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Performance Description of Untung Suropati Green Terminal in Pasuruan

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ABSTRACT

Untung Suropati Terminal is a road transport passenger terminal with Type B in Pasuruan City that serves public transportation between cities in the province of East Java. At this time the Untung Suropati terminal is quiet from visitors and public transport vehicles. The condition of the physical building is mostly damaged. This study aims to perform user voice description of the performance of Untung Suropati terminal. The description describes the level of user satisfaction. Description refers to the principles of green terminal using statistical descriptions method. The results achieve 12 performance variables are Security (X₁), Safety and Health (X₂), Responsibility (X₃), Building Utility (X₄), Architectural Esthetics (X₅), Ease and Affordability (X₆), Reliability Transportation (X₇), Building Durability (X₈), Frequency and Density (X₉), Comfort and Regularity (X₁₀), Availability and Capacity of Public Facilities (X_{11}) , and Implementation of Environmentall-Friendly Concepts (X_{12}) . The satisfactory scale (scale 4) was obtained for 11 performance variables and only 1 variable gets scores on a very satisfactory scale (scale 5) that the variable of Ease and Affordability (X_6) .

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INTRODUCTION

Untung Suropati Terminal is a road transport passenger terminal with Type B in Pasuruan City that serves public transportation between cities in the province of East Java [1]. This terminal becomes a node for public transportation connecting Pasuruan with Probolinggo, Malang, Sidoarjo, Mojokerto, and Surabaya. Untung Suropati Terminal is on the Pantura line has been operating until now since 2002. At this time the Untung Suropati terminal is quiet from visitors and public transport vehicles. The condition of the physical building is mostly damaged, even in the rainy season is not operated due to the large flood that inundated the terminal area. This problem needs to be evaluated so the terminal that one of the important facilities in encouraging inter-regional supprot connectivity in its transportation can be realized. This study aims to perform user voice description of the performance of Untung Suropati terminal. The description describes the level of user satisfaction. Users consist of passengers and operator of public transport, owners of commercial areas within terminals, and communities around the terminal. Description refers to the principles of green terminal. The method used is statistical descriptions derived from the calculations results of voice of user using SPSS 20.

RESEARCH METHOD

The research method is shown in Figure 1, the terminal performance variables obtained from the previous survey and research. Performance variables are arranged according to the green terminal principles. These variables are arranged in research instruments distributed to respondents in surveys and interviews. The number of respondents to be targeted is 30 people consisting of passengers who often use terminal service, operator of public transport, owners of commercial areas within terminals, and communities around the terminal. Survey results are described by the measurement scale of satisfaction levels including:

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a. Scale 1 = not satisfactoryb. Scale 2 = less satisfactoryc. Scale 3 = quite satisfactory d. Scale 4 = satisfactorye. Scale 5 = very satisfactoryPerformance variables from the previous study The Survey and Preliminary Description research Literature Study survey instrument Requirement of performance variables

Figure 1. The developed method

RESULTS AND ANALYSIS Existing Condition

The survey and interview results obtained the existing condition of Untung Suropati terminal in Blandongan Pasuruan. Figure 2 shows the front of the terminal, while Figure 3 is the bus departure area which is still operating and still in good condition.



Figure 2. The fasade of terminal



Figure 3. The departure area for bus

Figure 4 shows the part of the terminal building that has been severely damaged. This condition also occurs in other building parts of the terminal due to lack of maintenance and repairment. Figure 5 illustrates the departure areas that not operate and not maintained.



Figure 4. The building damage that caused no maintenance in terminal



Figure 5. The departure area for city public vehicle that no maintenance caused teminal comfortable

Figures 6 and 7 show the terminal due to the flood that happened Pasuruan and surrounding areas in 2016 ago. This flood inundated most of Untung Suropati terminal area making terminal cannot operate totally. The

impact of this flood also caused a number of damage to the terminal facility so that it has a very significant effect on the performance and service quality.



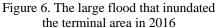




Figure 7. The large flood in 2016 cased damage to part of terminal facilities

Performance Requirement Level

The survey and interview stage achieve 12 performance variables are Security (X_1) , Safety and Health (X_2) , Responsibility (X_3) , Building Utility (X_4) , Architectural Esthetics (X_5) , Ease and Affordability (X_6) , Reliability Transportation (X_7) , Building Durability (X_8) , Frequency and Density (X_9) , Comfort and Regularity (X_{10}) , Availability and Capacity of Public Facilities (X_{11}) , and Implementation of Environmentall-Friendly Concepts (X_{12}) . Table 2 shows the requirements level to the performance of the Untung Suropati terminal. This requirements level is necessary to ensure that 12 performance variables are ready and feasible to serve as a research instrument. The colleting stage of level of user requirements is referred to as voive od user (VoU). The number of respondents to be targeted is 30 people.

