

Analysis of influencing factors on using rental bikes at shopping tourism sites in Surakarta

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A. Introduction

Why we have to use bicycle?

- Increasing the number of motor vehicles
 - Traffic jam
 - High air pollution
 - Enviroment pollution
 - Fuel waste of vehicles
 - Wasting time value
- Eco friendly
- Support green transportation
- Healthy life for people
- Urban Planning
- Etc

Surakarta City



This research aims to determine the most influential factors in the use of rental bikes at shopping sites in Surakarta City, among others, in Pasar Gede, Pusat Grosir Solo, Beteng Trade Center, and Klewer Market

B. Research Method

- ❖ The factors :
 - weather condition
 - air pollution conditions
 - bike topography
 - mileage
 - bike lane capacity
 - separator
 - bicycle paths
 - signs for bicycles
 - maps or routes
 - bike operators
 - rental fee
 - ease of access using applications for rent bikes
 - ease of understanding instructions on applications
- ❖ The data in this study is collected by an interview using questionnaires in a shopping tour in Surakarta City
- ❖ The data analysis technique used is factor analysis with PCA (Principal Component Analysis) for reducing data, making it easier to interpret the data

C. Analysis Data

❖ C.1 Validity And Reliability Test

This data obtained the value of r_{table} , which is 0,1966 and the value of r count is larger than r tabel so the question item is valid and the alpha value of 0.679 is more than 0,6 which means it has sufficient reliability.

❖ C.2 Factors Analysis

Factor	Eigenvalue	varian value (%)	Variable	loading factor
1	3,056	23,509	weather	0,821
			air pollution	0,818
			topograpy line	0,779
			mileage	0,859
2	2,727	20,973	rental fee	0,577
			easy of application access	0,957
			easy of application instruction	0,953
3	2,003	15,411	capacity line	0,634
			barrier modal	0,817
			bicycle map	0,637
			bicycle operator	0,746
4	1,118	8,602	availability bicycle line	0,826
			bike signs	0,834

D. Conclusion

- The results of the data obtained are four new variables that determine the factors that affect the influence of tourists using bicycle rental in shopping in Surakarta. The four new variables include weather, air pollution, topography of bike lanes, and mileage
- Hopefully this research will be conducted to improve the arrangement of better transportation system, convenient, safe and environmental health by using bicycles

Thank you...