

## THE MARKETING MIX STRATEGY BASED ON CONSUMER BEHAVIOR ANALYSIS AT TAXI MAX CIPAGANTI IN SURABAYA

Esti Dwi Rinawiyanti<sup>1</sup>, Rosita Meitha<sup>2</sup>, Ira Mayasari<sup>3</sup>

<sup>1 2 3</sup>Departement of Industrial Engineering, University of Surabaya  
Raya Kalirungkut, Surabaya 60293, Indonesia  
E-mail: estidwi@ubaya.ac.id

### ABSTRACT

Nowadays transportation is a rapidly growing service industry in Indonesia. Taxi Max is Cipaganti new transport service division of PT Citra Graha. Taxi Max which has been operating in Bandung and Jakarta tried to enter Surabaya by relying on the superiority completeness facilities. In order to compete with other existing similar industries, Taxi Max 'Cipaganti need to pay attention to the characteristics of consumer behavior of taxi users, especially in the city of Surabaya. The results of sampling showed that the majority of taxi users are female (54%), aged 16-25 years (79%), students (67%), and income <Rp 1,500,000 (45%). Based on lifestyle, the majority of consumer users Taxi Max are The Socialite (29%) and The Affluent (21%). The results also showed that the excellence of Taxi Max with a high level of satisfaction lies in good taxi condition (3.79), the comfortable atmosphere in a taxi with full facilities (3.96), the cleanliness in the taxi (3.87), comparable rates to the facilities provided (3.56), security service to destination (3.79), hospitality of taxi driver (3.65), the driver has good knowledge of the destination path (3.66). While the lack of taxis Max with low satisfaction level are on ease of finding a taxi public places (2.96), the ease of booking a taxi (3.18), easy to remember phone numbers (3.16), affordable rates (3.44), and the appearance of taxi driver uniform (3.53). The results of the questionnaire were then used to design a marketing strategy (8P) with a focus on the variables that need to be maintained and variables that still need to be improved.

**Key words:** taxi, consumer behavior, marketing mix

### 1. INTRODUCTION

Taxi Max is a new transport service division of Cipaganti, which is part of PT Citra Graha. Taxi Max has been operating in Bandung and Jakarta, and since March 29, 2011 Taxi Max was operated in Surabaya by launching a fleet of 200 units. Currently there are 26 taxi operators in Surabaya with approximately 4250 taxi units. Due to the rapid economic growth and development of Surabaya as business and trade, the calculation of the ideal number of taxis in Surabaya is 6,000 units. Thus, the opportunity to enter the taxi market in Surabaya is still possible. In order to compete with similar existing industries Taxi Max Cipaganti need to have a good knowledge and understanding of the characteristics of taxi users in Surabaya. It is necessary to analyze consumer behavior of taxi users and identify what consumers need and want. The objectives of this research is to determine the variables/factors influencing

consumers in choosing and using a taxi service, to identify the characteristics of consumer behavior of Taxi Max Cipaganti in Surabaya, and to design improvements of more appropriate and effective marketing mix strategies. The results are expected to provide useful information for the company as a basis for planning the right marketing strategy.

### 2. THEORITICAL BACKGROUND

One of the products that can be offered to the market is the service, activities or benefits benefits offered for sale that are essentially intangible and do not result in ownership of anything (Kotler, 2010, p.30). According to Kotler (2010, p 269) service has four characteristics that should be considered in designing a marketing program, namely: (1) Intangibility: services can not be seen, touched, or heard before purchase, so that customers can not see the

results or benefits of services before making a purchase; (2) Inseparability: services are generally produced and consumed exclusively at the same time; (3) Variability: it is very difficult to achieve a result of service with the appropriate quality standards. Services depend on by whom, when, and where the services were provided; and (4) Perishability: service is a commodity that is not durable and can not be saved.

