Factors Affecting Customer Satisfaction on Organic Facial Foam: A Case Study of Customers who used Organic Facial Foam

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Abstract

Facekute Facial Foam has been established in 2015. The primary target market is teenagers and young adults aged 13 – 25 years old. The product is available and sold mainly online. This research aims to identify factors that affect customer satisfaction on Organic Facial Foam, to define the relationship between customer satisfaction and product quality, reliability, price, product design; to determine the impacts of each independent variable on dependent variable, and to provide recommendations for improvement. The scope of this research focused on customers aged 13 – 25 year old who purchased and used Facekute Facial Foam. The survey was conducted online. The research instrument was an online questionnaire and data was collected from sample of 278 experienced customers. The significance and relationships of product quality, reliability, price, and product design on customer satisfaction were analyzed by using the multiple linear regression. The result provided important managerial implications to organic facial form industry to focus on customer satisfaction in order to augment profit.

Keywords: customer satisfaction, organic facial foam, product quality, reliability, price, product design

Introduction

The global skin care industry has grown rapidly due to the demand of older customers and younger customers. The market share in US dollar has continuously augmented every year (Chu, 2015) and is predicted to have the highest market share in 2021. The Wall Street Journal stated that emerging global market of skin care products has continuously increased (Chu, 2015), not only for women but also for men.

In 2014, the global organic skin care market dimension was valued at USD 3,004 million. The increasing demand for organic products including body lotions, sunscreens, and face creams positively affects the region . (Pawar, 2016).

The expansion of research and development spending on extracts from plants into abundant organic products is expected to boost market growth in the next seven years (Pawar, 2016). Moreover, technological innovations are used to escalate product shelf life and productivity so that they have a progressive effect on these products (Pawar, 2016).
The global market is segmented into two categories of products: face cream and body lotion. Organic face creams are the largest product segment. The escalating significance of natural ingredients such as vegetables, fruits and, herbs in face cream products is expected to grow (Pawar, 2016). The second product largest segment was body lotion. It is expected to grow at a CAGR of over 18% (Pawar, 2016). Furthermore, organic body products do not contain chemical substances like, parabens, sulfur, and ammonia.

The use of skincare products is widespread in East Asia and Southeast Asia (Global Habit, 2012). Every Asian city has a high consumption of face cleansers as compared to other products (Global Habit, 2012). Seoul is the highest country where 99.6% women always use skincare products (Global Habit, 2012). On the contrary, Mumbai is the lowest country where 53.9% women use skincare products (Global Habit, 2012).

A study in 2015 showed that Thais spent their money for beauty and personal care with an amount of 65.6 billion Baht (Skin Care in Thailand, 2016). Thai people spend much time to search for brands and products. Most of them go through product reviews, ingredient lists, and benefit assessments (Skin Care in Thailand, 2016).

Due to various brands, skin care in Thailand product consumption was split in 2015. “Beiersdorf Thailand managed to maintain the leading position in 2015, with a value share of 14%; followed by L’Oréal Thailand and Unilever Thai Holdings, each with a share of 12%. Beiersdorf Thailand has the brands Eucerin for sensitive skin and Nivea in many facial and body care categories” (Skin Care in Thailand, 2016, p.1).

**Product**

Facekute Facial Foam was established in 2015 (Facekute, n.d.). The owner studied about facial foam and found the extract of carrot not only as good for health, but it is beneficial for the skin as well. Carrots comprise of two vital elements which are carotenes and carotenoids. Carotenes make the skin look healthy and shining. Carotenoids can reduce aging together with other powerful anti-oxidants that protect and condition the skin (Mukherjee, 2011). Carrots also help in boosting the creation of collagen in order to prevent facial creases.

