

# THE INFLUENCE OF MARKETING MIX AND MARKETING ENVIRONMENT TOWARDS CUSTOMERS SATISFACTION TO ENHANCE THE LOCAL SMALL MEDIUM ENTERPRISES COMPETITIVE ADVANTAGE

Raditya Ardianwiliandri, Rio Prasetyo Lukodono, Remba Yanuar Efranto

Industrial Engineering Dept., Universitas Brawijaya

**Abstract** Fruit Chip is one of the most well known Small Medium Enterprise's products in Batu Malang. This is due to the high number of fruit production produced in this city. In selling their products, local Small Medium Enterprise have to face the highly competition from other producers as well who also produced similar products. The increasing number of tourists who came into Batu City also encouraging local Small Medium Enterprises to capture this opportunity by producing food souvenirs such as fruit chip. Therefore, every local Small Medium Enterprises should make continuous improvements in all areas as well as improving the quality of their products especially to maintain and attract the consumers. One of the key areas that need to be developed is marketing by conducting marketing research. This marketing research is conducted by observing the marketing environment (X1) and marketing mix-7P's (X2) towards the customer satisfaction (Y) using Structural Equation Modelling (SEM). Based on the regression analysis, we can conclude that there is significant correlation between marketing mix towards customer satisfaction. The most influential variable in marketing mix is employee, promotion, process, and places. While the biggest influence in marketing environment is new entrants and customer variables.

**Keywords:** Customer Satisfaction, Marketing Mix, Small Medium Enterprises, Structural Equation Modelling.

## 1. Introduction

Fruit Chip is one of the most well known Small Medium Enterprises (SME's) product in Batu Malang. This is due to the high number of fruit production produced in this city. In selling their products, local SMEs have to face the highly competition from other producers as well who also produced similar products. The increasing number of tourists who came into Batu City also encourage the local SME to capture this opportunity by producing food souvenirs such as fruit chip. Therefore, every local SMEs should make continuous improvements in all areas as well as improving the quality of their products especially to maintain and attract the consumers. This is important because sustainable growth and the increase of SME competitiveness will provide the environment for investment and employment [1].

Even though there are no single definite definitions for Small Medium Enterprises, it is very clear that Small and Medium Enterprises has significant contributions towards the economy of a country and even consider as the backbone of the economy [2]. Bank Indonesia as the central Bank in Indonesia has defined SME as all of the businesses that has less than 10 Billion Rupiah's worth in assets and less than 50 billion rupiah's in annual revenue [3].

One of the most important tools in marketing is marketing mix. According to Philip Kotler[4], Marketing Mix is the set of controllable variables that the firm can use to influence the buyer's response. While the marketing mix is a combination of four variables or activities in which are the core of the company's marketing system that is, product, price, promotional activity and distribution system [5]. In order to understand the customer's needs and wants, business owner need to understand every elements of marketing mix to get a satisfy their customers and get a loyal customer [6]. In other words, marketing mix

\* Corresponding author. Email : raditya\_ti\_ub@ub.ac.id  
Published online at <http://Jemis.ub.ac.id> Copyright ©2021 JTI UB  
Publishing. All Rights Reserve

Cite this Article As Ardianwiliandri, R., et.al. (2021). THE INFLUENCE OF MARKETING MIX AND MARKETING ENVIRONMENT TOWARDS CUSTOMERS SATISFACTION TO ENHANCE THE LOCAL SMALL MEDIUM ENTERPRISES COMPETITIVE ADVANTAGE, *Journal of Engineering and Management in Industrial System*, 9(2), p. 94-100

consists of Product, Price, Promotion, and Place. But as the time goes by, the marketing mix increased by 3 more variables into 7Ps [7], which consisted of Product, Price, Promotion, Place, Participant, Process, and Physical Evidence. A good marketing strategy is not only considering the internal aspect that controlled by the company, but we also have to analyze the environment that the company are facing. Therefore, it is also needed for us to understand the nature of the environment that we called as marketing environment. This is important because the rapid competition in the marketing environment force the small and medium enterprises to identify new ways to satisfy their customers and to offer them constantly value in a way much more efficient than their competitors [8]

