The Effect of taxi bike Service Quality on Customer Satisfaction among Students

Iswandi Idris[1*], Poppy Dinar Sari[2], Yusmar Ali[3], Siti Aisyah[4], Antonius Satria Hadi[5]
{ iswandi.idris@plm.ac.id[1*], poppydinarsari98@gmail.com[2], dedek.sitiaisyah@yahoo.com[4], antonius_satria@widyamataram.ac.id[5]}

Industrial Engineering, Politeknik LP3I Medan, Medan, Indonesia[1*]
Administration Business, Politeknik LP3I Medan, Medan, Indonesia[2]
Graphic Engineering, Politeknik Negeri Media Kreatif, Medan, Indonesia[3,4]
Study Program Entrepreneurship,Faculty of Economics, Universitas Widya Mataram, Yogyakarta, Indonesia[5]

Abstract. The phenomenon Taxi bike is a driver who will be minimal attention to customers, less attention to the completeness of attributes for customer safety and lack of providing quality services. So from that this research was conducted with the aim to find out how the effect of taxi bike of service quality on customer satisfaction. Primary and secondary data are the selected data types. The data sources has been internal and external data. Method of collecting data is observation and questionnaire. Data analysis technique is quantitative. Based on the results of simple linear regression is the value of Y = 1,270 + 0,231 (X), it is known that the value of a = 1,270 and the value of b = 0,231. If the value of X (Service Quality) increases by 1 then the satisfaction level rises by 1.501 and if there is no variable X, then the level of satisfaction constant 1,270 and the most influential t test result is X5.1 where the value of t is the value of T count and T Table or (4,842> 1,97976) it is concluded that H_0 is treated as H1 means there be an effect between Service Quality on the first tangibles (tangible) variable (X5. 1) on Customer Satisfaction, the results of the Effect of taxi bike Service Quality determination test are obtained R2 (R Square) of 61.9 % service quality has an effect on customer satisfaction while the rest (100% — 61. 9% = 38. 1%) is influenced by other factors outside the research, it can be concluded the results the Service Quality (X) variable is directly positive and significantly influential to the Customer Authority (Y) at the Taxi Bike.

Keywords: Service Quality, Customer Satisfaction, Taxi Bike

1. Introduction

Service Quality on Customer Satisfaction [1] has been well documented and discussed on its connection to organizational performance [2], and Rapid developments, inventions, and technological changes like today development of the lifestyle of the wider community practice [3] and The information systems that have a high response rate and focus on users from all aspects [4]. The overriding aim of the organizations providing services is to obtain and maintain the customer [5], Customer loyalty is a source of competitive advantage and an important intangible asset to any organisations [6]. The increasingly rapid development of the era requires that people be more creative and innovative in creating new businesses, especially in the field of providing transportation services. The taxi bike in the city of Medan was present in 2016 which became an alternative means for people to travel. Taxi bike offers that offer mobile applications. One of the key factors for the successful implementation of

ICASI 2019, July 18-19, Banda Aceh, Indonesia

DOI 10.4108/eai.18-7-2019.2288678

transportation services is the ability to provide services to customers to the public, giving satisfaction to consumers in meeting their needs, as well as their wishes and expectations. customer satisfaction has a significant effect on customer loyalty [7]. Satisfaction is one of the aspects that can contribute to the dissemination of services [8], focus on all dimensions of service quality [9], the combination of comfort and connection alone captures higher customer satisfaction [10].

Based on Test F the independent variables simultaneously have a significant effect on the dependent variable, based on the results of the t-test it is concluded that the one that dominates student satisfaction as a customer is reliability, the results of partial testing (t-test) show that physical evidence variables positively and not significantly influence student satisfaction as a customer in University of Sumatera Utara [11].

The company will succeed in getting customers in large numbers if judged to provide satisfaction for consumers. Consumer taxi bike covers all groups of customers ranging from teenagers to adults with a variety of different economic backgrounds ranging from students, students, employees, to housewives. The research that the author does is a service that can be measured with certainty. The difference between this research and previous research lies in the method of research conducted in obtaining data, research objects, and research locations. Based on the background described above, the author takes the title “The Effect of taxi bike Service Quality on Customer Satisfaction among Students”

Given the importance of the influence of the quality of online motorcycle taxi services in measuring customer satisfaction among students, the writer will publish scientifically the results of this study in the EAI Core Proceedings in order to become a source of information for future researchers.

