

Public Transport Service Quality and Community Satisfaction Level in Bali, Indonesia

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Abstract

This study aims to analyze the effect of transport performance and bus crew performance on the quality of Trans Sarbagita transportation services in Bali Province. This study combines a descriptive analysis techniques and structural equations with alternative PLS SEM. The findings showed that the performance of transport and performance of the bus crew had a positive and significant effect on the quality of Trans Sarbagita transportation services in the Province of Bali. Transportation performance, bus crew performance and service quality have a significantly effects on the satisfaction level of Trans Sarbagita users in Bali Province. Transport performance and bus crew performance indirectly influence the level of satisfaction through the quality of Trans Sarbagita services in Bali Province. Based on the results of the study, a more comprehensive study is needed in the development of Trans Sarbagita public transportation to realize service quality and maximum level of satisfaction.

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INTRODUCTION

The success of the transportation system in an area is inseparable from how the Government provide facilities for its people and ease of access. Public transportation as one of the elements of the transportation system plays a very important role to support the development of a region, therefore, the importance of public transport services is an obligation that cannot be contested.

The lack of quality public transport services has led to various perceptions in the community of the Government's performance in the transportation sector. According to the Directorate General of Land Transportation (1997), said that the objective conditions of public transport that exist in big cities in developing countries in plain view can be observed so far and it can be concluded that the existing mass public transportation is quite alarming. This also happened in Bali Province where the number of public transport vehicles from year to year has decreased in number. The lack of public transport services can also have an impact on congestion problems as a result of increased use of private vehicles, increased gas emissions of vehicle emissions as a result of increasing vehicle fuel consumption, as well as other problems that follow. The variety of responses in the community has caused the Government to be required to seriously deal with this problem, if it is not

immediately resolved, the future problems will become increasingly large and difficult to find a solution.

Public transportation plays an important role, Warpani (2002) argues that another aspect that is not less important is the role of public transport as a controller of traffic volume, energy saving, and regional development. To answer the challenges in providing transportation services, the Provincial Government of Bali has a strategy, namely the Trans Sarbagita Public Transport Service Program, where up to now two main corridors have been operated. This program is a flagship program in two Governing periods of Mr. Governor Made Mangku Pastika which is contained in the Regional Medium Term Development Plan (RPJMD) 2008-2013 and 2014-2018. This program aims to improve the performance of public transport services in urban areas, namely Denpasar, Badung, Gianyar and Tabanan in synergy.

Amid the challenges of continuing to improve the quality of Trans Sarbagita's public transportation services, various problems occurred both from the perspective of Transport Performance, Crew Performance, Service Quality that influenced the perception of User Satisfaction of Trans Sarbagita public transport services. Warpani (2002) argues, in areas where the level of vehicle ownership is high even though there are still people who need and use public transportation services. This also happens in the Trans Sarbagita transportation mode where amid the lack of public transportation services, Trans Sarbagita is still expected to be a pioneer in providing mass transportation services.

Zeithaml & Bitner (1996) suggested that satisfaction is a concept that is far broader than just an assessment of service quality, but it influenced by other factors. Azikin M.Z. (1998) argued that a good measure of service is if the transportation service meets the criteria of safe, comfortable, fast and cheap. As in this study, the use of several research variables to find out from various user perspectives.

Tjiptono (2001), argues that service quality is the expected level of excellence and control of the level of excellence to meet customer desires. Nugroho (2009) remarked that the overall dimensions of the quality of services studied (tangibles, reliability, responsiveness, assurance and empathy) individually and jointly have a positive and significant effect on passenger satisfaction levels, which means that the dimensions of service quality and indicators have a significant effect on satisfaction of *Sedyo Mulya* night bus passengers. Manullang, Ida (2008), argues that service quality seen from 5 dimensions of Tangibles, Reliability, Responsiveness, Assurance and Empathy simultaneously or partially has a significant effect on customer satisfaction in flight services PT. Garuda Indonesia Airlines at Polonia Airport in Medan.

Kotler and Keller (2009) mention five determinations of service quality including (1) Reliability, namely the ability to carry out promised services reliably and accurately; (2) responsiveness, namely willingness to help customers in providing timely services; (3) Guarantees, namely the knowledge and politeness of employees and their ability to show trust and confidence; (4) Empathy, namely the condition of paying attention and giving personal attention to customers; (5) Forms, namely the appearance of physical facilities, equipment, personnel and communication materials. All of that contributes to efforts to improve service quality.

