held rejuvenation, so that the conditions of many city buses are damaged. In addition to the condition of the bus, its services are also not good; operationally according not to schedule; the waiting time were quite long; and difficult to access. Those were because there is no feeder transport. In the end, passengers increasingly start abandoning public transport and switching to private vehicles. The results of the study in 2004 on the bus showed that the number of unused seats reached 27.27%.

The explanation above illustrates the downside of city transportation in general. Several matters are arisen such as not in-depth and comprehensive planning of public transport operating systems, government-owned limited funds, limited fleet size, less accessibility, affordability, overlapping routes, headway too long and low service quality. It has not been able to perform the effective and efficient transportation services as being targetted in Sistranas. It does not ensure the comfort and safety for passengers, so that eventually people will prefer to use their own vehicle rather than using public transport.

How about the existing public transportation services quality in Surakarta? The conditions of public bus transportation services in Surakarta is not far from the phenomenon of public transportation in other major cities. Public transport quality (especially city buses) in Surakarta is on the wane, so the farther left by users. In Solo, there also exists City Bus Transport. There used to be 13 bus companies with a fleet of 242 buses, but there are only 5 companies which are still operating, namely: PO. Surya Kencana (30 fleets); PO. ATMO (24 fleets); PO. Nusa (30 fleets); PO. DAMRI (30 fleets) and PO. Wahyu Putra (11 fleets). Since 2010, there are also exist Batik Solo Trans (BST) with 15 buses. In addition to that facts, the lesser preferences of using public transportation (especially city bus) are because of: the condition of the chaotic trajectory; the limited capacity of the road; and the more uncontrolled number of private vehicles, especially motorcycles. In the other side of the contrary, the Solo city bus can only give services with seat occupation of under 100% (60-70%), up to 15-20 minutes behind the operational scheduled time, and less feasibility. This shows that, in general, the city bus service quality is quite low and consequently being abandoned.

1. 2. State of the Art
The explanation illustrated above shows the blurred portrait of public city transportation in Solo of Surakarta City. Some detected problems arose are not in-depth and comprehensive planning of public transport operating systems; government-owned limited funds; limited fleet size; less accessibility and affordability; overlapping routes; operating behind operational scheduled time; and low service quality. In which, it has come to the ineffective and inefficient service of public city transport as being mandatory in Sistranas. To that end, it does not ensure the comfort and safety for city public transport users. Eventually, people will change their preferences to their own vehicle rather than using public transport. Such conditions have brought city public transportation as not an option for public choice.

2. Problem of the Study
To reveal the arisen problems such as inefficiency and effectiveness of public services particularly in urban bus transport services, and the responsibility of the government to improve the quality of public transport buses, this study have formulated several questions as follow:
1. How is the service quality of public transport buses in the city of Surakarta?
2. What action plan(s) should be done to improve the quality of urban bus public transport service?

3. Review of Related Literatures
3.1. Public Transport
Transportation is the notion of "the movement of people, goods and information from one place to another with safe, convenient, fast, cheap and in accordance with the environment to meet human needs" (Budiarto and Mahmudah, 2007: 1). Meanwhile, according to Miro (2005: 4) transport is: "moving activity, moving, transporting or transferring an object both people and goods from one place to another". Almost the same sense conveyed by Salim (2008: 6-7) which stated that "transport is the activity of moving goods (cargo) and

passengers from one place to another". It can be seen two essential elements in transporting: (1) displacement / movement and (2) physically, changing places and passengers to another". The issuance of Law No. 22 of 2009 on Traffic and Road Transportation is the legal product for public transportation. One of the considerations is that the Traffic and Road Transportation as part of the national transportation systems must be developed to realize the potential and role of security, safety, order and smoothness of traffic and road transport in order to support economic development and regional development.