Customer satisfaction is the perception that customer expectations are met or exceeded (Gerson, 2004). Furthermore customers will be happy (delighted) if the company can deliver more than expected. If customers are not satisfied, then he will stop business with the company. But if the customers are satisfied, they will do more business and more often to the company, as well as loyal to the company. The simplest way to measure customer satisfaction is directly asking customers how satisfied they are with the quality and service of the company, then doing measurement of it, and comparing it with the level of customer satisfaction (Tjiptono, 2005). Measurements can be done through surveys and interviews, and from the results of surveys and interviews can be seen how is the perception of customers regarding the quality and service of the company. Therefore the company can get an idea whether the customer is satisfied with the quality and service provided and how is the current position of the company seen from customer perceptions against the quality and service provided.

A taxi, as one of transportation mode, is a service product. Satisfaction of consumers who use taxi will depend on the performance given to the consumer when riding the taxi. Consumers will be satisfied if the performance of the taxi is as expected. Research on consumers of taxis in Jakarta stated that the factors in top priority and should be implemented for compliance with consumer expectations are the ability of a company to be responsive to consumer complaints and the hospitality personnel (Arifin, 2005). While the factors to be considered to improve the user satisfaction are the timeliness of the provision of taxi when ordering by telephone, the availability

of time to respond to passenger complaints, easiness to get a taxi anywhere and anytime, the ability of the driver to provide a fast and appropriate service to the passengers, and the honesty of the driver (Deddy, 2010). Factors that need to be maintained are the taxi, cleanliness of the taxi, driver appearances, facilities in the taxi as a complementary service, and timeliness to deliver passengers to their destination, the meter (argo) conformity, security, hospitality and courtesy driver, and driver awareness. In conjunction with a service to consumers, the consumer involvement in the service giving process can not be avoided. This makes the marketing mix for the services evolved into eight variables known to 8PS model of integrated service management namely product, price, place, promotion, people, process, physical evidence, and productivity/quality (Lovelock and Wringht, 2005, p.18),

Several studies about taxi that have been done were mostly applied on a taxi that has long operated and customer satisfaction analysis was assessed using service quality with the five dimensions of tangible, responsiveness, assurance, reliability and empathy. However, the research described in this paper is slightly different because it is applied to newly operated taxi (less than two years) to analyze the consumer behavior and customer satisfaction and then based on those analyses to design appropriate marketing mix that can be applied. Consumer behavior is the study of how individuals, groups, and organizations select, buy, use, and how goods, services, ideas, or experiences to satisfy their needs and desires. The study of consumer behavior will be the basis of a very important in marketing management and will help the marketers to design marketing mix, to define segmentation, to formulate positioning and product differentiation, to analyse business environmental, and to develop marketing research. (Setiadi, 2010, p.7)

### 3. RESEARCH METHOD

Questionnaire for sampling were distributed to 100 respondents (actual consumers of Taxi Max) and divided into three parts: the

first part contains 14 questions related to demographic variables and consumer behavior, the second part includes 19 questions related to 8P to determine the level of interest, while the third part contains 19 questions (similar to the second part) to determine the level of customer satisfaction. The results of the questionnaires will be presented in accordance with the relevant analysis.

#### 4. RESULTS AND DISCUSSION

The results of sampling will be presented into four parts, such as analysis of consumer behavior, analysis of importance, analysis of customer satisfaction, and analysis of quadrant.

##### The Analysis of Consumer Behavior

The analysis of consumer behavior is to know characteristics influencing consumer-users of Taxi Max. The results of the questionnaire are listed in Table 1 explained as follows:

1. Social class (cultural) characteristics include (1) Occupation: the majority is the student (67%), and (2) Income: the majority is <Rp 1,500,000 (45%).
2. Social characteristics consist of (1) Family status: the majority is single (87%); (2) Information source of Taxi Max: the majority is personal (family and friends) (54%), then followed by experience (27%); (3) Parties who gives advice on using taxi: the majority is coming from respondents themselves (51%), the second is coming from friends (31%); (4) Parties who make a decision in using taxi: a majority 70% is from the respondents themselves, then the second is family (17%).
3. Personal characteristics include (1) Sex: the most dominant is female (54%); (2) Age: the majority is 16-25 years (79%); (3) How long being a customer of Taxi Max: the majority is 5 months (21%), followed by 6 months (15%); (4) Type of lifestyle: the majority is a lifestyle group of The Socialite (29%) and the second is The Affluent (21%). The Socialite is a group of people who like to hang out, socialize with others, like to take risks and dare to act, tend to dominate others

and stand out, and reactive to changes. The Affluent is a group of people who have a hard-working nature, have a strong confidence (such as innovation, proactive, willing to take risks), pleased to seek for attention and likely to be open to new things and have the ability to influence/to lead others.