Some results of the study revealed that transport performance and crew performance had a significant effect on improving service quality. Dwiyanto (2006) stated that service quality is the result of interaction of various aspects, namely service systems, service providers, service strategies and customers (customers). Hasibuan (2003), revealed that in management science there are six management elements known as 6M which consist of Man, Money, Matherial, Method, Market and

Machine. Therefore, every company or organization that wants to improve the quality of service must be reorganized or renewed by increasing the quality of its employees' performance. According to Didit (2005), employee performance has a significant effect on customer satisfaction.

According to Rusadi, Ayu and Sujito (2013) service quality is the beginning of the creation of customer satisfaction. Service quality and customer satisfaction are the success factors of a company to achieve competitive advantage (Sawitri et al., 2013). So the importance of improving service quality is to realize a maximum and high level of user satisfaction.

According to Nirjaya, A.A.Gede Oka. (2015), the dimensions of the vehicle, the attitude of the vehicle crew and freight rates indirectly affect the interest of the user community through the performance of Trans Sarbagita transport in the Province of Bali. The interest of the user community is a manifestation of user satisfaction with the services received, so it is important to maintain service quality so that users remain loyal to use the Trans Sarbagita transportation mode.

The level of user satisfaction is the main indicator that determines the quality of services provided in the provision of transportation services. The return of the user in using the service depends on the quality of service received. So it is very important to do research on the level of community satisfaction of users of Trans Sarbagita public transportation to improve service by analyzing the problems in it.

METHOD

This study combines a descriptive analysis techniques and structural equations with alternative PLS SEM. The location of the research was carried out in the Province of Bali at the Trans Sarbagita bus stop corridor 1 and the corridor route 2. The selection of research locations in these two corridors is given from 3 (three) corridors that have been operated, only 2 (two) of these corridors which have operational time exceeding 5 years and have a relatively stable number of passengers. The scope of this research was limited to only the Trans Sarbagita transport on the main routes that were already operating and received positive responses from the community. The variables used include Independent Variables, namely Transport Performance and Crew Performance, Intervening Variables, namely Service Quality and Dependent Variable, namely the Satisfaction Level.

The population of this study is Trans Sarbagita public transport passengers on the main route, namely corridor I (City - GWK) and corridor II (Batu Bulan - Nusa Dua PP). Based on the total data of Trans Sarbagita bus passengers corridor I and II in 2016 amounting to 878,566 passengers (Dinas Perhubungan, 2016), the average passenger per day reached 2,407 people per day as an approach to get the population sought, so that with the Slovin formula obtained as many samples 96 passengers. Sampling is done by purposive sampling, the technique of determining the sample with certain considerations or criteria. Samples were taken from passengers at the bus stop that passed the Batu Bulan route to Nusa Dua and Kota route to Garuda Wisnu Kencana (GWK).

