AN INVESTIGATE THE SERVICE QUALITY AND CUSTOMER SATISFACTION: THE CASE OF HOME AND RESIDENCE IN BANGKOK AND ITS VICINITY

Nilubon Sivabrovornvatana[1]
Graduate College of Management,
Sripatum University, Bangkok, Thailand

ABSTRACT

This research aims to study the level of opinions on the marketing mix of home and residential customers, as well as investigate the 4P weight on marketing mix elements. The weight of the observed variables on the marketing mix elements was studied. The population is residential customers in housing estates and condominiums in Bangkok and its vicinities. The study used 500 samples with random sampling. The instrument used was a five-level questionnaire with a validity of 0.50 and a reliability of 0.976. The statistics used were percentage, mean, standard deviation and component analysis. The study identified four elements of the marketing mix, including mean variance of the marketing mix of 77.23% with the eigen-value of 3.09%. The mean KMO of 0.842 was statistically significant with the chi-square of 125.36, p value of 0.000. Each component contains the weight from high to low showing as follows: product, price, place, and promotion, respectively. When considering each component, it was found that the product component, the most weighted variables were a central lighting system and a drain system, along with a cleaning system. For the price component, the most weighted variables were interest rate, and home and banking fees for loan applications. For the place component had the most weighted variable of employees' service and sales staff, along with office/corporate office hours. Finally, for the promotion component, the most weighted variables were after-sales service, discounts, and maintenance, respectively.

Keywords: 1) Marketing Mix 2) Home 2) Residence

1. Introduction

Customer satisfaction is defined as an "evaluation of the perceived discrepancy between prior expectations and the actual performance of the product" (Tse and Wilton, 1988, Oliver 1999). Satisfaction of customers with products and services of a company is considered as most important factor leading toward competitiveness and success Customer satisfaction is actually how customer evaluates theon going performance. In many previous research refer customer satisfaction is customer's reaction to the state of satisfaction, and customer's judgment of satisfaction level. Customer satisfaction is very important in today's business world as according toDeng et al., (2009) the ability of a service provider to create high degree of satisfaction is crucial for product differentiation and developing strong relationship with customers.

The competition in home and residential real estate has been intensified in 2017 due to the large number of homes and residences from the year 2016 (based on real estate data, there were 522,879 units sold in 2019, and there were about 65 percent in 2017). 107,000-109,000 new homes and residences were built (Kasikorn Research Center, 2017) due to the development of a mass transit network of the green, red, purple and blue metro

---

lines that have been implemented from the years 2018 to 2021 (AREA Research and Database Department, 2017). Real estate along the metro line is built towards the suburbs significantly, in order to meet the needs of residential areas along the nearby Bangkok metropolitan. However, the global and domestic economy has slowed down; resulting in the competition in this business is more intense. This is the year that the marketing of homes and residences is very competitive due to increased supply. Many marketing strategies have been created such as discounted deals, discounted giveaways, or media outlets to accelerate the old stocks sold. Combining the launch of new jointly strategies might allow entrepreneurs using the marketing mix or 4P that consists of product, price, place, and promotion.

In the present situation, the marketing mix of 4Ps allows customers to weight on any levels. The information that entrepreneurs should focus should be a good answer for home and residential business. The importance of the marketing mix is determined by the average of the customer's level of feedback. There are also high-level statistics that can determine the weight of the four market mixes, in terms of the weight of the observed variables. In all four components and the weight of the four components above are the marketing mix elements by using the factor analysis. Due to the aforementioned problems, the research objectives were as follows: 1) to identify the level of opinions on the marketing mix of home and residential customers, 2) to investigate the weight of 4P on the marketing mix elements, 3) to investigate the weight of observed variables on the marketing mix elements in various fields.

1.1 Scope of the Study

1) Scope of content

The content of this research study was 4P's market mix of home and residential customers that include product, price, place, promotion by inquiring the opinions from customers, business homes, and residences located in Bangkok and its vicinity.

2) Scope of source

The source of the data collection was representatives of home and residential customers in both high and low rise housing projects in Bangkok and its vicinities, with a random sampling of 500 samples.