**Statement of Problem**

Facekute is a new brand and it is relatively difficult to convince customers to purchase and build brand trust. Hence, this research aimed to determine the factors that affect customer satisfaction on Facekute Facial Foam in order for the company to build a stronger customer market share.
Research Objectives

1. To identify factors that affect customer satisfaction on Facekute Facial Foam.
2. To define the relationship between customer satisfaction and product quality, reliability, price, and product design.
3. To determine the impacts of product quality, reliability, price, and product design on customer satisfaction.
4. To provide recommendations that can be guideline to improve customer satisfaction on Facekute Facial Foam.

Research Questions

1. What factors affect customer satisfaction on Facekute Facial Foam?
2. What are the relationships between customer satisfaction and product quality, reliability, price, and product design?
3. Which factor has the most impact on customer satisfaction on Facekute Facial Foam?
4. What recommendation can this study provide for Facekute?

Review of Literature

Customer Satisfaction

Kotler defined satisfaction as a person’s feelings of pleasure, excitement, delight or disappointment, which results from comparing products to his or her expectations (Lu & Lukoma, 2011). LaTour and Peat discovered that customer satisfaction relied on experience standards as a foundation (Yi, 1990). Experience is the main determining factor of customer satisfaction. When customers are familiar with those products, they will not hesitate to buy again.

Customer satisfaction is a critical goal of corporate marketing strategies. The high levels of customer satisfaction can lead to customer loyalty, trust, positive word-of-mouth, repeat sales, increase future revenue, and reduce customer complaints (Zhang, Zhang, & Law 2013). Raising customer’s experience to exceed their expectations could satisfy them. Having a website for online purchase increases the connection between company and customers (Cox & Dale, 2001). A firm ought to create high quality web page and social network because the communication between the company and the customer makes better through technology (Cox & Dale, 2001).

Product Quality

The key factors that affect and measure customer satisfaction on products were in terms of quality, availability, and condition (Zamazalová, 2008). Better product quality will maintain a
high level of customer satisfaction and encourages customers to make their next purchases (Zamazalová, 2008). The product quality of physical products generally involves the quality of ‘physical characteristic’ and ‘performance’ (Chinomina, Okoumba, & Pooe, 2013). Likewise, product quality is assessed by how easy the product can be used and how suitable it is applied to the consumer.

Moreover, there are a great deal of studies indicating that improved product quality benefits companies by building a long-term customer base and creating a valuable asset for loyal customers (Yuen & Chan, 2010).

Reliability

The reliability factor has to do with ‘doing what is promised’ and ‘doing it at the promised time’. Customer satisfaction is not only based on the judgment of customers towards the reliability of the delivered service, but it is the reliability that customers' experience with the service delivery process as well (Jamal & Naser, 2003).

Some firms found out that there are many customers who shop via the Internet due to convenience (Riseley & Schehr, 2000). If companies cannot deliver what they promise, the customer will choose other firms. Customers are concerned when they select skin care product. Consumers’ behavior are complicated because they have different needs, wants, and interests.

Price

Customers who are satisfied with a purchased price will buy the same product more often and will also recommend it to others (Lympopoulos, Chaniotakis, & Soureli, 2013). A high price could trigger customer switching, as immediate physiological response others (Lympopoulos, Chaniotakis, & Soureli, 2013). The perceptions of price have a direct impact on customer satisfaction, the likelihood of switching, and providing positive word-of-mouth (Lympopoulos, Chaniotakis, & Soureli, 2013).

Product Design

The customers give their first impression of a product through physical appearance (Ana & Arboleda, 2004). The physical appearance can create good or bad perception in the customer’s mind. Hanzaee and Beghi identified two benefits of design, which are usability benefits and hedonic benefits (Hanzaee & Beghi, 2011). Usability benefits involve the touchable or technical benefits such as ease of use and convenience of use. Hedonic benefits include the consumer enjoyment while being used such as shape, color, and smell (Hanzaee & Beghi, 2011).
Color has an effect on product design, which can represent the theme of the firms. Choosing the accurate tone creates positive outcome. As stated by Bellizzi, Crowley, and Hasty, green and blue tend to be more pretty than red (Bellizzi, Crowley, & Hasty, 1983). It creates optimistic and comfortable feeling towards customers and business image.