According to Lewis and Booms [12] "service quality is a measure of how well the level of service provided is able to be in accordance with customer expectations".

According to Parasuraman [13] there are dimensions of service quality as follows:

1. Reability that is, the organization must have the ability to carry out the promised service reliably.
2. Responsiveness which includes how the organization of customer complaints regarding service that is not or less satisfactory, the organization's actions on customer complaints, and staff assistance to customers who submit complaints, staff responsiveness to customer requests and willingness to provide fast service.
3. Assurance namely the knowledge and politeness of employees and the ability to convey their beliefs and beliefs.
4. Empathy namely providers of care and individual attention to customers.
5. Tangibles, the process of service performed on the customer must be visible or physically can be clearly seen regarding the working mechanism of the various facilities used, both the appearance of physical facilities, equipment, personnel, and communication materials.

According to Yamin [14] "customer satisfaction is a post-purchase evaluation or evaluation results after comparing what is felt and expectations".

According to Kotler [13] there are several factors that influence customer satisfaction as follows:

1. Product quality is the ability of a product to carry out functions including, reliability, reliability.
2. Quality of service is to make customers feel satisfied because they get good service or according to what they expect.

3. Emotional, that is, customers will feel proud by getting confidence that other people will be amazed when they get good quality service, so they tend to have a higher level of satisfaction.
4. Price is to set prices that are relatively cheap in accordance with distance without adding costs that are not appropriate because it can affect consumers in terms of costs incurred.
5. Convenience namely customers will be more satisfied if it is relatively easy, comfortable and efficient in getting the services provided by the company.

2. Research Methods

This research was conducted at private university in Medan, Medan, Sumatera Utara. The data used in this study are primary data. The method used is by distributing questionnaires to taxi bike customers Students of the private university in Medan. The sample selection method used is by using the krejcie and morgan tables consisting of 180 people, the study sample was 123 people. In this study Test Validity, Reliability, Linear Regression, T Test, and Determination will be carried out using the SPSS V.22 auxiliary program application.

3. Results and Discussion

The results of testing the validity found that all question items on service quality variables and customer satisfaction were declared valid so that they could be used in subsequent studies.

Table 1. Test Results for Validity of Service Quality Level Instruments (X) on taxi bike

Variabel	Code	r_{count}	r_{table}	Info
Reliability	Skills and Reliability in Driving (X1.1)	0.677	0,177	Valid
	Serviceability can be trusted (X1.2)	0,634	0,177	Valid
Responsivenes s	Providing Solutions When Ordering Problems Occur (X2.1)	0,545	0,177	Valid
	Spry and Respond When Experiencing Constraints On Vehicles (X2.2)	0,599	0,177	Valid
Assurance	Polite behavior and providing quality services (X3.1)	0,678s	0,177	Valid
	Have Knowledge and Skills in Performing Tasks (X3.2)	0,751	0,177	Valid
Emphaty	Taxi Bike Drivers Always Say Greetings to Passengers (X4.1)	0,565	0,177	Valid
	Drivers Care About Consumer Desires And Complaints (X4.2)	0,653	0,177	Valid
Tangibles	Good Vehicle (X5.1)	0,581	0,177	Valid
	Complete Customer Attributes (X5.2)	0,614	0,177	Valid

Table 2. Test Results for Validity of Instrument Customer Satisfaction Level (Y) on taxi bike

Variabel	Code	r_{count}	r_{table}	Info
Product Quality	Vehicles Used According to Standards (Y1.1)	0.670	0,177	Valid
	Vehicle Quality Provides Convenience for Customers (Y1.2)	0,699	0,177	Valid
Service Quality	Service Quality Provided by Drivers (Y2.1)	0,722	0,177	Valid
	Providing Solutions When Ordering Problems Occur (Y2.2)	0,718	0,177	Valid
Emotional	Proud When Using Taxi Bike Services (Y3.1)	0,622	0,177	Valid
	Satisfied With the Taxi Bike Network System When Ordering (Y3.2)	0,713	0,177	Valid
Price	Price according to mileage (Y4.1)	0,627	0,177	Valid
	Prices In Accordance With Service Quality Provided (Y4.2)	0,630	0,177	Valid
Convenience	Ease in Ordering Through the Application (Y5.1)	0,641	0,177	Valid
	Ease in Knowing the Driver's Arrival (Y5.2)	0,642	0,177	Valid