3) Scope of the variables

The variables included 4P's marketing mix of home and residential customers containing product, price, place, and promotion.

1.2 The benefits of Research

1) To acknowledge the weight of four components of the marketing mix including product, price, place, and promotion.

2) To understand the weight of each variable for further strategic planning of the home and residential business management.

2. Conceptual Framework

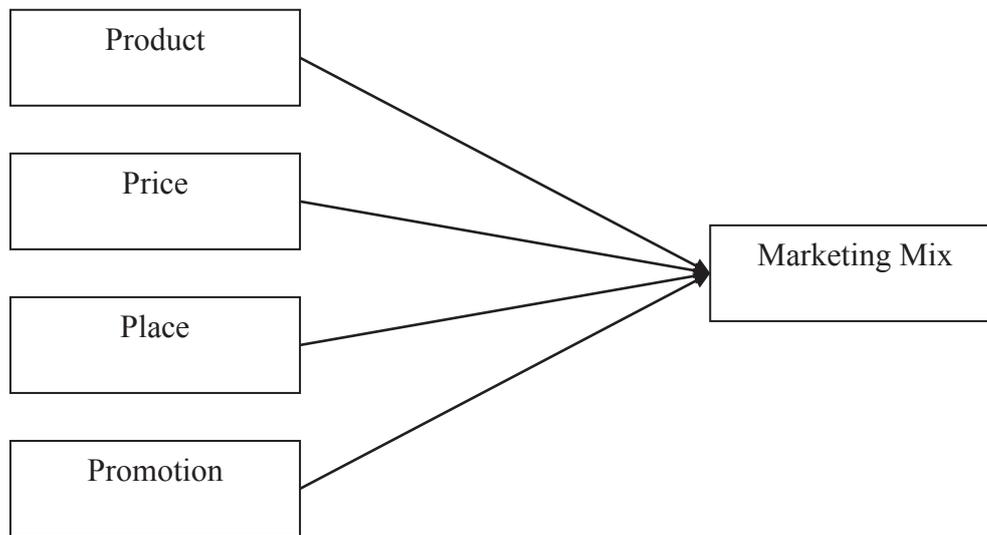**Independent Variables**   **Dependent Variable**

Figure 1: Conceptual Framework

  Figure 1 shows the factor of product, price, place, and promotion that are hypothesized to be a component of marketing mix.

3. Research Methodology

  This research study used quantitative research methodology, and its process is shown as follows:

3.1 Population and Sample

  The population in the study was residential housing clients and/or condominiums in Bangkok and its vicinity. Random sampling was used with accidental sampling of 500 people.

3.2 Data Source

  The source of data collection was the customer who comes to be serviced with buy and/or visit a home and residential distribution project located in Bangkok and its vicinities. 500 condominiums were given with a questionnaire.

3.3 Research Tools

  The tools used to collect data were five levels of evaluation questionnaire for the marketing mix (4Ps) of one residential project in Bangkok and perimeter. One questionnaire contained 29 items, and the demographic characteristics of 15 items.

3.4 Research Tools and Quality Testing

  1) Content validity of the questionnaire was tested by 5 experts using IOC that was over 0.5.

  2) Reliability testing was made that equals to 0.976, the result was greater than 0.70.

3.5 Data Collection

  The researcher collected the data by asking for cooperation from various residential and housing projects in Bangkok and suburbs, and self-managed.

3.6 Statistical Analysis

1) Frequency and percentage in the counting and percentage calculation that describe the demographic characteristics of the customer group.

2) Mean and standard deviation were used to describe the marketing mix in all four aspects.

3) Factor analysis was conducted with the Principal Component (PC) extraction method that determines the number of components in each of the factors. It was used for determining the weight of observed variables in four components of the market mix.

4) The use of inferential statistics was tested with a significance level of 0.05.

4. Results Analysis

Demographics of home and residential customers were used as examples in the study.