**Conceptual Framework**

The conceptual framework in this research consists of two main variables: dependent variable (customer satisfaction) and independent variables (product quality, reliability, price, and product design).

**Research Hypotheses**

**H1₀**: Product Quality has no significant relationship with customer satisfaction on Facekute Facial Foam.

**H1ₐ**: Product Quality has a significant relationship with customer satisfaction on Facekute Facial Foam.

**H2₀**: Reliability has no significant relationship with customer satisfaction on Facekute Facial Foam.

**H2ₐ**: Reliability has a significant relationship with customer satisfaction on Facekute Facial Foam.

**H3₀**: Price has no significant relationship with customer satisfaction on Facekute Facial Foam.

**H3ₐ**: Price has a significant relationship with customer satisfaction on Facekute Facial Foam.
**H4₀:** Product Design has no significant relationship with customer satisfaction on Facekute Facial Foam.

**H4₁:** Product Design has a significant relationship with customer satisfaction on Facekute Facial Foam.

**Methods of Research Used**

The quantitative research methodology was utilized in this research. Online questionnaires were distributed to 278 respondents. Our respondents were adolescents aged between 13-25 years old. An online survey questionnaire was convenient, so less time was consumed for respondents to reply.

Questionnaires could be simply measured because every answer was given in numbers by using Likert scale. The questions were conducted in both Thai and English versions in order to make the respondents easily understand. The data analysis used a statistical analysis program to perform three analyses, which were descriptive, correlation, and multiple regression.

**Sampling**

Epstein mentioned that at a 95 percent level of certainty 1,000 populations would have sampling size of 278 respondents (Epstein, 2012). This research applied non-probability method. The online survey questionnaires were distributed via social network such as Line Application and Facebook.

**Research Instrument (Questionnaire)**

The research instrument was online survey questionnaire. The questionnaire consisted of three main parts, which were general information, variables measured by Likert Scale, and personal information.

The first part was general information, which are closed format questions. This is to ask for screening questions and measured the frequency of purchasing Facekute Facial Foam.

The second part was measured the variables, which affected customer satisfaction in using Facekute Facial Foam. The research was created by using a five point Likert Scale where respondents indicated their level of agreement.

1= strongly disagree

2= disagree
3= neither agree nor disagree
4= agree
5= strongly agree

The final part had the personal information such as gender, age, monthly income, and occupation. This part of the questionnaire was designed as closed-ended questions.

Pilot Study

The pilot study was conducted with 30 samples to test the reliability of questionnaire.

Table 1

*Pilot Study Reliability Test (N = 30)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>.918</td>
<td>4</td>
</tr>
<tr>
<td>Product Quality</td>
<td>.878</td>
<td>4</td>
</tr>
<tr>
<td>Reliability</td>
<td>.893</td>
<td>4</td>
</tr>
<tr>
<td>Price</td>
<td>.870</td>
<td>4</td>
</tr>
<tr>
<td>Product Design</td>
<td>.865</td>
<td>4</td>
</tr>
<tr>
<td>Overall</td>
<td>.951</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 1 shows the results of reliability pretest (N = 30) in which Cronbach’s Coefficient Alpha above .6. It indicated all variables and questionnaires are reliable. The highest Cronbach’s Coefficient Alpha was customer satisfaction, which was equal to 0.918. The lowest Cronbach’s Coefficient Alpha was product design, which was equal to 0.865.

Data Collection Procedures

Online questionnaires were distributed at least 278 customers who have used Facekute Facial Foam in order to know their level of satisfaction on the product. Online questionnaire has countless advantages such as saving time, saving cost, and reaching many people (Bryman & Bell, 2011). This research applied a statistical analysis program to analyze the data to in order to gain answers.