This marketing research is conducted by observing these two important factors, which are marketing environment and marketing mix-7P's towards the customers satisfaction. Marketers could push further and could influencing higher levels of Customer satisfaction (CS) by using marketing tools such as marketing mix, after understanding the customer's need [9]. The probability of a satisfied customers that become a regular customer would become very high. Therefore good customer satisfaction would give an huge effect towards the profitability of nearly every business [10]. Moreover, satisfied customers allow companies to save money on attracting new customers by freely sharing their emotions and impressions of a product or service with their relatives, friends and acquaintances.

This research will be conducted by using Structural Equation Modelling (SEM). SEM is a

comprehensive statistical approach to testing hypotheses about relations among observed and latent variables [11]. SEM also provides a general and convenient framework for statistical analysis [12]. The variable observed in this marketing research is marketing environment and marketing mix-7P's variable towards the customers satisfaction variable.

The purpose of this study is intended to answer the research question that comes with the background as described above. The purpose of this study are to know the factors of marketing mix and marketing environment that are most important in local fruit chip SME in Batu, to analyze customer perceptions regarding marketing mix evaluation and to analyze the influence of marketing mix and marketing environment towards customer satisfaction.

Previous research conducted in various industries suggest that there are significant influence of marketing mix strategies towards customer satisfaction [13]. Hence, business entities must understand the marketing needs to focus attract customers and keep them loyal to the brand [14].

## 2. Materials and Methods

The data is collected by distributing questionnaires towards customers. The quantitative analysis used in this research is Structural Equation Model (SEM) using AMOS software. These are the exogenous constructs (X) also known as source variable or independent variable and the endogenous constructs (Y) of this research. Table 1 shows construct indicators that generated referring to the marketing mix concept stated by Kotler [15].

**Table 1.** Construct Indicators

| Construct          | Construct indicators |  |
|--------------------|----------------------|--|
| Marketing Mix (X2) | Product (X21)        | Products Varieties<br>Variety of Product flavor<br>Expiry of the product<br>Attractiveness of the products |
|                    | Price (X22)          | Affordability<br>Price discount on the product   |
|                    | Promotion (X23)      | Wide promotion efforts<br>Familiar Promotion media   |
|                    | Place (X24)          | Avaibility of products<br>Information of distributors<br>The sales point the product is easy to access     |
|                    | Employee (X25)       | The understanding of the employee towards the products.  |
|                    | Process (X26)        | Hygienic products  |

| Construct                  | Construct indicators  |   |
|----------------------------|---|---|
| Marketing Environment (X1) | Easy purchasing process                                       |   |
|                            | Online purchasing is available                                |   |
|                            | Fast delivery   |   |
|                            | Physical Evidence (X27)                                       | Sales Outlet is clean and neat  |
|                            |   | Parking lot in the sales outlet is available                                |
|                            |   | Sales outlet is spacious  |
|                            |   | Good and clean sale window  |
|                            |   | Waiting space is available  |
|                            |   | Clean indoor air circulation  |
|                            | Competitors (X11)   | Sales outlet of competitors is available in many places                     |
|                            |   | Taste of the competitors product is better                                  |
|                            | Customers (X12)   | It is important to set lower price point                                    |
|                            |   | Customer want to try different kind of products                             |
|                            |   | Customer preferences influenced by discounts                                |
|                            | Suppliers (X13)   | Often try new products  |
|                            | A lot of supplier available in Batu – Malang                  |   |
|                            | Lots of distributors of raw materials of production in Malang |   |
| Customers Satisfaction (Y) | New Entrants (X14)  | There are many new products and store selling the same products             |
|                            |   | New store and products offer better quality of products                     |
|                            |   | Lots of products variety  |
|                            | Substitute Products (X15)                                     | Many food souvenirs from Malang besides fruit chip as a substitute products |
|                            | Create Value (Y1)   | Create product suitable for customers needs and wants                       |
|                            |   | Could produce good and delicious food products                              |
|                            |   | Could be sent through delivery  |
|                            | Communicate Value (Y2)  | Promotion media could deliver a clear information                           |
|                            |   | Promotion is fast and follow the trend                                      |
|                            |   | The Product is consistent with the promotion used                           |
|                            |   | Sales outlet is nearby  |
|                            | Delivery Value (Y3)   | Delivery process is fast  |
|                            |   | Delivery of product is on time  |
|                            |   | Product delivered is accurate   |
|                            |   | Variety of Product Delivered  |