3.2. Concepts of Public Service

Public service, is basically a form of service to the public good, for it before discussing about the concept of public service, it will be explained in advance of public goods. In general, public goods commonly understood as something that can be enjoyed or needed by everyone. A public goods are goods that can not be limited as much as possible and users who even do not need to pay someone to get it. Savas (2000: 41-55) also used the same dimensions, i.e. exclusion (can be excluded and can not be excluded) and consumption (personal consumption and collective consumption). In this case, the consumption can be divided into 4 (four) combination, namely: (1) Individual goods (private goods) are goods and services consumed by individuals followed by exclusion that can really be done; (2) Toll goods, the goods and services consumed together and followed by exclusion that can be done; (3) Common - pool goods, the goods and services that can be consumed individually but exclusion can not be done, and (4) Collective goods (often called public goods) are goods and services that can be consumed along with the exclusion that can not be done. The typology of public goods suggested by Savas (2000) are drawn in Table 1.

Table 1. Four kinds of goods according to its characteristics

	Easy to exclude	*Difficult to exclude*
Individual consumption	*Individual goods* (e.g., food, clothing, shelter)	*Common-pool goods* (e.g., fish in the sea)
Joint consumption	*Toll goods* (e.g., cable TV, telephone, electric power)	*Collective goods* (e.g., national defense, felons)

Source: Savas (2000: 26)

Based on the nature of public goods and services mentioned above, Laing (2003) (in Dwiyanto, 2006: 179-181) mentioned some of the defining characteristics of public service, namely: (1) The provision of public goods and services is based more on political considerations destination , rather than economic goals, which is to realize social justice for the people; (2) The assumption that more service users views his position as a citizen rather than as a customer; (3) Character of service users and multi-dimensional complex is reflected in the level of service beneficiaries who are individuals, families, and communities.

In the Law of the Republic of Indonesia No. 25 of 2009 on Public Service, Clause 1, sub clause (1), it was steted that: "public service is a series of activities in order to meet service requirements in accordance with the laws for all citizens and residents on goods, services, and / or administrative services provided by public service providers". Furthermore, in a Clause 5 (2), the scope referred to sub clause (1) included education, teaching, jobs and businesses, housing, communications and information, environment, health, social security, energy, banking, transportation, natural resources, tourism, and other strategic sectors. Having regarding to the scope of public service under the Law of 25/2009, then the scope of public service that should be administered by both central and local governments is the field of transportation: which includes the field of transportation. If we associate with the type of public goods by Savas, public transport (in this case is urban bus public transport) can be classified as "toll goods", for its services and exclusion can be done for those who utilize the services.

3.3. Measuring Quality of Service

Attention to the service quality is very important because people will always demand for satisfaction for every penny they spent on the service(s). Service Quality (ServQual) becomes the right of people to be met by the bureaucracy. As confirmed by Sinambela (2006: 43) that "quality of service bureaucracy that serves customers according to their needs and tastes". This means that all things pertaining to the service is measurable accuracy, since the quality is given. Some opinion on ServQual, among others: Juran (1962), Crosby (1979). Deming (1982) and Feagenbun (1991). While the notion of quality according to Ducker (1991) in Aykac, et.al. (2009), defined that: service quality as "what customers get with the willingness to pay" of "what is provided by the

suppliers" (of the service). Therefore, the quality of service is often "conceptualized as a comparison between service expectations with actual performance perceptions". While According to Edvardsson (1998) in Pandelis, et. Al. (2009) defined that the Service Quality as the efforts exerted by the organization to meet the expectations and requirements that anticipate customer expectations. Thus, Service Quality approached as a 'customer-oriented.

ServQual method was developed by Berry, Zeithaml, and Parasuraman (1997). The model was built on the existence of a comparison of two main factors, namely: perceived service and expected service. Where expectations, customer satisfaction, and quality of service have a relationship that can be measured from the service quality. Customer satisfaction is calculated by comparing the expected service, in reality seeing that in many service delivery gaps often occur include:

a. The gaps that emerged from within the company / organization (company gaps) are distinguished into 4 (four) types of gaps, namely:
   - Gaps 1 : do not know consumer expectations about services
   - Gaps 2 : does not have a standard design and appropriate services
   - Gaps 3 : do not provide services based on standards of care
   - Gaps 4 : do not provide services as promised

b. The gaps that emerged from outside the company, that is the difference between consumer perceptions with consumers' expectations of service.

