

THE EFFECT OF PRICE AND ACCESSIBILITY ON CONSUMER INTEREST IN USING SOEKARNO-HATTA AIRPORT TRAIN

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Abstract. The study aimed to apprehending whether the variables of price and accessibility had any effect on consumer interest in using Soekarno-Hatta Airport Train. This research is a quantitative research. The primary data were collected through questionnaires. The samples comprised of 154 respondents selected using random sampling technique. The data were processed using a statistical tool, SPSS. Based on the data processing result, the data showed that price did have significantly positive effect on consumer interest in using Soekarno-Hatta Airport Train and the effect of price and accessibility on consumer interest, simultaneously, was under strong correlation category.

Keywords: Price, Accessibility, Consumer interest, Airport Train, Railink

Introduction

1. Background

PT Kereta Api Indonesia and PT Angkasa Pura II have a subsidiary company, PT Railink, which offers a railway-based public transportation service so-called Airport Train. Soekarno-Hatta Airport Train was first officially operated in early 2018. This transportation mode has a purpose to become a solution to solve heavy traffic jam from and to the airport (Railink, n.d.). Airport train is a service provided by airports for airport service users.

The price comparison of each transportation mode to or from Soekarno-Hatta Airport is presented in the following table:

Table 1
Price Comparison

Transportation Mode	Tariff	Source
Airport Train	Rp70,000,- /pax (BNI City-Airport)	(<i>Railink - Reservation</i> , n.d.)
Damri Bus	Rp50,000,- /pax (Damri Blok M-Airport)	(<i>DAMRI</i> , n.d.)
Online Taxi	±Rp130,000,-/1-4pax Rp30,000,-/pax (4pax) (toll included) (Central Jakarta-Airport)	GRAB Application
Conventional Taxi	±Rp192,500,-/1-3pax Rp64,000,-/pax (3pax) (toll included) (Central Jakarta-Airport)	(<i>Soekarno-Hatta - Tangerang</i> , 2020)

The accessibility comparison of each transportation mode to or from Soekarno-Hatta Airport is as follows

Table 2
Accessibility Comparison

Transportation Mode	Time (minute)	Transportation Connectivity
Airport Train	40 minutes (BNI City-Airport)	Public/private transportation (home/starting point-BNI City Station) Skytrain/shuttle bus (Soekarno Hatta Airport Station - Terminal 1,2,3)
Damri Bus	46 minutes (Damri Blok M-Airport)	Public/private transportation (home/starting point-terminal)
Online Taxi	±44 minutes (Central Jakarta-Airport)	Door to door service
Conventional Taxi	±44 minutes (Central Jakarta-Airport)	Door to door service

(source: data processed in 2020)

Table 3
Consumer Interest

Period	Occupancy	Seat Available	Seat Sold
Early 2018 – early 2020	32% per day in average	19,040 seats/day	6,092 seats/ day

(source: Acting President Director of Railink)

Based on the information above, 68% of the total seats available are not filled. The researchers concluded that there are several factors causing this paucity. Therefore, the researchers wanted to examine into what extent these factors influence consumer interest in using the airport train. However, the writers limit of the study on price and accessibility on consumer interest in using airport train; and this research was conducted by exempting and disregarding the COVID-19 pandemic condition.

Based on the aforementioned background, the researchers were interested to conduct a scientific research titled “THE EFFECT OF PRICE AND ACCESSIBILITY ON CONSUMER INTEREST IN USING SOEKARNO-HATTA AIRPORT TRAIN”.

2. Literature Review

Price

As suggested by Amstrong, Gary & Philip (2015), price is defined as an exchange unit with a certain sum of values that is paid or charged to the customers for a product or service so they can take a benefit for having or using the product or service. Price is something that is exchanged for a certain good or service (Lamb, C. W., 2010). According to (Tjiptono, 2010), price can be defined as a monetary unit or other unit (good or service) that is exchanged to gain the rights to own or use a good or service. Price refers to a certain quantity of money (added with some goods if

required) that is needed to obtain a combination of good and its services (Swastha, 2010).