Descriptive Analysis
Descriptive analysis transforms from raw data into expressive information, which is easy to comprehend (Shizuhiko, 2007). In this research, descriptive analysis was used to describe the basic characteristics in the data in terms of gender, age, income, and occupation. This will help the researcher know the measure of tendency and the measure of variability.

**Correlation Analysis**

There are two groups of correlation, which are parametric (Pearson Correlation) and non-parametric (Spearman Correlation). Walker and Almond claimed that there are some differences between them (Walker & Almond, 2010). Parametric measures interval scales and ratio, whereas non-parametric measures ordinal scales. Pearson Correlation is applied to this research because the level of measurement of questionnaires is interval scales.

**Multiple Regression Analysis**

Multiple regression is an expansion of ordinary linear regression (Timothy, 2013). Prognosticating the value of each variable will depend on other variables (Hair, Celsi, Money, Samouel, & Page, 2011). In this research, multiple regression was used for examining the relationship between four independent variables (product quality, reliability, price, and product design) and one dependent variable (customer satisfaction).

**Descriptive analysis for demographic factors**

**Frequency of Demographic Characteristic**

The analysis of gender level by using frequency and percentage indicated that out of 278 respondents, the highest gender range in this study was female, with 197 people (70.9%). After that, the second highest gender range in this study was male, with 81 people (29.1%). Accordingly, female was the majority of respondents. The analysis of age by using frequency and percentage indicated that out of 278 respondents, the highest level of age range in this study was 19-25 years old, with 153 people (55.0%), followed by 86 people in the level of age range of 13-15 years old (30.9%) and 39 people in the level of age range of 16-18 years old (14.0%) respectively. The analysis of monthly budget by using frequency and percentage indicated in the table, the highest percentage of respondent's monthly budget was more than 10,000 baht and shown at 47.1% (131). Then, the second highest percentage of respondent's monthly budget was less than 2,000 baht and shown at 20.1% (56). The analysis of occupation by using frequency and percentage indicated in the above table, the highest percentage of respondent's occupation was university student and shown at 50.0% (139).

**Frequency of Behavior**
The analysis of what the average amount of purchase Facekute Facial Foam per one time by using frequency and percentage indicated in amount average of purchase Facekute Facial Foam showed the greatest percentage was 45.3% (126) of 200 baht per time, 37.8% (105) of 201-400 baht per time, 7.2% (20) of more than 800 baht per time, 5.8% (16) of 401-600 baht per time, and 4.0% (11) of 601-800 baht per time. The analysis of how often customers purchase Facekute Facial Foam by using frequency and percentage showed that the highest was 3-4 times per year with 124 people (44.6%), followed by 1-2 times per year for 91 people (32.7%), and more than 5 times per year for 63 people (22.7%) respectively. The analysis of how customers get information about Facekute Facial Foam by using frequency and percentage indicated that the highest was family/friend recommendation with 107 people (38.5%). After that, the second highest in this study was Facebook with 98 people (35.3%). The third highest in this study was other with 22 people (7.9%), the fourth highest in this study was Instagram with 21 people (7.6%), the fifth highest in this study was Line with 19 people (6.8%), and the last one was Leaflet with 11 people (4.0%) respectively.

**Reliability Analysis of research instrument (Alpha test)**

Reliability analyst is used to evaluate the reliability of questionnaires and reliability of each variable by utilizing Cronbach’s Coefficient Alpha value. If the outcome represents beyond .6 or equal to .6, it indicates the variable is acceptable and reliable. Reliability Analysis of research instrument of this study is shown in Table 20.

The Summary of Reliability (N = 278)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Satisfaction</td>
<td>0.891</td>
</tr>
<tr>
<td>Product Quality</td>
<td>0.899</td>
</tr>
<tr>
<td>Reliability</td>
<td>0.910</td>
</tr>
<tr>
<td>Price</td>
<td>0.886</td>
</tr>
<tr>
<td>Product Design</td>
<td>0.838</td>
</tr>
</tbody>
</table>

The results in Table 20 illustrated Cronbach’s Coefficient Alpha above .6. That indicated all variables and questionnaires are reliable.