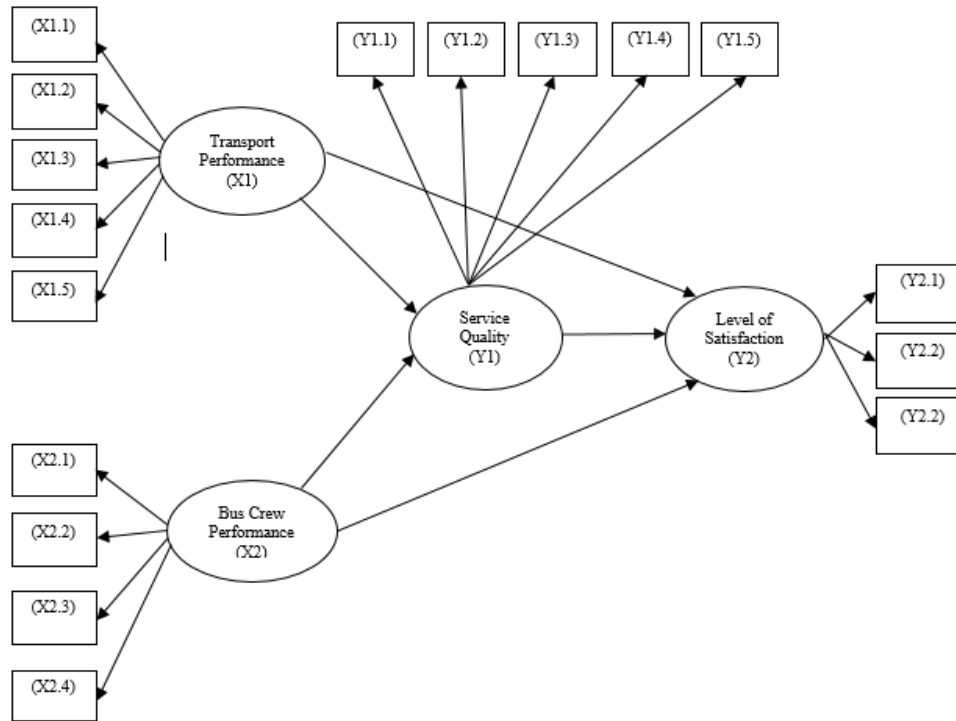


Figure 1. The Relationship Between Variables Research

RESULTS AND DISCUSSION

Characteristics of Respondents

Based on gender, data shows that of the 96 Trans Sarbagita transport users (respondents), there were 59 men and 37 women. With the number of respondents dominated by Trans Sarbagita users, male sex is 61 percent, while female users are 39 percent, this proves that the use of this mode of transportation is still dominated by male users.

Characteristics of respondents according to age are grouped into 5 (five), namely age 10 to 20 years as many as 24 people, aged 21 to 30 years as many as 32 people, aged 31 to 40 years as many as 26 people, aged 41 to 50 years as many as 10 people, age 51 to 60 years as many as 4 people. The number of respondents based on age is more dominated by respondents aged 21 to 20 years, namely 33.33 percent. Respondents aged 31 to 40 years were 27.08 percent. Respondents aged 10 to 20 years were 25 percent. Respondents aged 41 to 50 years were 10.42 percent. While the number of respondents aged 51 to 60 years was 4.17 percent.

Based on education level as much as 36.45 percent of users have high school education, as many as 27.08 percent have undergraduate education, 15.62 percent have Diploma level education, as much as 10.41 percent have S2 education level, as much as 6.25 percent have junior high school education and the remaining 4.16 percent have elementary school education. It can be interpreted if the composition of Trans Sarbagita public transport passengers is dominated by secondary education and above, so that it has a broader understanding of the role of mass public transportation.

While based on the type of work dominated by respondents with the type of work of private employees amounting to 46.87 percent, respondents with the type of work students/students amounted to 36.45 percent, respondents with types of entrepreneurial jobs amounted to 9.37 percent and respondents with types of civil servant jobs amounted to 6, 25 percent.

Description of Variables

Evaluation of transport performance through these indicators is expected to provide input in an effort to realize optimal service quality. The indicators used in this study are Waiting Time (X1.1), Distance to bus stop (X1.2), Travel Time (X1.3), Average Speed (X1.4) and Travel Costs (X1.5)

Table 1.
Distribution of Respondents' Frequency to Perception of Transport Performance Variables (X1)

Construct		Value					Total Value	Average Value
		1	2	3	4	5		
Waiting time	X1.1	0	15	52	29	0	302	3,145
Distance to bus stop	X1.2	0	11	55	27	3	310	3,230
Travel Time	X1.3	1	20	51	21	3	293	3,052
Average of bus speed	X1.4	0	15	54	27	0	300	3,125
Cost	X1.5	0	8	40	46	2	330	3,437
Total Average X1							3,197	

Source: Research Results

The data in Table 1. shows that respondents' perceptions of the Transport Performance variable (X1) are concentrated in scores of grades 3 and 4 and overall have an average score of 3.197, this means that Transport Performance is at a fairly good level. Some indicators that average scores are still below the average, namely the Waiting Time indicator (X1.1) with an average score of 3.145, Travel Time with an average score of 3.052 and Speed average with an average score of 3.125, still at a fairly good level. The highest value of user assessment is on the cost of travel with an average score of 3.437 which is above the total average indicating that the tariffs charged by Trans Sarbagita public transport are very helpful to the community. As we know, Trans Sarbagita public transportation does get subsidies from the Government.

The performance of the bus crew is the work of the bus crew which can be shown through the perception of respondents in terms of politeness, driving techniques, alertness and discipline. The performance of the bus crew is the identification and involvement of the crew in providing services.

The data in Table 2. shows that respondents' perceptions of the Bus Crew Performance variable (X2) are concentrated in scores of grades 3 and 4 and overall have an average score of 3.025. This means that the commitment of the bus crew is at a fairly good level.