Table 2. The determination result of Performance variables of Untung Suropati green terminal

Table 2. The determination result of Performance variables of Untung Suropati green terminal			
No	Performance Variables of Green Terminal	Mean	Rangking
1	Security Assurance in the availability of security service and facilities, free from crime, and free from illegal persons	3,620	11
2	Safety and health assurance in the availability of health care facilities, free from accident, disaster management facilities are available, and free from hazardous materials	3,667	10
3	Responsiveness of management employees in care providing, responsiveness to problems, polite and friendly, and have adequate skills	3,692	9
4	Building utility performance that include natural and artificial lighting, natural and artificial air conditioning, the availability of rubbish facilities, and area utilities	3,755	6
5	Architectural aesthetics in building design, good space inside and outside of building	3,902	4
6	Ease and affordability in terminal location, circulation, ease of getting a ticket, available in information and telecommunications facilities, and integration with the environment around	3,708	8
7	Transportation reliability in the timeliness of arrival and departure, waiting time of freight, availability of travel information, and availability of transport modes	3,982	3
8	The building durability include the physical condition or the durability of the main and support building terminal	3,864	5
9	The frequency and density in terminal visitors, there is no congestion, queuing passengers is norm, and the availability of parking spaces	3,608	12
10	Comfort and regularity in the cleanliness and orderliness terminal, free from disturbance and pollution, and comfort in outdoor and indoor space	3,748	7
11	The availability and capacity of public facilities in the completeness and performance of major and supporting facilities	4,076	2
12	Application of the environmental-friendly concept include alternatives energy of solar and wind, green building, disabled person services, and electrical transport systems	4,322	1

11,33%

1

2

3

4

5

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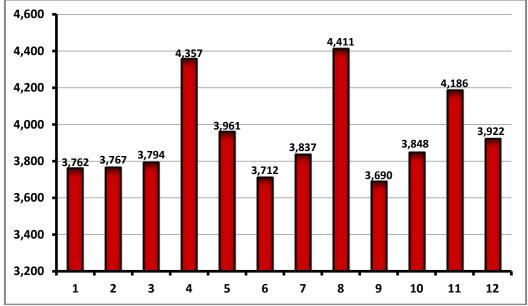


Figure 8. The graph of requirement level of Untung Suropati green terminal

User Satisfaction Level

The survey results to explore the user satisfaction level with 12 variables of the Untung Suropati green terminal performance is shown in the following figures. Figure 9 is a description of the level of user satisfaction with variable of security (X_1) . The highest satisfaction level appears to be on a satisfactory scale (scale 4) with 38,67%. Figure 10 is a graph explaining the level of satisfaction with the variables of Safety and Health (X_2) , where the highest is satisfactory scale (scale 4) with 41,33%.

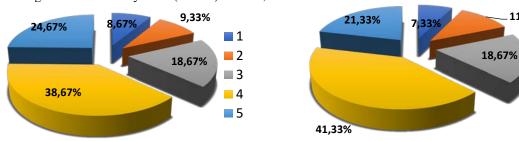


Figure 9. The graph of satisfaction level of Security (X_1)

Figure 10. The graph of satisfaction level of Safety and Health (X_2) ,

Figure 11 is the graph of user satisfaction level to the variable of Responsibility (X_3) with the highest score is satisfactory scale (scale 4) with 36,67%, while Figure 12 is the graph of user satisfaction level to the variable of Building Utility (X_4) with the highest score is satisfactory scale (scale 4) with 44,00%.

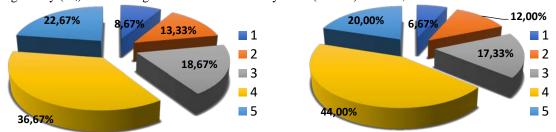


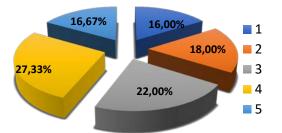
Figure 11. The graph of satisfaction level of Responsibility (X_3)

Figure 12. The graph of satisfaction level of Building Utility (X₄)

Figure 13 is the graph of user satisfaction level to the variable of Architectural Aesthetics (X_5) with the highest score is satisfactory scale (scale 4) with 27,33%, while Figure 14 is the graph of user satisfaction level to the variable of Ease and Affordability (X_6) with highest score is very satisfactory scale (scale 5) with 27,58%.

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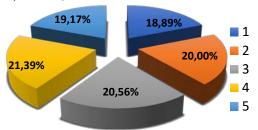


27,58% **1** 16,06% 2 **3** 18.48% 4 25,45% **5**

Figure 13. The graph of satisfaction level of Architectural Aesthetics (X₅)

Figure 14. The graph of satisfaction level of Ease and Affordability (X₆)

Figure 15 is the graph of the user satisfaction level to the variable of transportation reliability (X_7) with the highest score is satisfactory scale (scale 4) with 21,39%, while Figure 16 is the graph of the user satisfaction level to the variable of building durability (X_8) with the highest score is quite satisfactory scale (scale 3) and satisfactory (scale 4) with 28,00%.