4. Psychological characteristics include (1) Motivation: the first reason why respondents use a taxi is no vehicle (37%), followed by unexpected requirement (34%); (2) Physically memory (Perception): the most dominant is design and style (57%) and red colour (37%); (3) Frequency of taxi usage in a month (Learning): the majority is once a month (30%), the second is twice a month (28%); (4) Important factors choosing a taxi (Belief) are safety, price, and performance driver; (5) Type of decision-making behavior: the most dominant type is habitual buying behavior (36%), then dissonance reducing buying behavior (29%). Habitual buying behavior is based only on habit rather than loyalty to the brand. Consumers just do as what has become their habit, so when they need a taxi then they will call a taxi with a memorable number without considering the facilities, the interior, and the function of a taxi. They will think quickly and will make purchases in accordance with their habit.

##### The Analysis of Importance

From the results of the questionnaire in the first part can be seen that important variables in choosing a taxi (sorted from the highest), are (1) Safety, (2) Price, (3) Performance driver, (4) Service, (5) Quality of taxi (clean, neat, fragrant), (6) The speed in response to the order, (7) Convenient. These variables asked in more detail in the second part questionnaire to determine the importance of each variable in choosing a taxi. To simplify calculation is created the scale of measurement as specified in table 2. The average value of importance level can be seen in Table 3. Two variables that have medium value of importance level are on the dimension of physical evidence, namely the attractive exterior design of a taxi (3.33) and the availability of meter receipt (3.37). Variables considered very important

with average >3.66 are 17 variables in dimension of product, place, promotion, price and other cost of service, process, productivity and quality, and people.

**The Analysis of Customer Satisfaction**

Customer satisfaction will be analyzed to know how satisfied customers with Taxi Max to date. The average value for the level of satisfaction is listed in Table 3. From Table 3 can be seen 7 variables that have high satisfaction level. They are in dimensions of product, process, and physical evidence, i.e. (1) good taxi condition, (2) the comfortable atmosphere in a taxi with full facilities, (3) the attractive design of a taxi, (4) cleanliness in a taxi, (5) well-maintained taxi condition, (6) security service to destination, and (7) completeness of meter conformity. While the

level of satisfaction for other 12 variables are in the medium category of satisfaction level with the average value of 2.65 – 3.66.

**The Analysis of Quadrant**

The results of the analysis of importance level and the analysis of customer satisfaction level then will be used to make quadrant analysis in order to determine which variables that still needs to be improved or maintained which will be used to design a marketing mix strategy. Using the overall average value of customer satisfaction level of 3.54 and the overall average value of importance level of 4.02, where both of those average values are used as the coordinate axes. A graph of quadrant analysis can be seen in Figure 1.

Table 1. Questions related to consumer behavior with the most two answer

No.	Variables	Answer	Quantity	Percentage %
1	Sex	Male	46	46
		Female	54	54
2	Age	16-25	1	1
		26-35	79	79
3	Status	Single	87	87
		Married	13	13
4	Occupation	Student	67	67
		Employee	16	16
5	Income	<1.500.000	45	45
		1.500.000 - 2.999.999	33	33
6	Frequency of taxi usage in a month	1	30	30
		2	28	28
7	Needs to use taxi	No vehicle	37	37
		Unexpected requirement	34	34
8	Parties who give advice on using taxi	You	51	51
		Friends	31	31
9	Parties who make a decision in using taxi	You	70	70
		Family	17	17
10	Types of buying decision behaviour	Habitual Buying Behavior	36	36
		Dissonance Reducing Buying Behavior	29	29
11	Types of life style	The Socialite	29	29
		The Affluent	21	21
12	How long being a customer of Taxi Max	Since Desember 2011	21	21
		Since November 2011	15	15
13	Information source of Taxi Max	Personal (Family, Friend)	54	54
		Eksperience	27	27
14	Physically memory	Design and Style	57	59
		Red colour	37	39