The samples were 45.4% male and 54.6% female. The majority of them were aged between 31-40 years, accounted for 43.8%, 41.4% and 26.4%, respectively. Married couples were accounted for 69.0%, 23.6% had single, 28.0% had no children, 34.2% had one child, and 32.2% had two children. Most of the samples graduated above a Bachelor's degree that were more than 53.8%, and were employed by private companies of 42.0%. The business owner was accounted for 17.8%, with the average monthly household income of 45,243.0 baht. 65.0% was accounted for horizontal building, 35.0% was accounted for vertical building, and 50.0% for travelling private, respectively.
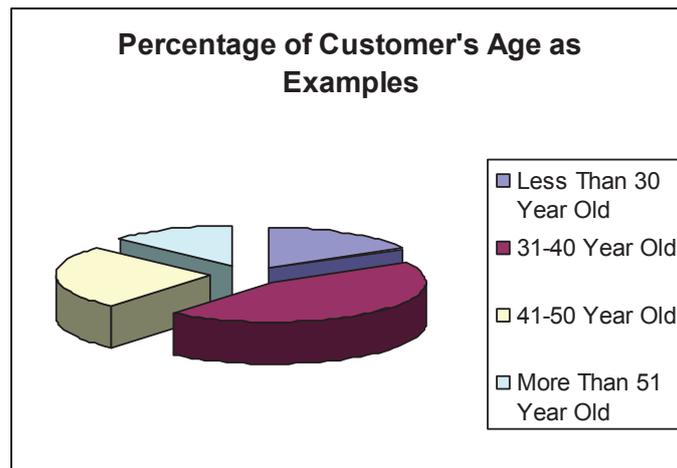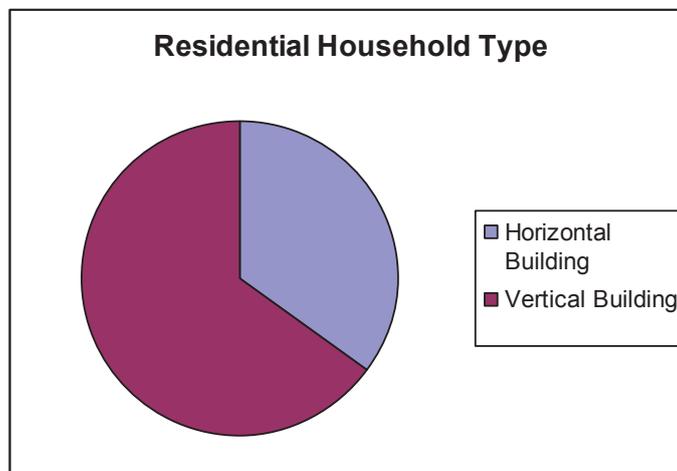
Figure 2: Percentage of Customer's Age as Examples
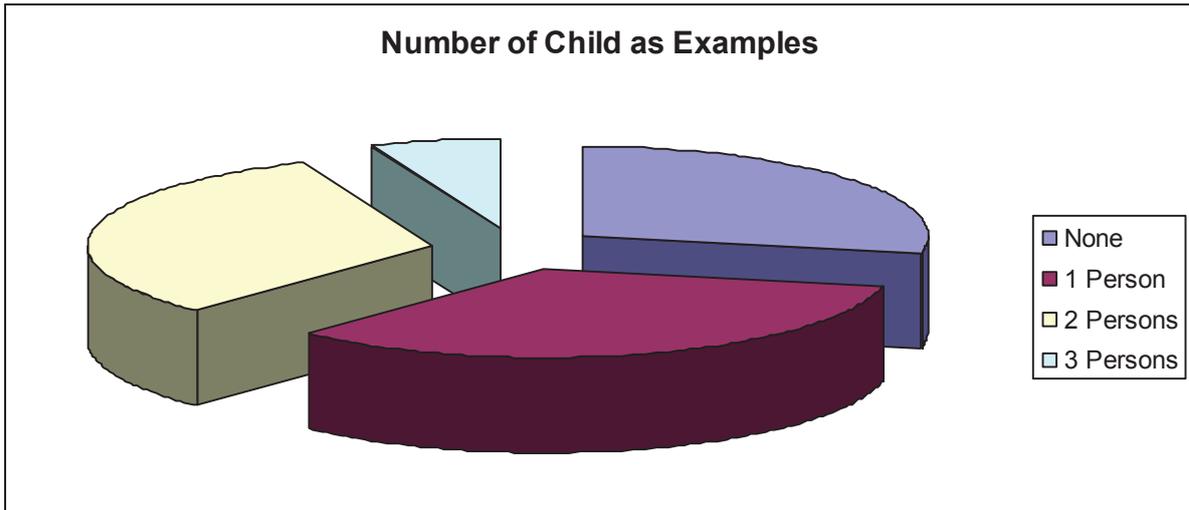
Figure 3: Residential Household Type