Gap(s) occur because of the services provided do not conform with the standards and expectations of customers. To analyze the gap between public expectations and perceptions of the services provided or the perception that service providers can affect the quality of services, the Parasuraman, Zeithaml, and Berry (1997: 219), known as the Gap Analysis Model, can be seen in Figure 1. Related to Gap Analysis Model as shown in Figure 1, this study is more focused on Gap 5 a.k.a. the differences between the expected services and the consumer perception with the performance given by the service provider. The gap will occur if service is not providing appropriate services quality dimensions as specified. There are several dimensions to measure service quality, for example, according to Zeithaml and Bitner (1996) which stated that service quality can be seen by 5(five) dimensions, where the company/organization can choose a combination of all five. Those five dimensions are: Reliability, Resposiveness, Assurance, Empathy and Tangibles.
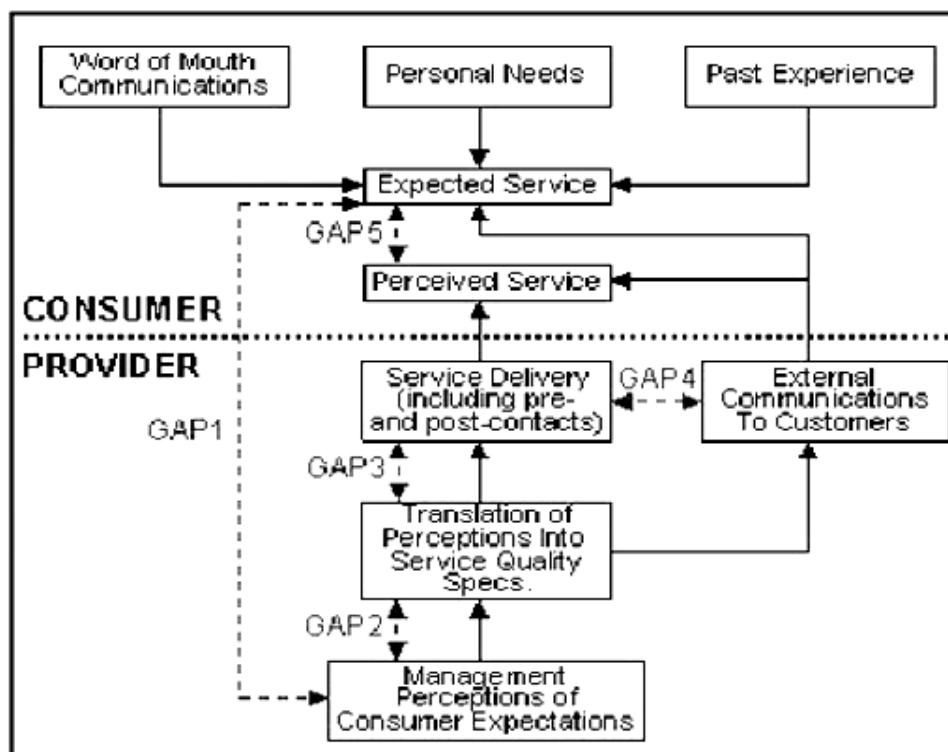
Souce : Parasuraman, Zeithaml, and Barry (1997: 219)
Figure 1. Gap Model of Service Quality (ServQual)

Research conducted by Parasuraman, et. al. (1997: 133-135) introduced a conceptual model of Service Quality and identified several dimensions, called as: RATER (Reliability, Assurance, Tangibles, Empathy and Responsiveness), which can be detailed as follow:

a. Reliability, namely the ability to serve in accordance with the wishes of customers, including skills, accuracy, expertise in serving customers.
b. Assurance (also known as collateral), is their ability to give confidence, assurance of safety, assurance of confidentiality.
c. Tangibels (direct evidence), is that the completeness of services that can be viewed/perceived directly by the customer, or an existing physical evidence.
d. Empathy, is reflected in the attention to customer desires and ease to be contacted.
e. Responsiveness, the ability or responsiveness in providing services, receive customer complaints, provide information as soon as possible, giving priority to the interests of customers.