### 3. Results and Analysis

#### 3.1 Validity and Reliability Test

According to Ghozali[12], validity is used to measure whether the questionnaire is valid or not. Based on the validity test using pearson Product Momen, the result of sig of 3 variables consisting of marketing mix, marketing environment, and customer satisfaction, is less than 0.05. This indicates that all statements is valid. While the construct realibility value of Marketing Mix, marketing environment, and customer satisfaction variables are 0.943, 0.954, and 0.964. This value is greater than 0.7, so it can be concluded that all variables are reliable.

#### 3.2 Normality Data

Normality test in SEM consist of two stages. The first step is univariate normality and the second step is multivariate normality. From normality test, the overall value (multivariate) is 3.316. this number is far beyond critical point between -2.58 up to 2.58. But based on the univariate value, the data is normal distributed based on the c.r skewness value that is between critical point -2.58 until 2.58 (2.58 is z value for 99% confident interval). Therefore, we can conclude that the data is normal distributed.

### 3.3 Outlier Evaluation

An outlier data is detected if it has a mahalanobis distance value is greater than the value of the table. The value obtained from the chi-square table by looking at the number of variables and the level of significance used in this research. This study used 15 research variables with a significance level of 1%, therefore the table value is 30.578. From multivariate outlier test, it is obtained that all

existing data have been feasible to be analyzed because it is in the range of 8,238 - 25,286 and under the value of 30,578.

### 3.4 Goodness of Fit

Based on table 2, it can be seen that the value of RMSEA is 0.234. This value is at the marginal fit because the value is between 0.08 - 1.00. This indicates that the model is fit based on the RMSEA test.

Table 2. RMSEA Goodness Of Fit Test

| Model              | RMSEA | LO 90 | HI 90 | PCLOSE |
|--------------------|-------|-------|-------|--------|
| Default model      | .234  | .217  | .251  | .000   |
| Independence model | .456  | .442  | .471  | .000   |

Based on Table 3, it can be seen that the default CMIN value of the model is 660,260. A good model is the model with CMIN default model value is between CMIN saturated model

and independence model (Santoso, 2012). This indicates that the model is fit based on the CMIN / DF test.

Table 3. CMIN/DF Goodness Of Fit Test

| Model              | NPAR | CMIN     | DF  | P    | CMIN/DF |
|--------------------|------|----------|-----|------|---------|
| Default model      | 32   | 660.260  | 88  | .000 | 7.503   |
| Saturated model    | 120  | .000     | 0   |      |         |
| Independence model | 15   | 2708.646 | 105 | .000 | 25.797  |

Based on table 3, It is known that the value of RMR is 0.074. Smaller RMR value indicates better fitting model. This indicates that the model is fit based on the RMR test. In addition, it can be seen that the value of GFI and AGFI is 0.643

and 0.513. A model is said to be fit if the GFI and AGFI values are in the range of 0 - 1 (Ferdinand, 2002), so according to the GFI and AGFI tests, the model is fit.