Table 2. The measurement scale for the importance level and the satisfaction level

Scale	The level of importance and the level of satisfaction
1.000 – 2.33	Low
2.331 – 3.66	Medium
3.661 – 5.00	High

Table 3. The average value of importance level and satisfaction level

Dimension	No.	Variable	Average value of importance level	Mean/ Dimension	Average value of satisfaction level	Mean/ Dimension
Product elements	1	Well-maintained taxi condition	4.06	4.15	3.79	3.87
	2	The comfortable atmosphere in a taxi with full facilities	4.10		3.96	
	3	Cleanliness in taxi	4.30		3.87	
Place	4	Ease to find a taxi in public places	4.20	4.21	2.96	3.10
	5	Ease to order a taxi	4.34		3.18	
	6	Ease to remember telephone number	4.09		3.16	
Promotion	7	Discount	3.92	3.92	2.65	2.65
Price and other cost of service	8	Affordable rate	4.08	4.13	3.44	3.50
	9	Comparable rates to facilities provided	4.19		3.56	
Process	10	Security service to destination	4.26	4.26	3.79	3.79
Productivity and quality	11	Care and attention to customer's complaint	3.99	3.99	3.42	3.42
People	12	Hospitality of taxi driver	4.05	4.08	3.65	3.49
	13	Appearance of taxi driver uniform	4.05		3.53	
	14	Taxi driver has the good knowledge of the destination path	4.24		3.66	
	15	Quick respond to order by phone	4.00		3.14	
Physical evidence	16	Good taxi condition	3.83	3.63	4.08	3.86
	17	The attractive exterior design of a taxi	3.33		3.94	
	18	Completeness of meter (argo) conformity	4.01		3.79	
	19	The availability of meter receipt	3.37		3.62	
The overall average value			4.02		3.54	

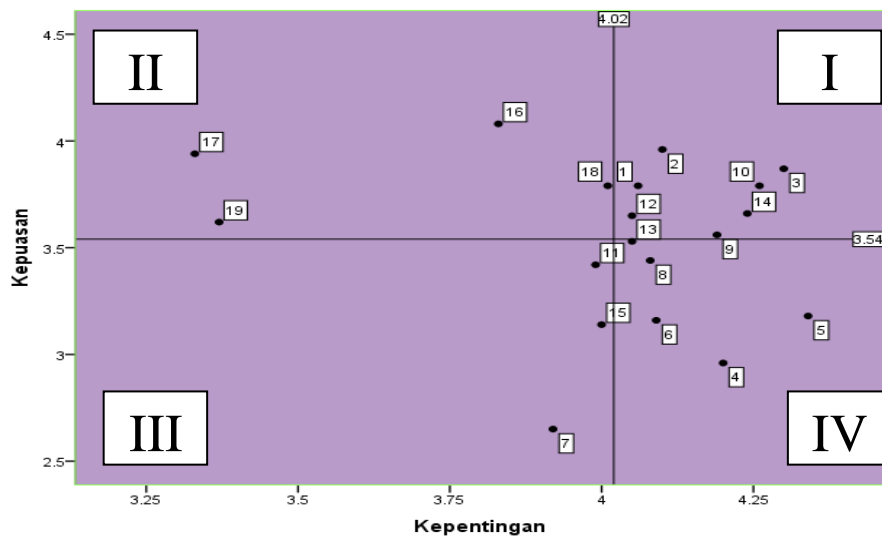


Figure 1. A graph of quadrant analysis

From the graph of quadrant analysis can be analyzed the strengths and weaknesses of Taxi Max for this time being as below:

- Quadrant I (Strengths) describes variables that have high importance level and high satisfaction level. They are 7 variables, namely (1) Well-maintained taxi condition, (2) The comfortable atmosphere in a taxi with full facilities, (3) Cleanliness in a taxi, (4) Comparable rates to the facilities provided, (5) Security service to the destination, (6) Hospitality of taxi driver, and (7) The driver has good knowledge of the destination path.
- Quadrant IV (Weaknesses) represents variables that have high importance level but low satisfaction level. They consists of 5 variables, i.e. (1) Ease of finding a taxi in public places, (2) Ease of booking a taxi, (3) Ease to remember telephone number, (4) Affordable rate, and (5) Appearance of taxi driver uniform.