While in the service of transportation, service quality criteria described in more detail about these aspects as well, namely: the aspects that should be held in public transport services is reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding , and physical evidence (TRB, 1999). In line with the above opinion, Prayitno (2007: 37) states that the quality of transportation service is determined by: a). total trip time; b). Journey reliable/trustworthy (reliability trip); c). A nice ride (comfort trip). These indicators are used to measure customer satisfaction more emphasis on the efficiency of the public/customers and not of the organization.

4. Research Method

This study used descriptive quantitative research method. It was chosen in order to describe quantitatively how the Service Quality (ServQual) provided by the city bus service provider(s), through a survey of the users' perceptions of transport services by comparing the expectations with service performance obtained. The data were collected through questionnaire from 150 respondents selected from 30 respondents (passengers) of each five bus companies. The collected data then analyze by using validity, reliability and quantitative data analyses. Quantitative data analysis method used Cartesian diagram, which is a building consisting of 4 (four) sections bounded by two perpendicular lines that intersect at points X and Y. Point X is the average of the scores level of performance while point Y is the average of interest rate. To obtain the average X and Y, a Likert scale was used with a weight value of the value of 1 to 5.

Assessment or calculation of any attributes of service quality dimensions and the total value assessed by using:

1. Assessment of importance:

    VI (x5), I (x4), QI (x3), LI (x2), VNI (x1)

    Whereas:
    VI   : Very Important (VI);
    I   : Important (I);
    QI   : Quite Important (QI);
    LI   : Less important (LI)
   VNI   : Very Not Important (VNI)

2. Performance assessment:

    VS (x5), S (x4), CS (x3), LS (x2), HuS (x1)

    Whereas:
    VS   : Very Satisfactory
    S   : Satisfy
    CS   : Quite Satisfactory
    LS   : Less Satisfactory
    HuS   : Highly unsatisfactory

The four quadrants of the Cartesian Diagram are:

a. Quadrant A (attributes to improve) / Performance of a variable is lower than the expectations of consumers. This is a top priority, because it includes the factors that are considered important by the customer but in reality these factors are not appropriate as expected by the customer (satisfaction level is low)
b. Quadrant B (maintain performace) / Performance and desires of consumers at a high level and appropriate. Attributes that are considered important by customers and which is considered by the customer is in compliance with felt that a relatively higher level of satisfaction.
c. Quadrant C (attributes to maintain) / performance and the desire of consumers are at a low level. Low priority factors that are considered less important by the customer and in fact performance is not too special.
d. Quadrant D (played to priority) / performance in a high-level but desire / low consumer expectations. Excessive / Superflus, factors that are considered less important by the customer and felt too much. Variables can be reduced in order to save costs.
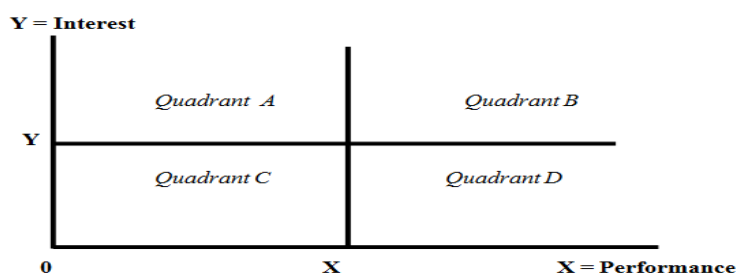
Source: Husein Umar (2002: 452)

Figure 2. Quadrants of Cartesian Diagram

5. Findings and Discussion

5.1. Findings

Public transport services in Surakarta consists of City Transportation, City Bus, taxis, and Individual Shuttles (e.g. motorcycles and tricycles/rickshaws). Public transport in Surakarta until now is still dominated by City Bus. The management of public transport in Surakarta is not only managed by government alone but also by the private sector with limited services. But in contrary, though the management is managed both by government and private sector, the usage of 13 units of Bus Corporation (*Perusahaan Otobus*, P.O.) with 242 fleets in 23 routes is remain declining. It now remains only 5 P.O. (starting from 2010 there were 7 additional P.O.) which still operate and has permission trajectory with 125 (plus 15 BST) fleets with only 9 routes. It is worsen with the conditions that they have no feeder routes, as well as emerged route overlapping. The detail of City Bus availability in Surakarta can be seen in Table 2.