**Hypothesis Testing and Correlation Analysis**
There were four hypotheses in the research. Pearson correlation was used to analyze only between two variables and multiple regression was used to estimate variables that have a relationship over two variables.

Correlation Analysis uses for evaluating the relationship between two variables in order to know how much it is strength. Correlation is related to one another. This means that if there is a systematic change in one variable, there is a systematic change in another also (Keane & Adrian, 1992). The following describes the strength of the correlation.

Table of the Interpretation of Strength Correlation
(Source: Keane & Adrian, 1992)

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Interpretation of Strength</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.00 - 0.19</td>
<td>very weak</td>
</tr>
<tr>
<td>0.20 - 0.39</td>
<td>weak</td>
</tr>
<tr>
<td>0.40 - 0.59</td>
<td>moderate</td>
</tr>
<tr>
<td>0.60 - 0.79</td>
<td>strong</td>
</tr>
<tr>
<td>0.80 - 1.00</td>
<td>very strong</td>
</tr>
</tbody>
</table>

The analysis of the relationship between and customer satisfaction and four independent variables (product quality, reliability, price, and product design) by using Pearson Product Moment Coefficient Correlation (Bivariate)

As indicated in the table, product quality has the correlation coefficient (r) equal to .808, which means that there is a very strong positive relationship between product quality and customer satisfaction. The other three variables (reliability, price, and product design) have a strong positive relationship with customer satisfaction. The correlation coefficient (r) is equal to .797, which means that there is a strong positive relationship between reliability and customer satisfaction. The correlation coefficient (r) is equal to .766, which means that there is a strong positive relationship between price and customer satisfaction. The correlation coefficient (r) is equal to .675, which means that there is a strong positive relationship between product design and customer satisfaction.

Multiple Regression Analysis
The analysis of Multiple Regression
According to above table, model summary shows that the value of adjusted R Square was equaled to 0.724, which meant that 72.4% of the variation in customer satisfaction could be explained by independent variables (product quality, reliability, price, and product design).

Anova table explains that all predictors (product quality, reliability, price, and product design) were significant related to customer satisfaction (0.000<0.01).

Coefficients table demonstrates that product quality was the most powerful influencer at the value of 0.357. Beta also has t-value and significance of that t-value associated with it. The highest beta was product quality at the value of 0.349. This value showed that product quality affected toward customer satisfaction. This could be summed that if product quality changed by one unit, customer satisfaction will increase or decrease by 34.9%.

There are three independent variables that are statistically significant (p < 0.01) towards customer satisfaction which are product quality, reliability, and price. On the contrary, the sig of product design showed 0.694 (The beta -0.21), which could be explained that product design was not statistically significance towards customer satisfaction.
Summary of Findings

Summary of Descriptive Analysis for Demographic Characteristic

The results of demographic data were from 278 respondents, who used and purchased Facekute Facial Foam. Most of them were female (197 people). The largest group of respondents was at the age of 19-25 years old (153 people). The highest percentage of respondent’s occupation was university student (139 people). The major group has income more than 10,000 baht.

Summary of Descriptive Analysis of Behaviour Frequency

The amount average of purchase Facekute Facial Foam per one time was 200 Baht (126 people). The analysis of how often do you purchase Facekute Facial Foam per year was 3-4 times (124 people). Finally, customers get information about Facekute Facial Foam from family/friend recommendation, which was 107 results.