### The Strategy of Marketing Mix

The results of consumer behavior and quadrant analysis then can be used to design a marketing mix strategy as follows:

1. Product: no changes to the product being offered, especially the core benefit. More attention should be given to product attributes (actual product), such as (1) Product quality: providing a well-maintained condition taxi because it has an average satisfaction value of 3.79 and

the average importance value of 4.06, at quadrant I, which is the superiority of Taxi Max. Therefore Taxi Max needs to provide a regular schedule for checking the machine and it is important to always keep the cleanliness of the taxi (average satisfaction value of 3.87 and an average importance value of 4.30, at quadrant I) by giving a small trash can in the car and maintaining the condition of the taxi free of the smell of cigarettes; (2) Product features: comfortable atmosphere in a taxi with full facilities in it, like air-conditioning, music, meter, karaoke, Wifi, and free phone for Flexi (average satisfaction value of 3.96 and average importance value of 4.10, located in quadrant I).

2. Price: No change in price strategy still uses Market Penetration Pricing by applying an equal rate to the other taxi, but with a cheaper minimum payment of Rp 15,000 (less than Rp 25,000 of Blue Bird Taxi) and free of additional charge for products with full facilities.
3. Place: there are several variables related to place that get consumer complaints, such as (1) Ease of finding a taxi in a public place (the average satisfaction value of 2.96 and the average importance value of 4.20); (2) Ease of booking a taxi (the average satisfaction value of 3.18 and the average importance value of 4.34); (3) Ease to remember phone numbers (the average

- satisfaction value of 3.16 and the average importance value of 4.09). Thus, to minimize those weaknesses Taxi Max can begin designing the new base places near the universities/ schools and developing a partnership with the university/school which is similar to what was done by competitors Silver and Orenz taxi which have collaboration with the University of Surabaya. To overcome the current bookings is already created 3 telephone lines which make consumer easier to contact.
4. Promotion: It has an average satisfaction value of 2.65 and an average importance value of 3.92 and at quadrant III where the level of satisfaction and the level of importance are lower than the overall average. Therefore the variables on dimension of promotion should be improved. It is important to note that the majority of consumer lifestyle is The Socialite and The Affluent. The majority of parties who gives advice on using taxi is respondents themselves (51%), and the most dominant of parties who make a decision in using tax is 70% is from the respondents themselves. Commercial promotion through sales promotion can be done to increase the taxi usage in the short-term, such as:
    - a. Providing a gift/bonuss for each payment reached Rp 50,000, like pens, notepads and so on with a corporate identify from Taxi Max. It can be also a part of public relation activities.
    - b. Coupons 10x get 1x free service for Rp 15,000 minimum payment. After collecting payment receipt by 10x, a consumer will get a rebate of 1x minimum payment.
  5. Process: The variable of security service to destination has the average satisfaction value of 3.79 and at quadrant I. Nevertheless Taxi Max must stay alert and pay attention to this variable because security service was ranked number one with an average value of 5.26 on the questions of what the most important factors in choosing a taxi. More over Taxi Max needs to maintain consumer confidence and feeling that Taxi Max is safe to use. Giving security guarantees to customers and their luggage can be carried out by keeping the doors always locked and applying the maximum speed. The drivers must also be careful in driving, prioritize the safety of passengers, and install seatbelt safety for themselves and to remind consumers who sits to the left of the driver's seat.
  6. Productivity and quality: It has the average satisfaction value of 3.42 and average importance value of 3.99 and at quadrant III, hence it needs to be improved and expected to become the strenghts of Taxi Max, such as:
    - a. Operating a full 200 units (now still operating  $\pm$  160 units).
    - b. Taxi driver should be good in driving carefully and not carelessly.
    - c. Taxi Max needs to do periodic (yearly) surveys that can measure the level of consumer satisfaction.
  7. People: focusing on the performance of the driver and operator with some suggestions:
    - a. Providing training for the driver to enhance the hospitality and readiness to help consumers (Hospitality of driver has an average value of satisfaction level of 3.65 and the average value of importance level 4.05, located in quadrant I), as well as to provide knowledge about the destination well, so that the driver will be more skilled and familiar with the streets of Surabaya.
    - b. Taxi Max operators need to take advantage of existing opportunities by setting up a customer's database (names, addresses and phone). When receiving calls operators should response with a friendly attitude. If there is already customer name in a stored call database, operators should call his name, so that customers have good impression. Furthermore operators should respond quickly and inform the target time when a taxi can reach them.
  8. Physical Evident: All variables on the dimensions of physical evidence lie in quadrant II which has higher satisfaction level than overall average value of 3.54 and lower importance level than overall average value of 4.02. This indicates that those variables can be as competitive