Accessibility

According to (Sutantono, 2014), accessibility is the right to access that is a basic travel needs service. Accessibility must be provided by the government regardless of the transportation mode is used or not by the people. Then, (Sutantono, 2014) added that accessibility is an ease or potential measure to reach people destination. The characteristics of transportation system are determined by accessibility. Accessibility has an effect towards the activity location or land use. Activity location also has an effect to the travel pattern in daily activities. This travel pattern then influences the transportation network and will affect the transportation system as a whole.

Consumer Interest

Interest is the feeling of fondness and attachment towards a certain thing or activity, without being thorough (Djaali, 2013). Consumer interest is the consumer's behaviour which shows to what extent his/her commitment is to purchase or use a product or service (Saputra, 2015). Consumer's need and demand on product or service develop over time and influence their behavior. Consumer's interest grows because of the motives that are based on the attributes of their need and demand in choosing a service (Ningsi & Putriyani, 2019).

Prior Researches

Table 4
Prior Researches

Research	Variable	Analysis Type	Result
Ichsan Alrusydi (2018) The Analysis on Factors that Affect Yogyakarta Public Interest towards Trans Jogja	Independent: Service quality, tariff, income, bus stop accessibility and facility Dependent: Public Interest	Multiple Linear Regression Analysis	The study result showed that the quality of the service, tariff, and people's income had significant effect towards the public interest; and bus stop accessibility and facility did not have significant effect towards the public interest.
Moch, Bayu Mahmudi (2018) The Analysis on Ticket Price, Facility, Accessibility and Security towards Passenger's Decision in Choosing Train Service (Study Case on Kalijaga AC Economic Train Semarang-Solo)	Independent: Ticket price, facility, accessibility, security Dependent: Passenger's Decision	Multiple Linear Regression Analysis	There was a correlation between independent and dependent variables at 50,3%. Hypothesis test showed that the three researched independent variables did not have positive and significant effect towards the dependent variable.

3. Theoretical Framework

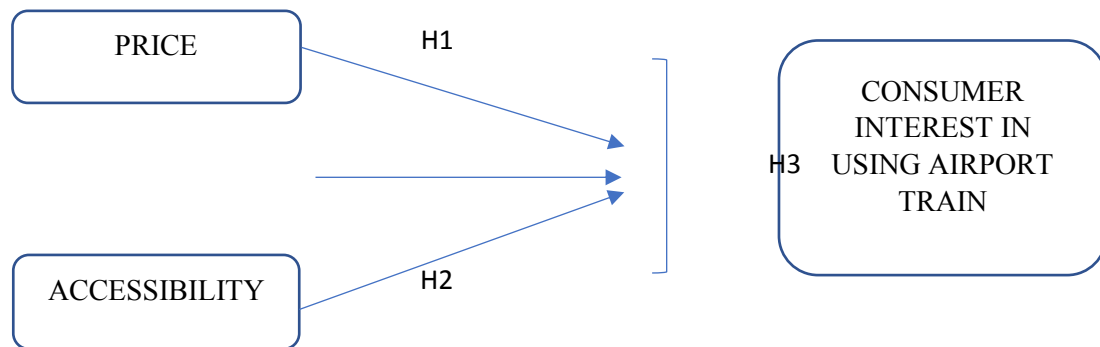


Figure 1
Theoretical Framework

Based on the theoretical framework above, there were 3 hypotheses:

- H₁ : Ticket price affects consumer interest in using Soekarno-Hatta Airport Train.
 H₂ : Accessibility affects consumer interest in using Soekarno-Hatta Airport Train.
 H₃ : Ticket price and accessibility simultaneously affect consumer interest in using Soekarno-Hatta Airport Train.