Tabel 4. RMR, GFI, AGFI Goodness Of Fit Test

| Model              | RMR  | GFI   | AGFI |
|--------------------|------|-------|------|
| Default model      | .074 | .643  | .513 |
| Saturated model    | .000 | 1.000 |      |
| Independence model | .436 | .135  | .012 |

Based on the results of Goodness Of Fit criteria analysis, four criteria (RMSEA, CMIN, GFI, and AGFI) have met the standard. Therefore it can be concluded that the developed model has been good or feasible.

### 3.5 Structural Equation Modelling

#### 3.5.1 Marketing Environment Variable (X1)

The Marketing Environment Variables (X1) consist of Competitors (X11), Customers (X12), Suppliers (X13), New entrants (X14), and Substitute products (X15). The relationship between the Marketing Environment variable (X1) and its indicators is described in equation

1.

$$X1 = 1,00 X11 + 1,14 X12 + 0,97 X13 + 1,39 X14 + 1.09 X15 \quad (1)$$

Based on the result of regression coefficient level, all of the value is greater than 0.5. This indicates that all indicator variables have strong relation towards marketing environment. The value of C.R from the relationship of all indicator variables towards the marketing environment is greater than 1.96 and the p-value for all indicators are 0,000 \*\*\*. It shows that Competitors, Customers, Suppliers, New entrants, and Substitute product variable has a significant effect on marketing environment variables.

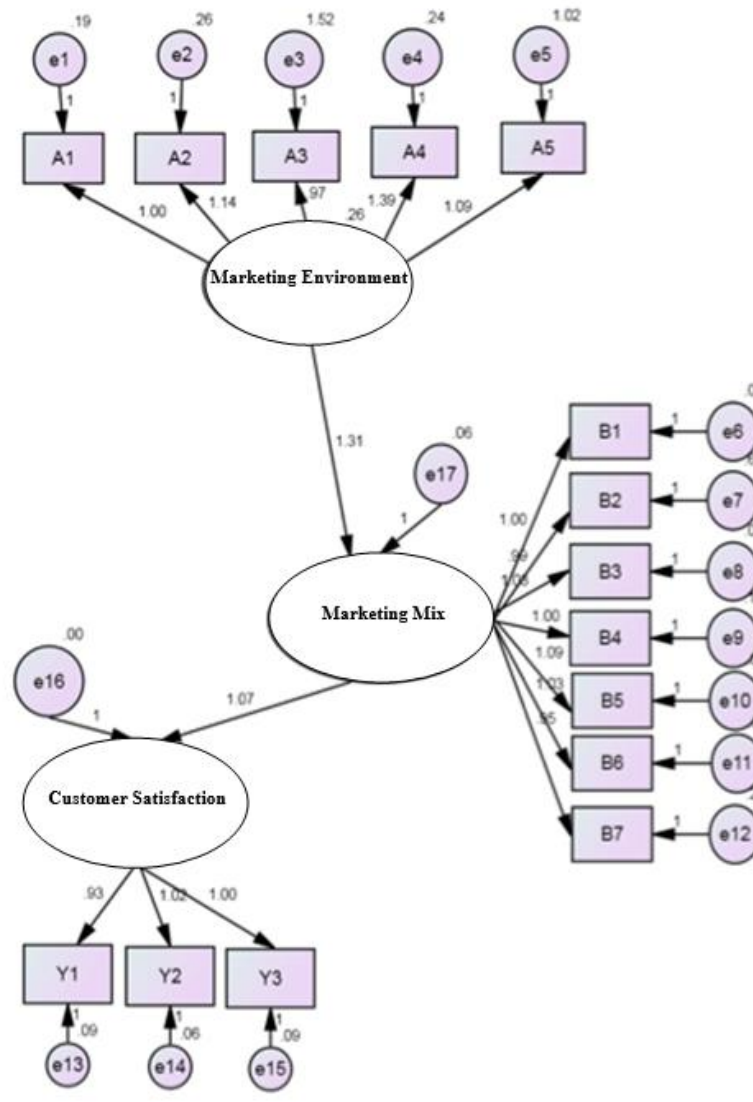


Figure 1. Path Diagram

**3.5.2 Marketing Mix Variable (X2)**

The Marketing Mix (X2) variable consists of Product (X21), Price (X22), Promotion (X23), Place (X24), Employee (X25), Process (X26), and Physical Condition (X27). The relations between the Marketing Mix variable (X1) and the indicator is described in equation 2.