Number of Child as Examples

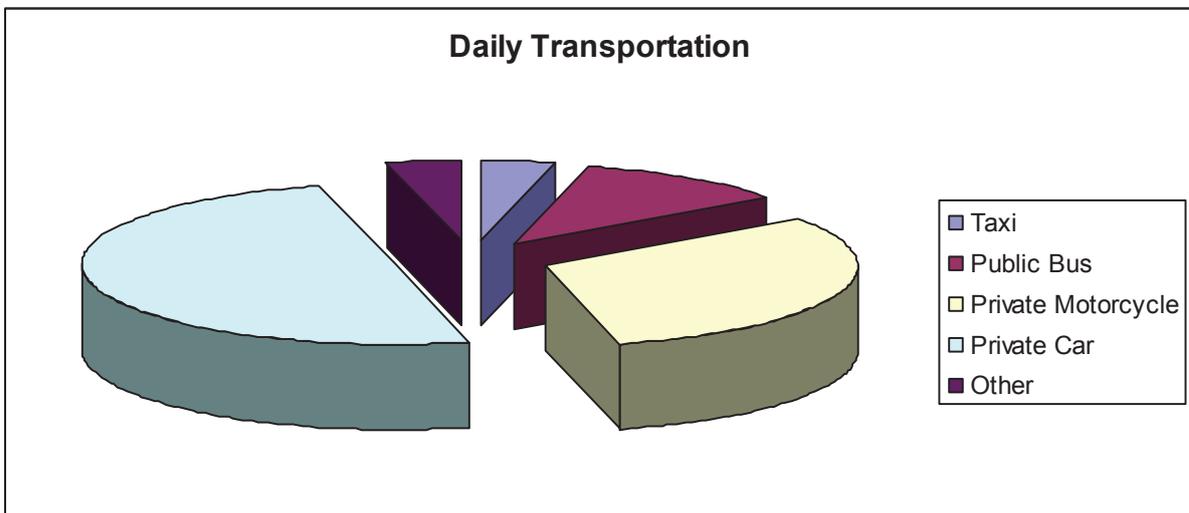**Figure 4** Number of Child as Examples

Daily Transportation

Figure 5 Daily Transportation

Figures 2 to 5 show the demographic characteristics of the clients used in the marketing mix.

The overall marketing mix was 3.92 at a high level. The highest average was the product that was 4.03 at a high level. Secondly, the average price was 3.94, average promotion was 3.83, and average place was 3.73 at a high level.

Table 1: Mean and Standard Deviation of Marketing Mix

Marketing Mix	$\overline{X}$	S.D.
Product	4.03	.69
Price	3.94	.73
Place	3.73	.70
Promotion	3.83	.77
Total	3.92	.64

Composition Marketing Mix Weight

The results from the component analysis for an overall marketing mix with each facet are shown as follows.

3.1 The results analysis of the compositional weight for 4 components of the marketing mix. It was found that the marketing mix of the place had Eigen = 3.090, explaining its variation of 77.23 percents. KMO equals to 08.42 with being statistically significant of x^2 = 125.63, p = 0.000). The weight of observed variables in four components was ranked as follows: place, product, price, promotion, respectively that is shown in Table 2.

Table 2: Weight of Components for Variables

Observed Variable	Weight of Component
Place	0.907
Product	0.893
Price	0.881
Promotion	0.833

3.2 The results analysis of the compositional weight for 4 components of the product. It was found that Eigen = 9.50, explaining its variation of 73.11 percents. KMO equals to 0.971 with being statistically significant of x^2 = 6603.93, p = 0.000). The weight of observed variables in four components was ranked as follows: central lighting system, drainage system, cleaning system, home interior, respectively that is shown in Table 3.