The indicators used within this research were:

Table 5
Research Indicators

Variable	Indicator	Source
Price	1. Consumer Needs	(Alrusydi, 2018)
	2. Consumer Expectation	
	3. Physical Evidence	
	4. Reliability	
Accessibility	1. Consumer Needs	
	2. Consumer Expectation	
	3. Physical Evidence	
	4. Reliability	
Consumer Interest	1. Consumer Needs	
	2. Consumer Expectation	
	3. Physical Evidence	
	4. Reliability	

Research method

This research took place at PT Railink, Soekarno-Hatta Airport. It was conducted from mid-June 2020 until early July 2020. The design of this research was a quantitative research. Quantitative research is a research which emphasizes on measurement and causal analysis between variables, not the process; and the investigation is considered to be within the framework of value-free (Ahlyar et al., 2020). Primary data obtained from questionnaires. For the research population was less than 100 samples, all samples

would have been used. However, the population of this research had more than 100 samples, therefore 10-15% or 20-25% or more of them were selected as samples (Arikunto, 2010). Finally, in this research, the samples that we used were 154 respondents. All respondents filled out the questionnaires properly and correctly so that none of them were rejected. The sampling technique was random sampling. Random sampling is a sampling technique that mixes its subjects regardless of their level within the population (Arikunto, 2010). The characteristics of respondent used within this research were determined by sex, age and occupation. The instruments used were questionnaires which indicators' validity and reliability had been tested. The instruments (questionnaires) were divided into 3 criteria: price, accessibility, and consumer interest. Multiple linear regression was applied in this research, multiple correlation coefficient and determination coefficient analyses. The hypothesis test in the research used T test and F test.

Results and discussion

1. Instrument Testing

it is defined as a tool or facilities used by the researcher to collect the data to ease the work and with better result, more precise, complete and systematic for easier processing (Arikunto, 2010). The instrument in this research was in form of questionnaire and the indicators had passed through validity and reliability test in a prior research by Ichsan Alrusydi in (2018). Therefore, in this research, validity and reliability tests were no longer necessary to be conducted.

2. Data Analysis

1) Multiple Linear Regression Analysis

Multitple linear regression analysis is a certain procedure used to give a prediction on the condition (the up and down) of the dependent variable (criterium)in the event that two or more independent variables, as the factor of predictor is manipulated (the value is increased and decreased). Thus, multiple linear regression analysis will be conducted if there are at least two independent variables. The equation of the multiple linear regression analysis is presented in the following equation (Sugiyono, 2014) :

$$Y = \alpha + b_1X_1 + b_2 X_2 + \varepsilon$$

Description:

Y	= Consumer Interest
α	= Constant Coefficient
$b_1, b_2, b_3, \dots$	= Regression Coefficient
X_1	= Price
X_2	= Accessibility
ε	= Error, Nuisance Variable

Table 6
Multiple Linear Regression Analysis
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.048	.790		1.327	.186
	PRICE (X1)	.265	.048	.313	5.487	.000
	ACCESSIBILITY (X2)	.639	.062	.586	10.284	.000

a. Dependent Variable: CONSUMER INTEREST (Y)
(source: data processed in 2020)

The application of the linear regression formula, based on the table above, explains that:

$$Y = 1.048 + 0.265 X_1 + 0.639 X_2 + \varepsilon$$

By referring to the above explained equation, it is obvious that Consumer Interest Variable (Y) represented to the constant value at 1.048, under the condition that the other variables' value were also constant. Price Variable (X1) had positive effect towards Consumer Interest (Y) with regression coefficient at 0.265, meaning that the value of Consumer Interest (Y) would increase by 0.265 per price variable unit (X1), under the condition that the other variables were constant. Accessibility (X2) had positive effect towards Consumer Interest (Y) with regression coefficient at 0.639, meaning that the value of Consumer Interest would increase by 0.639 per Accessibility variable unit (X2), under the condition that the other variables were constant.

2) Multiple Correlation Coefficient (Simultaneous)

Multiple correlation analysis was used to know the degree or strength of the relations between variable X towards variable Y simultaneously (Sugiyono, 2014).

Table 7
Guide to Interpret Correlation Coefficient

Coefficient Interval	Correlation Level
0,00-0,199	Very Low
0,20-0,399	Low
0,40-0,599	Medium
0,60-0,799	Strong
0,80-1,00	Very Strong

(By: Sugiono, 2014)

Table 8
Multiple Correlation Coefficient
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758 ^a	.574	.569	1.636

a. Predictors: (Constant), ACCESSIBILITY (X2), PRICE (X1)

b. Dependent Variable: CONSUMER INTEREST (Y)

(source: data processed in 2020)

Based on the Table of Model Summary above, it revealed that the coefficient of correlation was 0.758. It implies that correlation between the price variable (X1) and accessibility (X2) towards Consumer Interest (Y) is under “Strong Correlation” category in accordance with the correlation coefficient interpretation table.

3) Determination Coefficient

Table 9
Determination Coefficient
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758a	.574	.569	1.636

a. Predictors: (Constant), ACCESSIBILITY (X2), PRICE (X1)

b. Dependent Variable: CONSUMER INTEREST (Y)

(source: data processed in 2020)

In accordance with the above Table of Model Summary, the R-square value (R^2) was at 0.574 or the determination coefficient was at 57,4%. This means that 57,4% of the public interest (Y) was influenced by the independent variables, which are price (X1) and accessibility (X2). The remaining 42,6% was influenced by other factors which were not discussed in this study. The closer the value is to 1, the stronger the effect of the simultaneous independent variables will be.

3. Hypothesis Testing

1) T Test

Table 10
T Test
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.048	.790		1.327	.186
	PRICE (X1)	.265	.048	.313	5.487	.000
	ACCESSIBILITY (X2)	.639	.062	.586	10.284	.000

a. Dependent Variable: CONSUMER INTEREST (Y)

(source: data processed in 2020)

H1 Testing

by referring to the above table, the significance value of the effect of price variable (X1) towards consumer interest (Y) is $0.000 < 0.05$ and the t value $5.487 > t$ table 1.97580. Therefore, it could be concluded that H1 was accepted, which means that price variable had significant effect on consumer interest.

H2 Testing

In accordance with the above table, the significance value of the effect of accessibility (X2) towards consumer interest (Y) is $0.000 < 0.05$ and the t value $10.284 > t$ table 1.97580. Therefore, the conclusion displayed that H2 is accepted, which means that accessibility variable had significant effect on consumer interest.

2) F Test (Simultaneous Testing)

Table 11
F Test
ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	545.505	2	272.753	101.845	.000a
	Residual	404.397	151	2.678		
	Total	949.903	153			

a. Predictors: (Constant), ACCESSIBILITY (X2), PRICE (X1)

b. Dependent Variable: CONSUMER INTEREST (Y)

(source: data processed in 2020)

H3 Testing

In accordance with the above table, the significance values of the price effect (X1) and accessibility (X2) towards consumer interest (Y) are $0.000 < 0.05$ and the f value $101.845 > f$ table 3.06. Therefore, it could be implied that H3 was accepted, which means that price and accessibility variables, simultaneously, had significant effect on consumer interest.

Conclusion and recommendation

A. Conclusion

Airport train is a public transportation mode from BNI City Station – Soekarno Hatta Airport vice versa. This research was conducted to find out the price effect and accessibility factors towards the public interest in using the airport train. Based on the analysis and hypotheses tests, it is concluded that price and accessibility factors have significant effect, both partially and simultaneously. Price and accessibility showed positive effect on consumer interest.

B. Recommendation

1. For the Government

The government is expected to be able to cooperate with PT Railink in providing subsidies for the airport train's tariff.

2. For the Operator

It is recommended for the operator to actively promote the tickets, target new segments other than the aircraft passengers, such as membership card with special price for employees who work at Soekarno-Hatta Airport; and to cooperate with PT Angkasa Pura II to create interesting events such as airport tourism event. The operator is also suggested to cooperate with the other transportation modes, such as commuter line, Transjakarta and MRT to produce integrated tickets to provide better convenience for the airport train passengers.

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