Summary of Hypothesis Testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Details</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1&lt;sub&gt;0&lt;/sub&gt;</td>
<td>Product Quality has no significant relationship with customer satisfaction on Facekute Facial Foam.</td>
<td>Rejected</td>
</tr>
<tr>
<td>H2&lt;sub&gt;0&lt;/sub&gt;</td>
<td>Reliability has no significant relationship with customer satisfaction on Facekute Facial Foam.</td>
<td>Rejected</td>
</tr>
<tr>
<td>H3&lt;sub&gt;0&lt;/sub&gt;</td>
<td>Price has no significant relationship with customer satisfaction on Facekute Facial Foam.</td>
<td>Rejected</td>
</tr>
<tr>
<td>H4&lt;sub&gt;0&lt;/sub&gt;</td>
<td>Product Design has no significant relationship with customer satisfaction on Facekute Facial Foam.</td>
<td>Failed to reject</td>
</tr>
</tbody>
</table>

According to the hypothesis testing table above, H1<sub>0</sub>, H2<sub>0</sub>, and H3<sub>0</sub> were rejected at significance level testing value at 0.001 meaning that product quality, reliability, and price have a statistical relationship with customer satisfaction on Facekute Facial Foam. On the other hand, product design has no statistical relationship with customer satisfaction on Facekute Facial Foam.
Discussion and Conclusions

The result of the research displays that product quality has a significant relationship with customer satisfaction. Furthermore, the result also supported the previous studies which found that product quality was the most important attribute and was expected to have a positive relationship with customer satisfaction (Bei & Chiao, 2001). The better product quality will maintain high customer satisfaction (Yuen & Chan, 2010). Chinomina, Okoumba, and Pooe mentioned that product quality was assessed by how easy the product can be used, which matched with the finding (Chinomina, Okoumba, & Pooe, 2013). It was found that the highest mean in part of product quality was “It is easy to use” which was equal to 4.09.

From the study, the result of the research shows that reliability has a significant relationship with customer satisfaction. As mentioned in Riseley and Schehr’s journal, customers will buy online unless the company is trustworthy (Riseley & Schehr, 2000). It has the same result from this research, but it was less important than product quality. The perceptions of price have a direct impact on customer satisfaction (Lymperopoulos, Chaniotakis, & Soureli, 2013). The findings of this current study demonstrate that price was the third factor affecting customer satisfaction. The analysis of price proved that “I will continue to buy Facekute Facial Foam even the price goes higher” had the lowest mean which was equal to 3.38. For this reason, the company needs to make sure that customers are affordable to the selling price that the firm offers in the market.

The previous study revealed that product design was the tangible item to change and draw satisfaction from customers (Ana & Arboleda, 2004). Its role is to make the first impression to serve consumers’ fulfillment. The research findings expose that there is no statistically significant relationship between product design and customer satisfaction at 0.01 significant level. This could be concluded that product design had no impact on customer satisfaction.

Recommendations

The results of this research can be utilized to improve and increase customer satisfaction on Facekute Facial Foam. The demand of beauty is increasing from younger consumers to older consumers. People begin to use facial foam at a relatively young age. According to the findings, the company ought to concentrate on product quality, reliability, and price. These three factors affect customer satisfaction on Facekute Facial Foam.

To begin with, product quality has the most impact on customer satisfaction on Facekute Facial Foam. The company ought to take this issue into account, as it is the primary factor to subsidize the business. According to Sports Authority of Thailand, there are 390 lists of cream danger that the Food and Drug Administration (FDA) found forbidden mixtures (Office regulates
the use of banned substances Sports, n.d.). These creams make skin face whiten and solve skin problems rapidly. However, when the users stop using, their faces will be worse than before. The customer tends to select the high quality of organic product. Hence, the managerial team should search for the best quality from nature to satisfy customer satisfaction.

In addition, people have different age concern on reliability. The products are prerequisite to pass the experiment because people are sensitive to skin, especially their faces. Facekute should improve more in terms of communication so that people know their product. The company should also guarantee the new innovation, carrot facial foam. Moreover, the company ought to have many positive reviews from the users to strengthen the confidence of new customers.

Last but not least, price is the last factor that has an impact on customer satisfaction on Facekute Facial Foam. The reasonable price and attractive promotion will gap the attention from consumers. Likewise, the observation of direct competitors would help in setting price to be similar to them so that the firm can compete in price and make the most profit.

References


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