$$X2 = 1,00 X21 + 0,99 X22 + 1,05 X23 + 1,00 X24 + 1,09 X25 + 1,03 X26 + 0,95 X27 \dots (2)$$

Based on the result of regression coefficient level, all of the value is greater than 0.5. This indicates that all indicator variables have strong relation towards marketing mix. The value of C.R from the relationship of all

indicator variables towards the marketing environment is greater than 1.96 and the p-value for all indicators are 0,000 \*\*\*. It shows that Product, Price, Promotion, Place, Employee, Process, and Physical Condition variable has significant effect on marketing mix variables.

**3.5.3 Customers Satisfaction (Y)**

The Customer Satisfaction Variable (Y) consists of create value (Y1), Communicate Value (Y2), and Delivery Value (Y3). The relationship between Customer Satisfaction variable (Y) and its indicators is described in equation 3.

$$Y = 0,93 Y1 + 1,02 Y2 + 1,00 Y3 \dots (3)$$

Based on the result of regression coefficient level, all of the value is greater than 0.5. This indicates that all indicator variables have strong relation towards customer satisfaction. The value of C.R from the relationship of all indicator variables towards the marketing environment is greater than 1.96 and the p-value for all indicators are 0,000 \*\*\*. It shows that create value, Communicate Value, and Delivery Value variables has a significant effect on marketing mix variables.

### 3.5.4 Correlation between Marketing Mix and Customer Satisfaction

This is the results of the regression of the marketing mix variable towards customer satisfaction:

$$Y = 1,07 X_1 + 0,00 z_1 \dots \dots \dots (4)$$

Equation 4 states that customer satisfaction has a strong correlation towards marketing mix. It also shows that the residual value is 0.00. This indicates that the variable of customer satisfaction (Y) is explained by marketing mix variable approaching 100% and equal to 0.00% (very small) explained by other variable not analyzed or not included in this research. Based on the calculation can be seen that the correlation coefficient between the marketing environment and Marketing mix is 1.31.

Based on the result of regression coefficient level, this value is greater than 0.5. This indicates that marketing mix variables have strong relation towards customer satisfaction. The value of C.R from the relationship of all indicator variables towards the marketing environment is greater than 1.96 and the p-value for all indicators are 0,000 \*\*\*. It shows that marketing mix variable has a significant effect towards marketing customer satisfaction.

## 4. Conclusion

Based on the results of the discussion in the previous chapter, it can be concluded as follows:

1. Based on Regression analysis result, it can be seen that there is a very strong relationship between marketing mix variable to customer satisfaction variable

2. in the local SME product especially in Fruit Chips product in Batu – Malang.
2. The biggest influence in marketing environment is new entrants and customer variables. This indicates that the new entrant is one of the biggest threats that must be considered by the local SME companies. While the customer variable indicate that the company should continue to pay attention towards the customer’s needs and wants because these variables greatly affect the marketing environment faced by the local SME companies. Understanding the marketing environment is very important because it would affect the marketing mix as the company’s marketing strategy. Based on the regression analysis on marketing mix variables, variable that have the highest influence are Employee, Promotion, Process, and place. Employee skills in providing services is very important due to the fact that in the end, the employee is in the front line of a business that will interact directly with customers. In addition, it is also noted that the promotion also gives a very big influence, because the company’s product will be known by the customer by using an effective promotional media. Process is one of the most important thing to give a guarantee that the process could produce a high quality product. In addition, the place also gives a significant influence, because the ease of customers in finding the product is also one way to make the product reachable by the customer.