Table 2. Data of Bus Company (PO) and Total Fleet in Surakarta City

No.	Company Name	Fleet and Route	Total Operating Fleet	Total Route
1.	P.O. Surya Kencana	50	30	2
2.	P.O. ATMO	29	24	1
3.	P.O. SCT	0	0	-
4.	P.O. Sri Wedari	9	0	-
5.	P.O. Sumber Rahayu	21	0	-
6.	P.O. Budi Utomo	3	0	-
7.	P.O. NUSA	54	30	2
8.	P.O. Surya Jaya Setia	6	0	-
9.	P.O. DAMRI Bus Kota	32	30	2
10.	P.O. Sumber Makmur	0	0	-
11.	P.O. SKA JAYA	8	0	-
12.	P.O. Wahyu Putra Solo	13	11	1
13.	P.O. Berseri	2	0	-
14.	P.O. BST	15	15	1
	T O T A L	**242**	**140**	**9**

Source: Dishubkominfo of Surakarta

Note: the data of this study were randomly collected from 5 P.O. which are older founded corporations, excluding PO. BST because they have different management and different specifications. The five P.O. are: P.O. ATMO; P.O. NUSA; P.O. DAMRI, P.O. Surya Kencana and P.O. Wahyu Putra

5.2. Data Analysis and Discussion

A. Validity Data

A questionnaire is said to be valid if it is able to measure what is desired and can reveal the data of the studied attribute appropriately. Therefore, the level of validity of the questionnaire indicate the extent to which the data collected does not deviate from the description of the question attribute. The validity of that used in the study carried out by comparing the corrected item total correlation of r with r table. When the count value of r is greater than r table and the value of r is positive, then the item is said to be valid or questions, and vice versa if the calculated value of r is less than r table or query then the item is said to be invalid. From the calculation using

a tool such as SPSS obtained the results of this study as presented in Table 3.

Table 3. Validity of Results Test

Variable and attributes	Interest	Reality	Information
Reliability			
Conformity Schedule	0.605	0.461	Valid
Bus Speed	0.659	0.482	Valid
Waiting Time	0.356	0.746	Valid
Accessibility			
Ease of Bus Access	0.518	0.739	Valid
Affordability Rates	0.626	0.486	Valid
Access for Disabled	0.643	0.680	Valid
Comfort			
Seating Capacity	0.555	0.578	Valid
There is Not Heat	0.629	0.437	Valid
There is No Street Singers	0.539	0.669	Valid
Assurance			
How the Driver Drives	0.767	0.525	Valid
There is No Pickpocket	0.587	0.766	Valid
Tangible			
Availability of Fleet	0.481	0.726	Valid
Completeness Fleet	0.729	0.503	Valid
Number of Bus Stations	0.382	0.514	Valid

Description: The value of r table is 0.159, it means that the value of r table is less than the value of r count

It can be seen in Table 3 that each of the questions on each dimension of service quality attributes has a correlation coefficient greater than r table value which is 0.159. Thus each dimension of service quality attributes is declared invalid.

B.   Test Reliability

Data reliability test is intended to measure the consistency of the construct or attribute of the study. From this test, the results indicate that the magnitude of the alpha level of each attribute is greater than the alpha table, then all the attributes / the questions used in the study is reliable. The results of the counting of each attribute can be presented in Table 4.

Table 4. Reliability Test

NO	Dimension	Alpha		Explanation
		Interest Level	Performance Level	
1.	Reliability	0.693	0.691	Reliable
2.	Accessibility	0.688	0.722	Reliable
3.	Comfortable	0.692	0.679	Reliable
4.	Assurance	0.723	0.690	Reliable
5.	Tangible	0.690	0.704	Reliable

From the calculation of the reliability of the questions for each attribute, when compared with alpha reliability criterion, it indicates that all attributes are studied in a high alpha level of 0.60 that is above all attributes for that it declared as reliable research.