From the reliability test carried out it is known that the statements contained in the Service Quality variable (X) as many as 10 items are stated reliably because all Cronbach's Alpha results items are 0.825> 0.60 so that this research variable can be used for further analysis.

Table 3. Reliability of Service Quality on taxi bike

Cronbach's Alpha	N of Items
,825	10

From the reliability test carried out it is known that the statements contained in the Customer Satisfaction variable (Y) as many as 10 items are stated reliably because all Cronbach's Alpha results items are 0.861> 0.60 so that this research variable can be used for further analysis.

Table 4. Reliability of Customer Satisfaction on taxi bike

Cronbach's Alpha	N of Items
,861	10

From the simultaneous test (F test) it can be seen that the results of Fcount are 18.203 with a significant level = 0.000, greater than the value of F_{table} which is 2.29, with an error rate of $\alpha = 5\%$ or in other words $F_{count} > F_{table}$ (18.201> 2, 29). based on hypothesis testing criteria if $F_{count} > F_{table}$ and its significance level (0,000 <0,05), indicating that the influence of independent variables (reliability, responsiveness, assurance, empathy, tangibles) simultaneously has a significant effect on the dependent variable (customer satisfaction).

Table 5. Simultaneous Test Results (Test F) on taxi bike

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16,658	10	1,666	18,203	,000[b]
	Residual	10,249	112	,092		
	Total	26,907	122			

Based on the results of Effect of taxi bike Service Quality with the t test, the most influential variable is tangibles (X5.1) and a simple linear regression equation is obtained as follows: Y = a + bX, Y = 1,270 + 0,231 (X). From the following equation it can be seen that a = 1,270 and the value of b = 0,231. If the value of X (Service Quality of taxi bike) rises by 1 then the satisfaction level rises by 1.501 and if there is no variable X then the level of satisfaction is 1,270. Then the results of the T test (partial hypothesis testers), the value of tcount is 4.842 for variants X, while the value of t table is 1.97976 so thus the value of t_{count}> t_{table} or (4.842> 1.97976), then, it is concluded that H_0 is rejected and H_a accepted means that the influence between tangible variables (tangibles) on service quality indicators on customer satisfaction.

Table 6. Partial Test Results (t Test) on taxi bike

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1,270	,246		5,170	,000
	X1.1	,159	,065	,200	2,439	,016
	X1.2	-,085	,059	-,117	-1,438	,153
	X2.1	,060	,048	,092	1,250	,214
	X2.2	-,019	,053	-,026	-,358	,721
	X3.1	,083	,052	,125	1,604	,111
	X3.2	-,017	,054	-,026	-,315	,754
	X4.1	,012	,039	,022	,314	,754
	X4.2	,146	,041	,276	3,574	,001
	X5.1	,231	,048	,364	4,842	,000
	X5.2	,116	,039	,216	2,975	,004

Based on the results for Effect of taxi bike Service Quality of the determination test obtained the number R2 (R Square) of 0.619 or (61.9%). This shows that 61.9% of service quality affects customer satisfaction while (100% - 61.9% = 38.1%) is influenced by other factors outside of research. In this study obtained a value of 0.585 which means that the independent variable can only explain the variance of the related variable by 58.5% while the remaining 41.5% is influenced by other factors.