## References

- [1] Kraja Y, Osmani D. Competitive advantage and its impact in small and medium enterprises (smes) (case of albania). Eur Sci J [Internet]. 2013;9(16):76–85. Available from: <https://pdfs.semanticscholar.org/42f6/364c9a3140ed24a6b6238755cbac0e365a25.pdf>
- [2] Pula JS, Berisha G. Defining Small and Medium Enterprises : a critical review. Acad J Business, Adm Law Soc Sci [Internet]. 2015;1(1):16–28. Available from: [www.iipcccl.org](http://www.iipcccl.org)
- [3] Kotler, Philip. (2005.) Manajemen Pemasaran Analisis Perencanaan Implementasi dan Kontrol. Jakarta: Prehallindo

- [4] William J. Stanton.(1978). *Fundamentals of Marketing*. New Delhi: Mc Graw- Hill Book Company
- [5] Thieu BT, Hieu NTM, Sitepu ES. Linkages between Marketing Mix Components and Customer Satisfaction: An analysis on Google in Hanoi, Vietnam. *J Econ Bus Res* [Internet]. 2017;23(1):123–47. Available from: <https://www.cceol.com/search/article-detail?id=616682>
- [6].Rafiq M, Ahmed PK. Using the 7Ps as a generic marketing mix\_An\_explor. 1992;(1):4–15.
- [7] Iuliana C, Sorin MD, Razvan D. THE COMPETITIVE ADVANTAGES OF SMALL AND MEDIUM Enterprises. *Ann Univ Oradea*. 2008;17(4):811–6.
- [8] Wahab NA, Hassan LFA, Shahid SAM, Maon SN. The Relationship Between Marketing Mix And Customer Loyalty In Hijab Industry: The Mediating Effect Of Customer Satisfaction. *Procedia Econ Financ* [Internet]. 2016;37(16):366–71. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S2212567116301381>
- [9] Ilieska K. Customer Satisfaction Index – as a Base for Strategic Marketing Management. *TEM J* [Internet]. 2016;2(4):327–31. Available from: [www.temjournal.com](http://www.temjournal.com)
- [10] Hoyle, Rick H.(1995). *The Structural Equation Modeling Approach: Basic Concept and Fundamental Issues*, inside Rick H. Hoyle (editor), *Structural Equation Modeling: Concepts, Issues, and Application*. New York: Sage Publication.
- [11] Hox JJ, Moran, J. J. (1997). *Assessing adult learning: A guide for practitioners*. Malabar, Fla: Krieger Pub. Co. :1–17. Available from: [http://encore.lib.gla.ac.uk/iii/encore/record/C\\_\\_Rb1802355?lang=eng](http://encore.lib.gla.ac.uk/iii/encore/record/C__Rb1802355?lang=eng)
- [12] Ghozali, Imam.(2005).*Aplikasi Analisis Multivariate dengan SPSS (Semarang: Badan Penerbit UNDIP)*
- [13] Thieu BT, Hieu NTM, Sitepu ES. Linkages between Marketing Mix Components and Customer Satisfaction: An analysis on Google in Hanoi, Vietnam. *J Econ Bus Res* [Internet]. 2017;23(1):123–47. Available from: <https://www.cceol.com/search/article-detail?id=616682>
- [14] Wahab NA, Hassan LFA, Shahid SAM, Maon SN. The Relationship Between Marketing Mix And Customer Loyalty In Hijab Industry: The Mediating Effect Of Customer Satisfaction. *Procedia Econ Financ* [Internet]. 2016;37(16):366–71. Available from: <http://linkinghub.elsevier.com/retrieve/pii/S2212567116301381>
- [15] Kotler, P., & Keller, K. L. (2012), “Marketing Management”, Global Edition 14e, London: Pearson Education Limited 2012