Tabel 2.
Respondent Frequency Distribution
Against Variable Perception of Bus Crew Performance (X2)

Construct		Value					Total Value	Average Value
		1	2	3	4	5		
Hospitality service	X2.1	1	23	55	16	1	281	2,927
Driving Technique	X2.2	0	17	52	24	3	301	3,135
Responsiveness of bus crew	X2.3	1	20	49	26	0	292	3,041
Work discipline	X2.4	1	19	55	21	0	288	3,000
Total Average X2							3,025	

Source: Research Results

Some indicators that average scores are still below the average, namely the indicator of Pramujasa Hospitality (X2.1) with an average score of 2.927, Work Discipline (X2.4) with an average score of 3.052. While the indicator of Driving Technique (X2.2) with an average score of 3.135 and Bus Crew Response (X2.3) is above the average. The low score on premenjasa hospitality indicators reflects that the community can directly assess the services provided by the pramujasa not in line with expectations. This is the Government's record as a regulator.

Transportation service quality is the excellence of services provided to transport users according to service standards set and felt directly by users. Parasuraman, Zeithaml and Bitner (1996) summarize the 5 dimensions of service quality, namely: Tangibles (physical evidence), Reliability (trust), Responsiveness, Assurance, and Emphaty.

The frequency distribution of respondents can be presented as in Table 3.

Tabel 3.
Distribution of Frequency of Respondents to Perceptions of Service Quality Variables (Y1)

Construct		Value					Total Value	Average Value
		1	2	3	4	5		
1 <i>Tangibles</i>	Y1.1	0	28	37	28	3	294	3,062
2 <i>Reliability</i>	Y1.2	0	13	47	35	1	312	3,250
3 <i>Responsiveness</i>	Y1.3	0	24	41	27	4	299	3,114
4 <i>Assurance</i>	Y1.4	0	28	39	25	4	293	3,052
5 <i>Emphaty</i>	Y1.5	0	24	46	23	3	293	3,052
Total Average Y1							3,106	

Source: Research Results

The data in Table 3. shows that respondents' perceptions of the Service Quality variable (Y1) are concentrated in scores of grades 3 and 4 and overall have an average score of 3.106 which is quite good. This means that Service Quality is at a

fairly good level. In this study the reliability variable received the most positive response from users. Community trust grows as a result of continuous service.

According to Walker, et al. (2001) customer satisfaction can be defined as a situation where the needs, desires, and expectations of customers can be fulfilled through the products consumed. Service success can be seen from the level of satisfaction felt by its users. Service quality has a positive influence on user satisfaction so that both are very related (Winda Septianita, Wahyu Agus Winarno, Alfi Ari, 2014).

The frequency distribution of the Satisfaction Level can be presented as in Table 4.

Tabel 4.
Respondent Frequency Distribution of Perceptions of Variable Satisfaction Levels (Y2)

Construct	Value	Value					Total Value	Average Value
		1	2	3	4	5		
1 Conformity of Hope	Y2.1	0	15	22	51	8	340	3,541
2 Interest	Y2.2	0	9	26	58	3	343	3,572
3 Willingness to recommend	Y2.3	0	15	21	49	11	344	3,583
Total Average Y2							3,565	

Source: Research Results

The data in Table 4. shows that the respondents' perceptions of the Satisfaction Level (Y2) variable are concentrated on a score of 4 and overall have an average score of 3.565 (good). This condition reflects that the Trans Sarbagita public transport user satisfaction level is relatively good as indicated by the percentage of agreed statements of 54.86%. Whereas there is still a statement that disagrees with the respondent to the Satisfaction Level indicating that there are still negative perceptions or complaints that have not been fully addressed.

Discussion and analysis

Based on the results of data processing using Smart PLS, R-Square results are obtained as follows in table 1.

Table 1. R-Square

No	Dependent Variable	R-Square	Description
1	2	3	
1	Service quality (Y1)	0,474	Moderate
2	Satisfaction level (Y2)	0,549	Moderate

Source: Research Results

Based on the calculation results as shown in Table 1. it can be stated that the R-Square value of Service Quality variable (Y1) is 0.474. This number can be interpreted that 47.4 percent of Service Quality variables are explained by the Transport Performance and Bus Performance variables, while 52.6 percent of the Service Quality variables are explained by other variables outside the research model. In this case, the relationship between the independent variables on the dependent variable is moderate.