Table 7. Determination Coefficient Test Results on taxi bike

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,787[a]	,619	,585	,30251

4. Conclusion

Based on the results of the validity and reliability test, all indicators of the overall value of $r_{count} > r_{table}$ state that the statements on each indicator or variable are declared valid and reliable, then the results of simple linear regression are Y = 1,270 + 0,231 (X) if the value of X increases by 1 then the satisfaction level rises by 1.501 and if there is no variable X then the level of constant satisfaction is 1,270, then the result of the t test coefficient that is the most influential is the variable X5.1 where the value of t is the value of 4.842 for variable X, while the value of t is 1, 97976, so thus the value of tcount> of t_{table} or (4,842> 1,97976). Based on the results of the determination test obtained the number R2 (R Square) of 0.619 or (61.9%). This shows that 61.9% of service quality affects customer satisfaction while (100% - 61.9% = 38.1%) is influenced by other factors outside of research.

References

[1] Y. Fang, "A Study of the Impact of Service Quality on Customer Satisfaction in Xi'an HEMA FRESH STORE," in *Proceedings of the 4th International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2019)*, 2019.

[2] N. M. Binti Ali, S. F. M. Hamzah, K. Kamaruddin, H. M. Noor, and R. I. Borhanuddin, "Service Quality From Islamic Perspective and Its Connection With Customer Satisfaction With Public Transportation Sector In Terengganu," *Adv. Econ. Bus. Manag. Res.*, vol. 46, no. July, pp. 317–323, 2018.

[3] I. Idris, Z. Hanum, and D. Wahyudi, "ANALISIS EKUITAS MEREK PONSEL SAMSUNG SEBAGAI USULAN UNTUK MEMBIDIK SEGMENTASI BARU DI KOTA MEDAN," *J. Bisnis Adm.*, vol. 4, no. 2, pp. 75–78, 2015.

[4] I. Idris and Y. Delvika, "ANALISIS PERANCANGAN SISTEM INFORMASI TERINTEGRASI DI LINGKUNGAN PERGURUAN TINGGI SWASTA DI MEDAN," *J. Teknovasi*, vol. 1, no. 2, pp. 15–26, 2014.

[5] J. Klementova, J. Zavadsky, and Z. Zavadska, "The Measurement and Evaluation of the Service Quality through Customers 'Satisfaction," *Procedia Econ. Financ.*, vol. 26, no. 15, pp. 126–130, 2015.

[6] H. Jiang and Y. Zhang, "An investigation of service quality, customer satisfaction and loyalty in China's airline market," *J. Air Transp. Manag.*, vol. 57, pp. 80–88, 2016.

[7] L. A. Kasiri, K. T. Guan Cheng, M. Sambasivan, and S. M. Sidin, "Integration of standardization and customization: Impact on service quality, customer satisfaction, and loyalty," *J. Retail. Consum. Serv.*, vol. 35, no. November 2016, pp. 91–97, 2017.

[8] H. C. Maioli, R. C. de Carvalho, and D. D. de Medeiros, "SERVBIKE: Riding customer satisfaction of bicycle sharing service," *Sustain. Cities Soc.*, vol. 50, p. 101680, 2019.

[9] M. S. Farooq, M. Salam, A. Fayolle, N. Jaafar, and K. Ayupp, "Impact of service quality on customer satisfaction in Malaysia airlines: A PLS-SEM approach," *J. Air Transp. Manag.*, vol. 67, no. December 2017, pp. 169–180, 2018.

[10] S. Miranda, P. Tavares, and R. Queiró, "Perceived service quality and customer satisfaction: A fuzzy set QCA approach in the railway sector," *J. Bus. Res.*, vol. 89, no. July, pp. 371–377, 2018.

[11] G. F. W. Pratama, "Pengaruh Kualitas Pelayanan Terhadap Kepuasan Pelanggan Jasa Taksi Berbasis Online (GrabCar) pada Mahasiswa Universitas Sumatera Utara," Universitas Sumatera Utara, 2017.

[12] F. Tjiptono and C. Gregorius, *Service, Quality Dan Satisfaction Edisi 4*, 4th ed. Yogyakarta: Andi, 2016.
[13] M. Rusydi, *Customer excellence*, Cetakan 1. Yogyakarta: Gosyen Publishing, 2017.
[14] S. Herlambang, *CUSTOMER SERVICE Rumah Sakit dan Jasa Kesehatan Cara Sukses Melayani Pelanggandi Dunia Kesehatan*. Yogyakarta: Gosyen Publishing, 2018.