

The Factors Influencing Passengers' Interest in Using Transportation Services

Juliater Simarmata, Marthaleina R. Sitorus, Yuliantini, Dian A. Arubusman

Trisakti Institute of Transportation & Logistics, Jakarta, Indonesia

Abstract - This study is aimed at understanding and analyzing the influences of the image, ease-of-use, price and promotion of an application on passengers' interest. This study describes the results of a survey, which is administered to the customers of transportation services—Gojek, Grab, and Uber—in five cities in Indonesia: Jakarta, Bogor, Depok, Tangerang and Bekasi. The research methodology uses a survey of 421 users of online motorcycle transportation services. The results show that the image, ease-of-use, price and promotion of the application significantly influence passengers' interest.

Keywords: image, ease-of-use, price, promotion, interest, transportation services.

1. Introduction

Transportation is very important for people to carry out their activities. They want easy, fast and safe transport [1]. Today, transport does not necessarily mean conventional systems, in which people must wait on streets or in terminals. Passengers now want an easy way to order and use transport services. They want services that can be accessed through the internet and come to them, eliminating the need to go to streets, conventional motorcycle bases or terminals. The advancement of

online two-wheeled transportation services is indicated not only by Gojek, but also by other competitors such as Grab and Uber, each trying to deliver the best service to passengers [2]. Each company/operator does its best to attract passengers by relying on brand image, promotion, the ease-of-use of the application and price. The competition among online [3] motorcycle transport companies is significantly felt by passengers. For example, Gojek provides various services, such as Go-Ride, Go-Food, Go-Shop, Go-Mart, Go-Send, and Go-Tix, as well as competitive price discounts. People's need for safer, simpler, faster and cheaper transport [4] makes the rapid development of online motorcycle transport services in Indonesia unavoidable, especially in Jakarta, Bogor, Depok, Tangerang, and Bekasi.

2. Literature Review

Gojek, Grab and Uber are the brand names known to users of online *ojek* (motorcycle) transport services. Brand is an identity that can be easily recognized, and it promises certain values [5]. The importance of brand image development in business organizations is that brand image is the rational and emotional perception of a certain brand [6]. Currently, competition among companies to attract consumers is not limited to the functional attributes of products, such as product utility, but also brand, which can impart a specific image to users; the role of brand has shifted [7]. In highly competitive environments, brand contributes to the competitiveness of a product [8]. Brand is associated with a specific image, giving a certain association in consumers' minds. In their development, companies are recognizing brand as the most valuable company asset. Brand can be understood as the internalization by consumers of repeated impressions on them of perceived emotional and functional benefits. [9] Recently, the corporate images of online motorcycle transport services in Indonesia have been fairly good, especially in Jakarta, Bogor, Depok, Tangerang, and Bekasi. So far, the services or facilities provided have put the images of online motorcycle transport companies in a fairly good situation, despite unclear regulation and legitimization of online motorcycle

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Corresponding author: Juliater Simarmata,
Trisakti Institute of Transportation & Logistics,
Jakarta, Indonesia

Email: juliaters@gmail.com

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transport services, issues that have been voiced by many parties. These issues have not undermined the image of transportation services in Indonesia, especially in Jakarta, Bogor, Depok, Tangerang, and Bekasi.

Promotion by the online motorcycle companies through drivers' jackets, the internet, or even word of mouth has especially increased the number of online motorcycle transport users. It does not take a long time for online transport to be known by both old and young people, as well as rich and poor people. Promotion is a marketing activity to communicate information about a company and its products to consumers to create demand [1]. To communicate information about its products effectively, a company should determine its target market and address it with promotional tools such as sales, public relations, direct marketing and a dedicated sales force, so that consumers can identify the company's product and become interested in buying that product [10]. Promotional activities should be in line with the marketing plan, which is directed and controlled to foster the company. Uncontrolled promotion will decrease sales, thus wasting the cost of promotion. Based on the above explanation, promotional strategy can include brochure distribution, promotion through printed and electronic media, word-of-mouth promotion and price discounts.

In terms of the ease-of-use of online motorcycle applications, it seems that there is no problem in Jakarta, Bogor, Depok, Tangerang, and Bekasi. This is not unexpected given that the people have fairly high awareness of the internet. Even children in junior high school are skilled in using online applications, and many of them use online motorcycle transport services. Ease-of-use is defined as the degree to which someone believes that by using a technology, he or she will be free of effort [11]. According to [12], the perception of ease has an impact on behavior; the more favorable the perception of a system's ease-of-use, the higher the level of information technology utilization. Reveal that the intensity of usage and the level of interaction between users and the system can also indicate ease-of-use. A frequently used system indicates that it is easier for users to operate. [13], [14] state that if consumers consider a product easy to use, they will feel that its utility meets their needs and wants. Perceived ease-of-use is defined as the extent to which someone believes that technology utilization is an easy matter and does not require hard work from users [15]. In this concept, a clear reason for providing an easy-to-use system in line with users' wants is that it will increase technology utilization. A factor usually considered in online ordering is the application's ease-of-use. This factor is related to the operation of online transactions [16],[17].

Prospective buyers usually find difficulties when doing online transactions for the first time and tend to cancel their intention because they do not know how to use the application. On the other hand, some prospective buyers have the initiative to try, since they have information on how to use the application. Ease is indicated by the degree to which an application is *easy to learn, controllable, clear and understandable, flexible, easy to master, and easy to use* [18].

The prices offered by online motorcycle operators are perceived by customers as affordable and suitable for the services delivered. Price [5] is absolutely taken into account by a businessman in the production process, from which profit is obtained. The definition of price according to [19] is the following: "Price is the combined result of goods and services transactions and demand and supply in the market". The theory of pricing as proposed [2] states that "price is determined mutually in the interaction between the producer and consumer or, in the technical term, mutually by demand and supply, or it can also be said that the balanced output of a commodity is in the equilibrium between the price of demand and the price of supply". Pricing is intended to be a strategy for a company to compete, and the predetermined objective should be consistent with the way the company wants to define its position relative to the competition. Pricing is not regarded as easy for a company, since the decision of price is influenced by both internal and external factors. In setting the price with regard to primary demand, a company believes that a lower price can increase the number of users, the level of utilization or the number of repeat purchases for a certain product category. The most important thing here is that it can attract new customers.

People's interest in using online motorcycle *ojek* services is increasing day by day. Interest [20] is a psychological factor that has a fairly big impact on the behavior, and it is also a source of motivation that leads someone to take action. According to [21] interest is one's awareness or conscious regard of a certain object, person, matter or situation that is relevant to him/her. Interest in a certain object or thing does not appear automatically and suddenly in an individual [22]. There are three factors underlying the appearance of someone's interest [23]: 1. Inner force factor, which can be related to a physical or spiritual need; 2. Social motive factor, namely, the need to be rewarded in the context of one's social environment; 3. Emotional factor, a measure of one's intensity of attention to a certain activity or object.

According to [24], interest is when one effectively responds to or has a feeling toward a product but has not decided to buy yet. According to [25], one way to develop purchase interest is through promotion, a

communication that informs prospective buyers of a benefit or that gets responses. According to [25], consumers' purchase interests are actions and social relationships made by individuals or groups of consumers. [26] say that to influence someone, the best way is to study what is in his mind, to get information not only on that person, but also on the five stages of the purchase process—need, recognition, search, evaluation and decision. We can give specific persuasive information to influence someone in the five stages of this process. According to [10] purchase interest can be identified through the following indicators: Transactional interest, Referential interest, Preferential interest and Explorative interest.

3. Research Methodology

This research used a questionnaire as a data collection tool [27] with a Likert scale from 1 to 5 (1 = Poor – 5 = Excellent). It is necessary to test its validity and reliability. [3]. The next stage was analyzing and interpreting the data obtained in the field using descriptive statistical analysis and inferential statistics. The sample of 421 customers was drawn proportionately from five cities in Indonesia (Jakarta, Bogor, Depok, Tangerang and Bekasi). The distribution of the questionnaire was carried out randomly with the following result: Jakarta 151 respondents, Bogor 60 respondents, Depok 75 respondents, Tangerang 70 respondents and Bekasi 75 respondents. The duration of the survey was one month (July 2016) using a Google form. We used OLS regression to find the relation and impact of each variable.

The conceptual frame of research is briefly described in Figure 1 below:

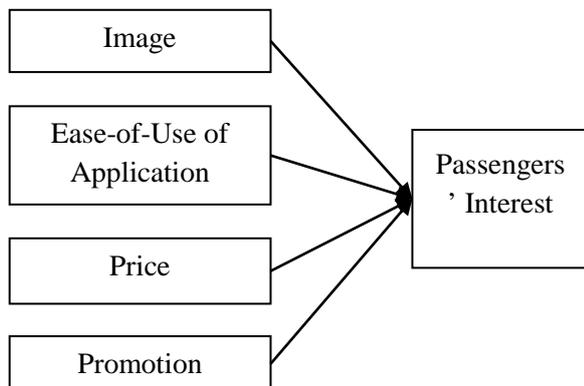


Figure 1. Conceptual Frame

The operationalization of research variables can be seen in Table 1. below:

Table 1. Operationalization of Research Variables

Variable	Indicators	References
Image (X_1)	<ol style="list-style-type: none"> 1. Logo 2. Comparison with other brands 3. Price excellence 4. Positive brand image for customers 	Mourad, Ennew & Kortam, 2011 & Myers, 2000
Ease-of-use of application (X_2)	<ol style="list-style-type: none"> 1. easy to learn 2. easy to use 3. clear 4. understandable 5. provides users with skills 	Vinhas Da Silva & Faridah Syed Alwi, 2008 Liou, Hsu, & Chih, 2015
Price (X_3)	<ol style="list-style-type: none"> 1. Affordable price 2. Price suitability with product quality 3. Price competitiveness 4. Price suitability with product utility 5. Price influence on consumers 	Bahmani, Harvey & Hegerty, 2013 Kuo & Nakhata, 2016
Promotion (X_4)	<ol style="list-style-type: none"> 1. Brochure distribution 2. Promotion through printed and electronic media 3. Word-of-mouth promotion 4. Discount offers 	Anselmsson, Johansson, & Persson, 2007
Passengers' Interest in transportation services (Y)	<ol style="list-style-type: none"> 1. Information discovery 2. Reliance on company's reputation 3. Comparison with other services offered 	Su & Tong, 2015 J.-M. Huang, Ho, Liu, & Lin, 2015

4. Results and Discussion

The multicollinearity test in this study was done by examining the collinearity statistics and the correlation coefficients for the independent variables. The multicollinearity test aims to determine whether correlation among the independent variables is found in the regression model. Multicollinearity occurs if (1) the value of *Tolerance* is < 0.10 and (2) the *Variance Inflation Factor (VIF)* is >10. As shown in Table 2, the values of VIF for the variables of image, ease-of-use of the application, price and promotion are less than 10, and the values of tolerance are greater than 0.10, indicating that there is no correlation among the independent variables in this study.

Table 2. Result of Multicollinearity Test on Coefficients

Variables	Collinearity Statistics	
	Tolerance	VIF
Image (X1)	0.749	1.336
Ease-of-use of application (X2)	0.744	1.344
Price (X3)	0.738	1.355
Promotion (X4)	0.982	1.019

Source: Result of Research, 2016 (data processed)

An important assumption from the classic linear model is that the emerging disruption in the function of population regression is *homoscedastic*—that is, all disruptions have the same variance. The coefficient of determination aims to measure the ability of the model, namely, how well the variation in the independent variables (image, ease of use, price and promotion) explains the variation in the dependent variable (customers' interest). The value of the coefficient of determination R^2 can be seen in Table 3 below.

The value of R^2 found is 0.295 or 29.5%, indicating that the variables image, ease-of-use, price and promotion explain 29.5% of the variation in passengers' interest, and the remaining 70.5% is explained by variables or factors not included in this model. The coefficient of determination value of 29.5% indicates that the independent variables in this study do not have a strong influence on the dependent variable, passengers' interest.

Based on Table 3 below, the constant is 4.547, and the coefficient values are 0.331 for X_1 , 0.183 for X_2 , 0.257 for X_3 , and 0.011 for X_4 .

Table 3. Result of the Equation Model

Variable	Coefficient	Expected Sign	Result
Image (X1)	0.331**	+	H_1 is accepted
Ease-of-use of application (X2)	0.183**	+	H_2 is accepted
Price (X3)	0.257***	+	H_3 is accepted
Promotion (X4)	0.011**	+	H_4 is accepted
R-Squared	0.295		
Adj. Square	0.289		
F-stat	43.590 (0,000)***		

*** Significant at 1%; ** Significant at 5%; * Significant at 10%

Source: Result of Research, 2016 (data processed)

To examine this hypothesis, an F statistic is used with the criterion that if F_{cal} is greater than F_{table} , then H_0 is rejected and H_1 is accepted. Based on Table 3, $F_{cal} = 43.590$ and $F_{table} = 2.39$. In this case, F_{cal} is greater than F_{table} , and the value of significance is 0.00, less than the value of alpha 0.05. Thus, H_0 is rejected, and H_1 is accepted. The acceptance of the alternative hypothesis indicates that the independent variables (image, ease-of-use, price and promotion) can explain the variation in the dependent variable (interest). In this case, the variables of image, ease-of-use, price and promotion simultaneously and significantly influence the enhancement of passengers' interest in transportation services.

The hypothesis examination in this study shows that simultaneously, the image of online motorcycle transport [28], ease-of-use of the application [29], price [30] and promotion significantly influence the interest of motorcycle transport passengers. This examination shows that simultaneously, the image, ease-of-use, price and promotion have a very significant role in enhancing the passengers' interest in transportation services. This means that if transportation services operators improve those independent variables in the same period, they will see that a significant enhancement in the passengers' interest in transportation services in Jakarta, Bogor, Depok, Tangerang, and Bekasi. A partial test indicates that ease-of-use significantly influences the passengers' interest in transportation services. Likewise, ease-of-use and price partially have a significant influence on the passengers' interest in transportation services. In this study, promotion does not significantly influence the interest of motorcycle transport passengers [22]. This is not in accordance with the theory explained in the bibliographical review. However, this result in this study does not contradict their theory. In certain situations, the promotion of transportation services does not have a significant influence since people know and like the service for other reasons, such as the ease of ordering, the reasonable price, and the desire to alleviate traffic.

5. Conclusion

Based on the research results and the discussion in this study, the authors conclude that image, ease-of-use of the application, price and promotion have a very significant role in enhancing or influencing the passengers' interest in transportation services. To maintain a good image, operators should consistently evaluate their drivers and develop a high standard of performance for them, such as 4.5 on a scale of 1 to 5. If performance is under the standard, at that time it is suggested that those drivers participate in training. At the same time, operators should

consistently provide rewards for drivers who put in extra time and for those whose performance is above standard, so that those drivers will continue to deliver excellent service. Operators should maintain the ease-of-use of their applications, since this is important for customers in making a choice. For customers, price is important in making a choice to use transportation services. Therefore, operators should offer competitive prices to keep up with tight competition. Generally, customers have been very familiar with the three operators of transportation services, knowing both their strengths and weaknesses. Thus, promotion is necessary only when introducing a new product/service.

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