Factors Affecting Customers Using Modern Retail Stores In Bangkok

Wornchanok Chaiyasoonthorn 1, + and Watanyoo Suksa-ngiam 2

1 Administration and Management College, King Mongkut’s Institute of Technology Ladkrabang, Bangkok 10520, Thailand.
2 Ruam-Jit Engineering Company Limited, Chainat 17000, Thailand.

Abstract. Discount stores, hypermarts, and supermarkets have been dominating the retail industry in Thailand for a long time. This research aims at investigating what factors affect Thai customers purchasing goods and services from such types of retail stores in Bangkok, Thailand. 424 respondents were selected from 4 areas in Bangkok; correlations and multiple regressions statistical analyses were employed to estimate relationships between independent and dependent variables. The results show that factors correlated with purchase of goods and services from modern retail stores were distance from home, distance from workplace, purchase intention, customer satisfaction, perceived service quality, personal income, and household income. However, when considered with significant factors and multicollinearity, only three factors: distance from workplace, purchase intention, and personal income could be used to create a predicting equation. Discussions and future research are addressed at the end.

Keywords: retail stores, discount stores, hypermarts, supermarkets, and marketing

1. Introduction

There is an increase in competition among types of modern stores: grocery stores, supermarkets, discount stores, department stores, catalog showrooms; they are competing for the same customers [1]. Gigantic discount chains can threaten a traditional department store chain and a small grocery store [2] while hypermarkets are a favorite type of retail store because of lower price and convenience. Such stores affect traditional stores negatively [3] because such store chains have advanced information technology, excellent logistic systems and powerful bargains [1]. In addition, traditional retailers are being coerced by modern stores since modern retail stores play in both the top (luxury offering) and the bottom (discount pricing) markets. Modern retailers have changed not only the structure of the retail industry, but also the pattern of consumer behavior. Nowadays, customers are facing difficulty in making their decision to select from many types of stores such as grocery stores, supermarkets, discount stores, large mega stores, and hypermarkets [4].

2. Literature Review

2.1. Distance

Locations of retailers must be accessible to the potential target group of customers [5]. A far distance has a negative effect on the selection of a retail store through reducing frequency of customers visiting a store [6]. Stores located in the centre of city benefit from their next door to remote customers [7]. Therefore, we surmised that distance from home (X1) and distance from workplace (X2) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 1 and hypothesis 2).

2.2. