

Marketing Approach on Competitive Advantage of Online-Based Public Transportation

Muhammad Iffan
Departemen Manajemen
Universitas Komputer Indonesia
Bandung, Indonesia
m.iffan@email.unikom.ac.id

Abstract — the aim of this research is to determine the competitive advantage using marketing approach of online-based public transportation. Marketing approach used in this research is a service marketing mix that includes product, price, promotion, place, people, process, and physical evidence. The method used in this research was comparative analysis using parametric analysis, independent sample t-test. Sampling method used in this research was random sampling through the distribution of a series of questionnaires to 200 online-based public transportation customers as a case study. This research investigated means the difference of competitive advantage between online-based public transports using marketing approach strategy. The result shows that there is a significant difference on four competitive advantage factors on online-based public transportation. Nevertheless, competitive advantage could be a factor that can determine the long-term success of online-based service company, especially online-based public transportation sector. The finding of this research contributes to encourage online-based service company to develop their competitive advantage to compete with others. By applying the appropriate marketing strategy, it is expected that the company can added value for the products/services offered to the public so they can achieve competitive advantage and win competition in the market.

Keywords—Competitive Advantage, Online-Based Public Transportation

I. INTRODUCTION

Lately, technology-oriented businesses have developed throughout the world [1]. With current technology, entrepreneurs have the opportunity to develop their business both domestically and internationally [2]. Technological improvement that occurred was accompanied by an increase in customer demand that forced entrepreneurs to develop strategies in attracting potential customers to win the competition in the market [3]. E-commerce is a way entrepreneur can do to maintain and improve their business with technology [4]. Entrepreneurs can easily find information about consumer needs using technology. The use of information technology to develop e-commerce can reduce transaction costs, reduce uncertainty, share market information, and simplify the distribution process. Providing information systems is the first important step towards developing a successful e-commerce business model [5]. Many online-based companies have focused on visual appearance and ease of use of their websites and applications to increase their customers in order to provide better service [6]. In this research, four marketing mix models were used to

identify the strategies of online-based public transport companies to achieve competitive advantage. The purpose of this study was to provide new insights into the development and application of online-based business strategies that can contribute to increasing profits. Competitive advantage is the result of the implementation of strategies that utilize resources owned by the company. Competitive advantage can be created if customers feel the product/service offered is better than competitors.

There were prior researches showed the impact of marketing mix to competitive advantage. Singh (2012) indicated that marketing mix helps the firm in creating strategic decisions for competitive advantage. The research describes the importance of marketing mix for obtaining competitive advantage in market [7]. Another research by Azadi (2011) showed that marketing mix contributes to increase profit of e-business. The research uses McCarthy's four marketing mix model and Porter's five competitive forces model to achieve a competitive advantage [6]. Unfortunately, the two prior research mentioned above did not compare the competitive advantage of a company with others. On the other hand, other research by Li (2006) indicated that supply chain management could lead to competitive advantage and improve company performance [8]. However, the research used supply chain management practices to influence competitive advantage instead marketing mix approach. The result of Wenli's research (2007) stated that buyer competitive advantage is built from efforts of supplier development [11]. This research used different factors to determine a company's competitive advantage. Then, another research from Kearns (2004) showed the positive and significant influence of the use of IT on competitive advantage [12]. However, this research does not compare the competitive advantage between companies.

The purpose of this research is to find out the difference of competitive advantage on online-based public transportation uses marketing approach strategy. The research used quantitative method using parametric analysis, independent sample t-test. This test is used to determine whether there is a mean difference between two unrelated sample groups. Simple random sampling is used as a sampling method. The sample is 200 online-based public transportation customers. This research compared the competitive advantage on online-based public transportation companies (Grab and Go-Jek) using a marketing approach; product, price, place, and promotion. Based on the marketing-approach method used in this study, the results

state that Go-Jek is superior to Grab on product & place indicators and on the other hand Grab is superior to Go-Jek on price indicators. In the promotion indicator, Grab is slightly superior to its competitors, in other words, there is no significant average difference between Grab and Go-Jek. The results of this study are not absolute results, because there are other factors that can affect the company's competitive advantage such as process, people, physical evidence, and others. But the results of this study can be a reference for further research in analyzing the company's competitive advantage. The companies are required to be able to create new strategies that can attract and retain potential customers to create added value from the products/services offered in achieving competitive advantage so that they can compete in the market.

II. METHOD

Survey design in this research is a cross-sectional survey design used a questionnaire. The analysis was conducted to online-based public transportation customers on June 2019. The sample was taken from 200 online-based public transportation customers. The customers that is chosen to be respondents in this research are customers who have used online-based transportation. This could give a reliable answer to this research in knowing competitive advantage on Grab and Go-Jek as online-based public transportation.

The questionnaire was divided into four parts. The first part discusses about product. Product refers to goods or services offered to consumers. The second part discusses about price. Price refers to the amount of costs that consumers pay for goods or services. The third part discusses about place. Place includes distribution channels and transportation coverages where goods and services are transferred from service providers to consumers. In addition, the fourth part discusses about promotion. Promotion helps entrepreneurs to introduce goods and services to consumers effectively and encourages them to buy [7]. Likert scale is used to compare the competitive advantage on online-based public transportation companies (Grab and Go-Jek) based on customer experience.

Data analysis method used in this research is independent sample t-test. This test can detect the spread of data and median differences. Different forms of data distribution usually accompany differences in the median population. Levene's test were also used to find out whether the data has the same variance or not. Based on this research, there are significant mean differences in all four factors of competitive advantage on Grab and Go-Jek as online-based public transportation companies.

The hypothesis proposed in this research are as follows:

- H1: There is a difference about products offered to customers between Grab and Go-Jek.
- H2: There is a difference about price offered to customers between Grab and Go-Jek.
- H3: There is a difference about coverage of service area offered to customers between Grab and Go-Jek.
- H4: There is a difference about promotion offered to customers between Grab and Go-Jek.

III. RESULTS AND DISCUSSION

The test was carried out before the independent samples T-test is Levene's test to find out whether the data variance is the same or not. If the data variance is the same, then the T test uses Equal Variance Assumed. Moreover, if the variance is different, then the T test uses Equal Variance Not Assumed. After Levene's test, the independent samples T-test is then carried out. Table 1 below explains the results of Levene's test and independent samples T-test for Product. Table 1 below explains the result of Levene's test and independent samples T-test for Product:

TABLE I. THE RESULT OF LEVENE'S TEST AND INDEPENDENT SAMPLES T-TEST FOR PRODUCT

| | | PRODUCT | | |
|---|---|-------------------------|-----------------------------|--------|
| | | Equal variances assumed | Equal variances not assumed | |
| Levene's Test for Equality of Variances | F | .770 | | |
| | Sig. | .381 | | |
| t-test for Equality of Means | t | -2.015 | -2.015 | |
| | df | 198 | 196.001 | |
| | Sig. (2-tailed) | .045 | .045 | |
| | Mean Difference | -.780 | -.780 | |
| | Std. Error Difference | .387 | .387 | |
| | 95% Confidence Interval of the Difference | Lower | -1.543 | -1.543 |
| | | Upper | -.017 | -.017 |

Based on Table 1, the variance assumption test results for the product are 0.770 with a significance value of 0.381. Because the significance value is greater than 0.05, it can be concluded that the Grab and Go-jek data groups have the same variant, so the Independent Sample T-test uses Equal Variances Assumed.

Table 1 presents the results of the Independent Samples T-test for Products, these results state that the -T value is smaller than the -T table ($-2,015 \leq -1,972$) and the significance value of 0.045 is smaller than 0.05. From the results it can be concluded that the H1 hypothesis is accepted, meaning that there are differences in the Products offered to customers between Grab and Go-jek. So, in based on Product category, Go-jek is superior to Grab. Table 2 below explains the result of Levene's test and independent samples T-test for Price.

TABLE II. THE RESULT OF LEVENE'S TEST AND INDEPENDENT SAMPLES T-TEST FOR PRICE

| | | PRICE | | |
|---|---|-------------------------|-----------------------------|-------|
| | | Equal variances assumed | Equal variances not assumed | |
| Levene's Test for Equality of Variances | F | .609 | | |
| | Sig. | .436 | | |
| t-test for Equality of Means | t | 2.110 | 2.110 | |
| | df | 198 | 195.189 | |
| | Sig. (2-tailed) | .036 | .036 | |
| | Mean Difference | .680 | .680 | |
| | Std. Error Difference | .322 | .322 | |
| | 95% Confidence Interval of the Difference | Lower | .044 | .044 |
| | | Upper | 1.316 | 1.316 |

Table 2 presents the results of the variance assumption test for Price is 0.609 with a significance value of 0.436. Based on the results it can be implied that the Grab and Go-jek data groups have the same variant because the

significance value is greater than 0.05. Thus, the Independent Sample T-test uses Equal Variances Assumed.

Based on the results of the Independent Samples for the T-test of Price in Table 2, T-value is greater than T-table ($2.110 \geq 1.972$) and the significance value of 0.036 is smaller than 0.05. These results state that the H2 hypothesis is accepted, meaning that there are differences in the price offered to customers between Grab and Go-jek. In Price category, Grab is superior to Go-jek. Table 3 below explains the result of Levene's test and independent samples T-test for Place:

TABLE III. THE RESULT OF LEVENE'S TEST AND INDEPENDENT SAMPLES T-TEST FOR PLACE

| | | PLACE | | |
|---|---|-------------------------|-----------------------------|-------|
| | | Equal variances assumed | Equal variances not assumed | |
| Levene's Test for Equality of Variances | F | .058 | | |
| | Sig. | .809 | | |
| t-test for Equality of Means | t | -2.255 | -2.255 | |
| | df | 198 | 197.937 | |
| | Sig. (2-tailed) | .025 | .025 | |
| | Mean Difference | -.280 | -.280 | |
| | Std. Error Difference | .124 | .124 | |
| | 95% Confidence Interval of the Difference | Lower | -.525 | -.525 |
| | | Upper | -.035 | -.035 |

Based on Table 3, the results of the variance assumption test for Place obtained are 0.058 with a significance value of 0.809. Because the significance value is greater than 0.05, it can be concluded that the Grab and Go-jek data groups have the same variant, so the Independent Sample T-test uses Equal Variances Assumed.

Table 3 presents the results of the Independent Samples T-test for Place, the results state that the -T value is smaller than the -T table ($-2.255 \leq -1.972$) and a significance value of 0.025 smaller than 0.05. These results conclude that the H3 hypothesis is accepted, meaning that there are differences in the coverage of service areas offered to customers between Grab and Go-jek. So, in the Place category, Go-jek is superior to Grab. Table 4 below explains the result of Levene's test and independent samples T-test for Promotion:

TABLE IV. THE RESULT OF LEVENE'S TEST AND INDEPENDENT SAMPLES T-TEST FOR PROMOTION

| | | PROMOTION | | |
|---|---|-------------------------|-----------------------------|-------|
| | | Equal variances assumed | Equal variances not assumed | |
| Levene's Test for Equality of Variances | F | .204 | | |
| | Sig. | .652 | | |
| t-test for Equality of Means | t | .747 | .747 | |
| | df | 198 | 196.998 | |
| | Sig. (2-tailed) | .456 | .456 | |
| | Mean Difference | .160 | .160 | |
| | Std. Error Difference | .214 | .214 | |
| | 95% Confidence Interval of the Difference | Lower | -.262 | -.262 |
| | | Upper | .582 | .582 |

Table 4 presents the results of the variance assumption test for Promotion of 0.204 with a significance value of 0.652. Based on the results it can be said that the Grab and Go-jek data groups have the same variant because the significance value is greater than 0.05. So that the Independent Sample T-test uses Equal Variances Assumed.

Based on the results of the Independent Samples for Promotion T-test in Table 4, T-value is smaller than T-table

($0.747 \leq 1.972$) and the significance value of 0.456 is greater than 0.05. The result states that the hypothesis H4 is rejected, meaning that there is no difference in Promotion offered to customers between Grab and Go-jek.

Competitive advantage is the difference between the value and cost of producing goods or services compared to competitors. If the economic value created is greater than the value of its competitors, the company has a competitive advantage; if the economic value is the same as the competitor, the company has a competitive balance; if economic value is lower than competing companies, companies have competing weaknesses [9]. Competitive advantage is an important attribute that can increase yields and become a differentiating aspect between companies with other companies [10]. There are many factors that can influence competitive advantage, this study discusses how the company's ability to compete using the marketing mix factor.

The first factor that can affect Competitive Advantage in this study is Product. The results obtained show that Go-Jek is superior to its competitors, namely Grab. Based on observation, Go-jek has more products / services offered to customers that Grab does not have, for example like Go-Fix. Go-Fix is a product / service offered by Go-Jek to help its customers improve electronic equipment. Another example is Go-Auto. Go-Auto is a feature of Go-Jek that makes it easy for customers to get motorized repair services.

The second factor is Price. The results showed that Grab was superior to Go-Jek. Based on the results of field observations and random interviews with respondents, Grab offers prices for products / services that are more affordable compared to Go-Jek. Then the third factor that can affect Competitive Advantage is Place. The coverage area of the service owned by Go-Jek is larger than that of Grab. This is indicated because Go-jek has more products or services offered to customers.

The last factor that affects Competitive Advantage in this study is Promotion. The results of the study explained that there were no significant differences regarding the promotion carried out by these two online-based public transportation companies. However, based on available data, Grab is slightly superior compared to Go-Jek. Based on the results of field observations and interviews, this is because Grab often gives promotions to attract customers to use their products / services more often.

Due to limited conditions and resources, we only analyzed four elements of the marketing mix. The focus of this study is to compare the competitive advantage between two online-based public transportation companies based on products, prices, places & promotions offered to customers. Further research is needed to refine this research by adding other factors that are indicated to influence competitive advantage.

IV. CONCLUSION

The results of this study indicate that the marketing mix has an influence on the competitive advantage of a company. Based on the results of this research, the first three hypotheses were accepted, this means that there are significant differences in Product, Price, and Place offered to

customers between Grab and Go-Jek. The last hypothesis in this research was rejected, it means that there is no significant difference regarding the Promotion offered to customers between Grab and Go-Jek. By applying the appropriate strategy, it is expected that the company can create added value for the products/services offered to the customers so they can achieve competitive advantage and win competition in the market. Further research is needed to perfect this research.

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