Table 3: Weight of Components for Product

Observed Variable	Weight of Component
Central Lighting System	0.887
Drainage System	0.887
Cleaning System	0.881
Home Interior	0.881
Water Supply System	0.872
Security System	0.865
Road and Public Area	0.860
Home Structure, Floor, Ceiling, Roof	0.847
Termite Control System	0.842
Parking Area	0.837
Material and Tool Quality	0.836
Travelling Comfort	0.812
Neighborhood	0.803

3.3 The results analysis of the compositional weight for 4 components of the price. It was found that Eigen = 4.01, explaining its variation of 80.20 percents. KMO equals to 0.899 with being statistically significant of x^2 = 2142.56, p = 0.000). The weight of observed variables in four components was ranked as follows: interest rate, home purchase fee, bank fee, respectively that is shown in Table 4.

Table 4: Weight of Components for Price

Observed Variable	Weight of Component
Interest Rate	0.916
Home Purchase Fee	0.907
Bank Fee	0.900
Public Service Fee	0.877
Home Price	0.877

3.4 The results analysis of the compositional weight for 4 components of the place. It was found that Eigen = 4.54, explaining its variation of 75.71 percents. KMO equals to 0.874 with being statistically significant of x^2 = 2937.79, p = 0.000). The weight of observed variables in four components was ranked as follows: staff service and sale staff, hour of corporate office and sale office, distribution channel and comfort in contacting with corporate office staff, respectively that is shown in Table 5.

Table 5: Weight of Components for Place

Observed Variable	Weight of Component
Staff Service and Sale Staff	0.902
Hour of Corporate Office and Sale Office	0.882
Distribution Channel and Comfort in Contacting with Corporate Office Staff	0.867
Distribution Channel and Comfort in Contacting with Sale Staff	0.862
Corporate Office and Sale Office	0.861
Service Staff and Sale Staff	0.846

3.5 The results analysis of the compositional weight for 4 components of the promotion. It was found that Eigen = 4.06, explaining its variation of 81.16 percents. KMO equals to 0.867 with being statistically significant of x^2 = 2398.83, p = 0.000). The weight of observed variables in four components was ranked as follows: service after sales, discount, maintenance, respectively that is shown in Table 6.

Table 6: Weight of Components for Promotion

Observed Variable	Weight of Component
Service After Sales	0.936
Discount	0.912
Maintenance	0.903
Home Warranty	0.877
Premiums	0.876

5. Discussion and Recommendation

5.1 Discussion

The results of the four components were product, price, place, and promotion revealed that the compositional weight was 0.833-0.907; indicating that the four variables had a significant effect on the market mix. This was consistent with the study of Thongchai Chusun (2007) of the factors affecting the decision to buy condominiums. The marketing mix factors affect the decision to buy condominiums in accordance with the

study of Chakrapan Siripanpong (2007). It was the marketing mix aspect that influences consumers' home buying decisions in housing projects. The results indicated that product, price, promotion, and place influenced the decision to buy a home.

Home and residential operators needed to focus on four aspects of business conduct for business competition. If the entrepreneur wanted to determine which elements should focus more on each other, the weight of the composition could be used as a reference in determining the marketing mix. From the study of market mix factors that affect the most marketing mix was the place scored as 0.907. It was composed of 6 observation variables, in which the variables used as the channel management approach were the service staff and sales staff, hour of corporate office and sale office, distribution channel and comfort in contacting with corporate office staff, distribution channel and comfort in contacting with sale staff, corporate office and sale office, and service staff and sale staff. The indicated results were in accordance with the study of Prapapang Prasit et al. (2010), titled "the marketing strategies of upper detached houses in Bangkok and its vicinity". It was revealed that place, such as booths in shopping malls, were effective for the marketing strategies.