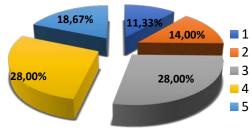
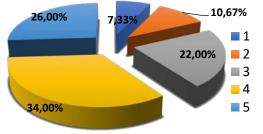


Figure 15. The graph of satisfaction level of Transportation Reliability (X₇)

Figure 16. The graph of satisfaction level of building durability (X_8)

Figure 17 is the graph of the user satisfaction level to the variable of frequency and density (X_9) with the highest score is the satisfactory scale (scale 4) with 34,00%, while Figure 18 is the graph of the user satisfaction level to the variable of comfort and regularity (X_{10}) with the highest score is satisfactory scale (scale 4) with 24,67%.



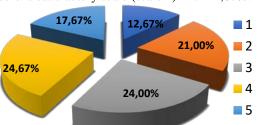
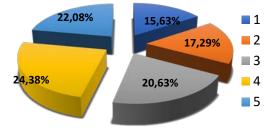


Figure 17. The graph of satisfaction level of frequency and density (X_9)

Figure 18. The graph of satisfaction level of comfort and regularity (X_{10})

Figure 19 is the graph of the user satisfaction level to the variable of Availability and Capacity of Public Facilities (X_{11}) with the highest score is satisfactory scale (scale 4) with 24,38%, while Figure 20 is the graph of the user satisfaction level to the variable of the Implementation of Environmentall-Friendly Concepts (X12) with the highest score is satisfactory scale (scale 4) with 20,47%.



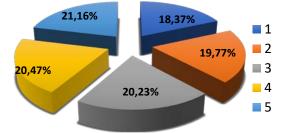


Figure 19. The graph of satisfaction level of Availability and Capacity of Public Facilities (X_{11})

Figure 20. The graph of satisfaction level of the Implementation of Environmentall-Friendly Concepts (X₁₂)

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These results indicate that the level of user satisfaction with 12 variables of the green terminal performance of Untung Suropati is on average on a satisfactory scale (scale 4). The satisfactory scale (scale 4) was obtained for 11 performance variables include Security (X_1) , Safety and Health (X_2) , Responsibility (X_3) , Building Utility (X_4) , Architectural Esthetics (X_5) , Ease and Affordability (X_6) , Transportation Reliability (X_7) , Building Resistance (X_8) , Frequency and Density (X_9) , Comfort and Order (X_{10}) , Availability and Capacity of Public Facilities (X_{11}) , and Implementation of Environmentall-Friendly Concepts (X_{12}) . Only 1 variable gets scores on a very satisfactory scale (scale 5) that the variable of Ease and Affordability (X_6) .

CONCLUSION

The results of surveys and interviews to obtain voice of user votes resulted in 12 variables of the Untung Suropati green terminal performance namely Security (X₁), Safety and Health (X₂), Responsibility (X₃), Building Utilities (X_4) , Architectural Esthetics (X_5) , Ease and Affordability (X_6) , Transportation Reliability (X_7) , Building Resistance (X_8) , Frequency and Density (X_9) , Comfort and Regularity (X_{10}) , Availability and Capacity of Public Facilities (X_{11}) , and Implementation of Environmentall-Friendly Concepts (X_{12}) . From these stages, the variable is obtained that The durability of the building includes the physical condition or durability of the main building of the terminal and the supporting building has the highest mean score of the requierement level with a score of 4.411, while the variable with the lowest mean score of the requierement level is variable Frequency and density in visitor, no congestion, the normal passenger queue, and the availability of parking space with a mean value of 3,690. The results of survey and interview to obtain user satisfaction level with the highest score on 12 variables of Untung Suropati green terminal performance include the user satisfaction level to the variable of Security (X_1) is satisfactory scale (scale 4) with 38,67%, the user satisfaction level to the variable of Safety and Health (X₂) is satisfactory scale (scale 4) with 41,33%, the user satisfaction level to the variable of Responsibility (X3) ia satisfactory scale (scale 4) with 36,67%, the user satisfaction level to the variable of Building Utility (X4) is satisfactory scale (scale 4) with 44.00%, the user satisfaction level to the variable of Architectural Aesthetics (X₅) is satisfactory scale (scale 4) with 27,33%, the user satisfaction level to the variable of Ease and Affordability (X₆) is very satisfactory scale (scale 5) with 27,58%, the user satisfaction level to the variable of transportation reliability (X_7) is satisfactory scale (scale 4) with 21,39%, the user satisfaction level to the variable of building durability (X₈) is quite satisfactory scale (scale 3) and satisfactory (scale 4) with 28,00%, the user satisfaction level to the variable of frequency and density (X₉) is the satisfactory scale (scale 4) with 34,00%, the user satisfaction level to the variable of comfort and regularity (X_{10}) is satisfactory scale (scale 4) with 24,67%, the user satisfaction level to the variable of Availability and Capacity of Public Facilities (X11) is satisfactory scale (scale 4) with 24,38%, and the user satisfaction level to the variable of the Implementation of Environmentall-Friendly Concepts (X_{12}) is satisfactory scale (scale 4) with 20,47%. The satisfactory scale (scale 4) was obtained for 11 performance variables and only 1 variable gets scores on a very satisfactory scale (scale 5) that the variable of Ease and Affordability (X_6) .

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