Likewise the Satisfaction Level variable has a R-Square value of 0.549. This figure can be interpreted that 54.9 percent of the Satisfaction Level variable is explained by Transport Performance, Bus Crew Performance and Service Quality variables, while 45.1 percent is explained by other variables outside the research model. In this case, the relationship between the independent variables on the dependent variable is moderate.

In this study tested 5 (five) variables that have a direct effect, namely: the effect of Transport Performance and Bus Crew Performance on Service Quality, the effect of Transport Performance on Satisfaction Levels, the effect of Bus Crew Performance on Satisfaction Levels, the influence of Service Quality on Satisfaction Levels. Based on the hypothesis the direct influence shown between variables has a positive and significant relationship, but in this study it can apply differently according to the results of the test. Result for Inner Model direct effect can be seen in Table 2.

Table 2. Result for Inner Model

No	Direct Effect	Original Sample	Standard Deviation	T Statistics	Description
1	2	3	4	5	6
1	Public Transport Performance → Service quality	0,319	0,115	2,772	Significant
2	Public Transport Performance → Level of satisfaction	0,274	0,125	2,203	Significant
3	Crew Performance → Service quality	0,417	0,109	3,837	Significant
4	Crew Performance → Level of satisfaction	0,245	0,098	2,494	Significant
5	Service quality → Level of satisfaction	0,318	0,094	3,391	Significant

Source: Research Results

From the results of hypothesis testing (Inner Model) in Table 2. all direct effects can be declared significant because they have T Statistics > 1,990. The direct effect of Transport Performance on Service Quality has a path coefficient (original sample) of 0.319. The direct effect of Bus Crew Performance on Service Quality has a path coefficient (original sample) of 0.417.

The results of this study are in line with the research of Setijowarno and Frazilla, (2001) which states that the characteristics of the public transport system are used to show the performance of the public transport system in the form of waiting time, headway, load factor, travel time, frequency. According to Nirjaya, Oka. (2015), the dimensions of the vehicle, the attitude of the vehicle crew and freight rates indirectly affect the interest of the user community through the performance of Trans Sarbagita transport in the Province of Bali. Dwiyanto (2006), states that service quality is the result of interaction of various aspects, namely service systems, service providers, service strategies and customers (customers). Therefore, every company or organization that wants to improve the quality of services, the things

that must be reorganized or updated is by improving the performance of the facilities and employee performance.

The direct effect of Transport Performance on Satisfaction Level has a path coefficient (original sample) of 0.274. The direct effect of Bus Crew Performance on Satisfaction Level has a path coefficient (original sample) of 0.245. The direct effect of Service Quality on Satisfaction Level has a path coefficient (original sample) of 0.318.

According to Zeithaml (1995), core service quality is the result of customer assessment of service excellence or privilege as a whole and has a positive effect on consumer satisfaction. Likewise, employee performance significantly influences customer satisfaction. Furthermore, customer satisfaction significantly influences customer trust, and then customer trust significantly influences customer loyalty (Pantja, 2005).

Service Quality plays an important role in determining user satisfaction. According to Henri (2012) so that service quality is successful, it is necessary to have internal reform, facilitation, and evaluation for all actors in the organization to provide quality services. According to Payne (1993), customers are increasingly clever in terms of their demand and demanding increasing service standards. This means to realize service quality that is able to give satisfaction to users, it requires joint support both transportation performance and bus crew performance.

Akbar, M. Muzahid., Parvez, Noorjahan. (2009), states that customer trust and satisfaction are significantly and positively related to customer loyalty. Customer satisfaction has been found to be an important mediator between the perception of service quality and customer loyalty. A clear understanding of the relationship between the variables studied can encourage cellular service providers to find appropriate actions to win customer trust by providing better services to create a loyal customer base.

CONCLUSION

From the study, it can be concluded that Transport Performance and Bus Crew Performance have a positive and significant effect on Service Quality. This means that the increasing performance of transport and bus crew will have an impact on the quality improvement of the Trans Sarbagita Public Transport Service and vice versa. Likewise, the influence of Service Quality on Satisfaction Levels has a positive and significant effect. It means that the better the quality of service, the higher the level of satisfaction of users of Trans Sarbagita public transportation services in Bali Province. The level of user satisfaction is a reflection of the quality of service, it is expected that the Provincial Government of Bali can continue to improve efforts to improve services by planning additional routes or corridors to improve modal interconnection. With service connectivity, the user satisfaction level is expected to increase.

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