Furthermore, the product component revealed that the weight of the element was 0.893, consisting of 13 observation variables. The variables used as product management guidelines were the central lighting system, drainage system, cleaning system, water supply system, security system, road and public area, home structure/floor/ceiling/roof, termite control system, parking area, material and tool quality, travelling comfort, and neighborhood had a compositional weight of 0.881. It comprised of five variable observations that guide price management, interest rates, home purchase fees, bank rates for home loans, and home prices. The last part was the promotion component that had the compositional weight of 0.833, consisting of 5 variable observations. The variables used as promotion were service after sales, discount, maintenance, home warranty, and premiums.

In the presented study, four components were conducted in more details in order to rank importance or weight of the observable variables used for a strategic plan. The results indicated that the product component reviews a central lighting system as the most important variable and followed by drainage system, cleaning system, home interior, water supply system, security system, road and public area, home structure/floor/ceiling/floor/roof, termite control system, parking area, material and tool quality, travelling comfort, and neighborhood, respectively. Considering the weight of 13 variables, it appeared that all variables were important for the product component with higher levels. Therefore, home and residential program must consider all 13 variables in order to attract customers to buy their home and residence. Moreover, the price component reviewed all 5 variables ranking from high to low of interest rate with the weight of 0.916. It means that the interest rate was important for the price component, followed by home purchase fee, bank fee, public service fee, and home price. Many projects were used as a strategy to invite customers to the project, such as starting price with low interest rate, or joined banks and home/residential project. It was due to some clients might be interested in each component, and that they received direct benefits in line with the study of Weena Thira Sophon (2015). Buying a home in Bangkok and its vicinity could be the price factor, service, environment, quality, and safety, respectively.

For the place of the marketing mix, it appeared that the most important variable was the service staff and sale staff. Secondly, it was hour of corporate office and sale office and place and comfort in contacting with corporate office staff. For the promotion, it appeared that the most important variable was the service after sales, discount, and maintenance. The results were in accordance with the study of Anchalee Thongpin

(2011), indicating the marketing factors affecting the decision-making process of single houses of Pruksa Real Estate Public Company Limited. It also showed that the cash discount was in line with the study of Supakorn Buenim (1998), identifying the factors influencing the purchase of housing for living. The results of this study were found that promotion that was a component of the marketing mix influencing decision making of buying home, especially advertising on low down payment.

This was summarized that product, price, place, and promotion combined into the marketing mix could describe the variation of 77.23%. The four elements had different weights in the marketing mix.

5.2 Recommendation

Structural Equation Modeling or SEM should be conducted to determine the causal factors that affect the marketing mix. More than 4 marketing mixes should be studied. The results of this research should be used in the strategic planning of home and land management.

References

Cervero, Robert. (2007). **Effects of Expenditure on Buying Home.** California, USA: Lincoln Institute.

Jakarpan Sirijatarapong. (2007). **Market Factors Influencing Consumers' Home Buying Decisions of the Housing Project**. Master of Business Administration, Burapa University, Cholburi, Thailand.

Prapai Saengprasit et al. (2011). **Strategic Marketing of Single Detached Houses in Bangkok and its Vicinities**. BERAC II.

Real Estate Information Center: Real Estate Information Center. (2017). **Brief Situation of Bangkok Residential Market**. Retrieved November 2, 2017, from https://thinkofliving.com/2016/11/26.

Real Estate Information Center. (2017). **Brief Situation of Bangkok Residential Market and the perimeter of Q3/2016.** Retrieved November 2, 2017, from https://thinkofliving.com/2016/11/26.

Research and Database Agency for Real Estate Affairs. (2017). **Real Estate Market Trends in Bangkok**. Retrieved November 2, 2017, from https://www.cbre.co.th/en/ResearchCentre/ Research/Bangkok-Real-Estate-Market-Outlook-2017.

Thachana Thongmuanglaung. (2011). **Marketing Factors Affecting the Single House Buying Process of Pruksa Real Estate Public Company Limited**. Rajamangala University of Technology Thanyaburi, Pathumthani.

Thongchai Khoosoon. (2014). **Factors Influencing Decision to Buy a Condominium, Graduate School**. Bangkok University, Bangkok, Thailand.

Veena Thirasopon. (2015). **Factors Affecting Housing Buying Decision, Faculty of Commerce and Accounting**. Thammasat University, Bangkok, Thailand.