advantage possessed by Taxi Max, hence Taxi Max should keep and maintain it. Those variables include taxi good condition, exterior design of taxi, completeness of meter conformity, availability of meter receipt. The design of Taxi Max is very unique and interesting which is representing images of Indonesia culture painted on the car body with the theme "The Great Art and Culture of Indonesia".

## 5. CONCLUSION

1. Characteristics of consumer behavior of Taxi Max in Surabaya are female, single, 16-25 years, the majority of student, income <3,000,000, minimal use 1x a month, using taxi due no vehicle, parties who give advice and decision-makers are consumer themselves, habitual buying behavior, the type of lifestyle the Affluent and The Socialite, obtaining information from personal, design and style are the most remembered by consumers.
2. Based on this research can be taken 5 variables that have the highest average value of importance level, namely (1) Ease of booking a taxi, (2) Cleanliness in the taxi, (3) Security services to the destination, (4) Drivers have good knowledge of direction, and (5) Ease of finding a taxi in public places.
3. Based on the analysis of the quadrant, there are some variables that need to be improved, including (1) Ease of finding a taxi in public places, (2) Ease of booking a taxi, (3) Easy to remember phone numbers, (4) Affordable rates, and (5) Appearance of taxi driver uniform.
4. Based on the analysis of consumer behavior and quadrant analysis can be designed the service marketing mix strategy covering 8Ps with focus on the dimensions of place, promotion, and productivity, while those 3 dimensions have high average value of importance level but low average value of satisfaction level.

## 6. REFERENCES

- (a) Gerson, Richard F, (2004) *Mengukur Kepuasan Pelanggan*, Penerbit PPM, Jakarta.
- (b) Kotler, Philip and Armstrong, Gary, (2010) *Principles of Marketing*, 13th Edition, Prentice-Hall International Inc., Englewood Cliffs.
- (c) Lovelock, Christopher & Wright, Lauren (2005) *Manajemen Pemasaran Jasa*, PT Indeks Kelompok Gramedia, Jakarta.
- (d) Setiadi, Nugroho.J (2010) *Consumer Behavior*, Kencana, Jakarta.
- (e) Soprijadi, Arifin S, (2005) Beberapa Faktor Kualitas Pelayanan yang Mempengaruhi Konsumen dalam Memilih Jasa Taksi di DKI Jakarta, *Jurnal Ekonomi Teleskop STIE Y.A.I.* Vol 4 Edisi 7.
- (f) Tjiptono, Fandy, (2005) *Pemasaran Jasa*, Bayu Media Publishing, Malang.
- (g) Wicaksono, Deddy Setyawan, (2010) *Analisis Kepuasan Pengguna Jasa Transportasi Taksi untuk Meningkatkan Loyalitas (Studi pada PT. Blud Bird Pusaka di Semarang)*, Universitas Diponegoro, Semarang.

## AUTHOR BIOGRAPHIES

**Esti Dwi Rinawiyanti** is a lecturer in Department of Industrial Engineering, Faculty of Engineering, University of Surabaya, Surabaya. She received her Master of International Management from Fachhochschule Nuertingen in 2001. Her research interests are in the area of Marketing and Innovation. She is a member of the Engineering Management Laboratory. Her email address is [meidira@gmail.com](mailto:meidira@gmail.com).