C.   Analysis of Each Attribute of Quality Dimensions

The following table is presented the assessment of significance and assessment of customers' perception of service performance of each from five dimensions of service. The question dimensions are:

a.   Reliability dimension.; there are 3 attributes: suitability schedule; running speed bus and no waiting time.

b.   Accessibility dimension; there are 3 attributes: bus access; Check affordability and access for the disabled.

c. Comfortable dimension; there are 3 attributes: seating capacity, not to jostle; There are air conditioning and comfortable no singers.

d. Assurance dimension (safety assurance); there are two attributes: the driver how to drive safely; and no pickpocket.

e. Tangible dimension; there are three attributes: the adequacy of the fleet; completeness of the fleet and the number of bus stations.

Table 5. Average Value of Interests Dimension / Passenger's Expectation (Y)

No.	Dimension	Interest / Expectation					Total	Y
		5	4	3	2	1		
A.	*Reliability*							
1.	Conformity Schedule	67	49	28	6	0	627	4.18
2.	Speed	108	28	10	4	0	690	4.60
3.	No waiting time	82	37	26	5	0	646	4.30
B.	*Accessibility*							
4.	Reachable	99	31	14	6	0	673	4.48
5.	affordable prices	69	45	29	7	0	579	3.86
6.	Access for Disabled	100	31	14	5	0	676	4.51
C.	*Comfort*							
7.	Seating capacity	84	37	24	5	0	650	4.33
8.	There is air conditioning	95	35	15	5	0	670	4.47
9.	There is no singers	85	41	22	2	0	659	4.39
D.	*Safe*							
10.	Safety driving	67	49	28	6	0	627	4.18
11.	There is no pickpocket	98	35	15	2	0	679	4.53
E.	*Tangible*							
12.	Total fleet	107	28	10	5	0	687	4.58
13.	Fleet completeness	90	39	16	5	0	664	4.43
14.	Number of bus stations	95	35	15	5	0	670	4.47
Total								**61.31**

The average values of Y can be calculated with formula, below:

$$\text{Average Value of Y} = \frac{61.31}{14} = 4.38$$

Table 6. Average Value of Satisfaction Performance Services Dimension (X)

No.	Dimension	Interest/ Expectation					Total	X
		5	4	3	2	1		
A.	Reliability							
1.	Conformity Schedule	14	20	75	21	20	437	2.91
2.	speed	10	15	19	98	8	371	2.47
3.	No waiting time	30	22	10	88	0	444	2.96
B.	Accessibility							
4.	reachable	7	15	20	100	8	363	2.42
5.	affordable prices	46	80	15	9	0	613	4.09
6.	Access for Disabled	0	7	39	94	10	343	2.29
C.	Comfortable							
7.	Seating capacity	26	28	86	10	0	510	3.40
8.	There is air conditioning	10	18	23	92	7	382	2.55
9.	There is no singers	36	24	75	5	10	521	3.47
D.	Assurance							
10.	Safety driving	0	10	39	91	10	349	2.33
11.	There is no pickpocket	30	22	10	88	0	444	2.96
E.	Tangible							
12.	Total fleet	10	17	23	92	8	379	2.53
13.	Fleet completeness	10	15	19	98	8	371	2.47
14.	Number of bus stations	0	13	40	87	10	356	2.37
Total								**39.22**

The average values of X can be calculated with formula, below:

$$\text{Average Value of X} = \frac{39.22}{14} = 2{,}80$$

D. Cartesian Diagram

To view the data placement position that has been analyzed, Figure 3 has drawn the analyzed data. Cartesian diagram is used to compare the service quality performed by service provider to quality expected by the customers (service users)
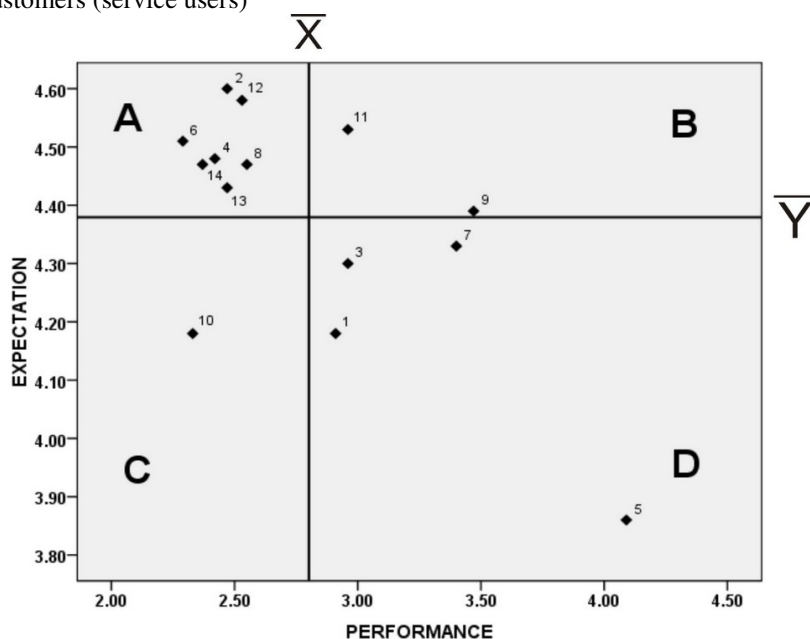

Figure 3. Cartesian Diagram for Attributes of City Bus Service Quality Dimensions

6. Conclusions And Recommendations

6.1. Conclusions

Based on the description and analysis in previous parts, the results of this study can be summarized as follows:

1. Attributes in quadrant A: Performance of a variable is lower than the expectations of consumers. in other words, the level of user expectations are still lower compared to the performance of services. There are 7 attributes of service quality dimensions of a city bus which are:
   - Accessibility: bus speed (2); easy access to the bus (4) reliability; access for the disabled group (6);
   - Comfortable: coolness (8)
   - Tangible: availability of the fleet (12); completeness of the fleet (13), and the availability of the number of bus stations (14).

   These attributes should be the main priority in the improvement of performance.

2. Attributes in Quadrant B: Performance and desires of consumers at a high level and appropriate, means between the interests / expectations of users and the performance of the city bus service is appropriate. Attributes that are in quadrant B are:
   - Comfortable: a sense of comfort because no singers (9), so that passengers do not feel disturbed; and
   - Safety Assurance: attribute a sense of security because there is no pickpockets (11).

3. Attributes in Quadrant C: both the performance and the desire of consumers are at a low level. Attributes in this quadrant is a guarantee of safety driving (10) from Assurance Dimension.

4. Attributes in Quadrant D: very good service performance or high, but actually it is not an expected attribute (not so important for service of users). Attributes that are in quadrant D are:
   - Reliability: spesific schedule (1); attributes of the waiting time (3);
   - Accessibility: affordability price attributes (5); and
   - Comfortable: attributes of seating capacity (7).

6.2. Suggestion

Based on the conclusion, it can be argued some suggestions that would be useful for City Bus of Surakarta, namely:

1. Attribute of service quality in quadrant A is called (attributes to improve) is an attribute of service quality that becomes top priority to improve service. Attributes in quadrant A is a very important attribute that must be implemented by the user and improved in order to gain the expectations of consumers.

2. Attribute of service quality in quadrant B (maintain performance): This attribute needs to maintain the achievement, because these factors are considered important and in accordance with the wishes of customers s o that the relatively higher level of satisfaction, and make superior quality in the consumers.

3. Attribute of service quality in quadrant C (attributes to maintain), an attribute that has a low priority, meaning no need to prioritize these attributes, the increase should be reconsidered, because the benefits received are also relatively small.

4. attribute of service quality in quadrant D (main to priority attribute) is an attribute that is surplus, meaning that its performance is very good but it is not an attribute that is overlooked (not too important) to the users, the increase should be reduced, so as to save costs.

References

Amaral, Miguel and Billon, Anne Yvrande. 2009. *Make or Buy Urban Public Transport Services: A Rational Choice? www.webssa.net /file/amaral_Yvrande_make or buy.*

Anggoman, Johan Paul Engelbertus. 2007. **Studi Tingkat Pelayanan Angkutan Umum DAMRI di Kota Manado.** Thesis. Program Pasca Sarjana Magister Teknik Pembangunan Wilayah dan Kota Universitas Diponegoro Semarang.

Aykac, Aydyn and Ates, Cetin. 2009. *Effects of Service Quality on Costomer Satisfaction and Customer Loyalty: Marmara University Hospital.* International Congress on Performance and Quality in Health (Uluslararasi Saglikta Performans ve Kalite Kongresi). **March 19-21**: Antalya. Turkey (http://ssrn.com.abstract/1362601).

Budiarto, Arif and Mahmudah, Amiratol M. H. 2007. *Rekayasa Lalu Lintas*. LPP-UNS dan UNS Press. Surakarta.

Dwiyanto, Agus. 2010. **Manajemen Pelayanan Publik: Peduli, Inklusif, dan Kolaboratif.** Gajah Mada University Press. Yogyakarta.

_____. 2006. **Reformasi Birokrasi Publik Di Indonesia**. 2nd Print, Gajah Mada University Press, Yogyakarta.

Gaspersz, Vincent. 2001. **Total Quality Management**, Translated by Al Ghozali Usman. LP3ES. Jakarta.

Ghozali, Iman. 2001. **Aplikasi Analisis Muktivariate dengan Program SPSS**. BP Undip. Semarang.

Gunawan , Didik and Kristina Setyowati. 2007. *Peningkatan Kualitas Pelayanan di Kantor Pertanahan Kabupaten Sragen,* LPPM-UNS. Surakarta.

Miro, Fidel. 2005. **Perencanaan Transportasi**. Erlangga. Jakarta.

Murdyastuti , Anastasia. 2010. **Pelayanan Transportasi Publik Dalam Perspektif New Public Mangement (NPM)**. Studi Pelayanan administrasi Transportasi Darat di Kabupaten Jember. Disertasi-PDIA. Brawijaya University. Malang.

Nugroho, Harimurti and Risdianto, Okto. 2007. *Model Rute Angkutan Umum Penumpang Dengan Aplikasi Sistem Informasi Geografis (SIG) (studi kasus Kota Semarang).* **Jurnal Tata Loka** , 9(4).

Parasuraman, Zeithaml and Berry. 1997. *A Conceptual Model of Services Quality and Its Implications for Future Reseach.* Journal of Marketing, **Vol.49**: 219.

Peraturan Menteri Perhubungan Nomor KM 49 Tahun 2005 Tentang **Sistem Transportasi Nasional (SISTRANAS).**

Prayitno, Soeheroe Tjokro. 2007. *Globalisasi Sektor Transportasi Ditinjau Dalam Perspektif Mikro dan Makro.* USAHAWAN. **No. 02 Th. XXXVI.**

Salim, Abas, H. A. 2008. **Manajemen Transportasi**. Raja Grafindo Perkasa. Jakarta.

Savas, E. S. 2000. **Privatization and Public Private Partnership**. Chatham House Publisher. Seven Bridges Press LLC. New York.

Simamora, Bilson. 2002. **Panduan Riset Perilaku Konsumen.** Gramedia Pustaka Utama., Jakarta.

Sinambela, Lijan, Poltak. 2008. **Reformasi Pelayanan Publik : Teori, Kebijakan dan Implementas.** Bumi Aksara. Jakarta.

Surat Edaran Menteri Pendayagunaan Aparatur Negara Nomor: SE/10/.M.PAN/07/2005 tertanggal 7 Juli 2005 Tentang *Daftar Prioritas Peningkatan Pelayanan Publik.*

Umar, Husein. 2000. **Riset Pemasaran dan Perilaku Konsumen**. PT. Gramedia Pustaka Utama bekerja sama dengan Jakarta Business Research Center (JBRC). Jakarta.

Undang - Undang Republlik Indonesia Nomor 22 Tahun 2009 Tentang **Lalu Lintas dan Angkutan Jalan.**

Undang - Undang Republlik Indonesia Nomor 25 tahun 2009 Tentang **Pelayanan Publik.**

Zisis , Garefalakis, and Sariannidis. 2009. *The Application of Performance Measurement in the Service Quality Concept: The Case of a Greek Service Organization.* Can be downloaded at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1359926

---------------. 2009. **A Handbook for Measuring Customer Satisfaction and Service Quality**. Transportation Research Board (TRB). TQSM. Washington D.C.

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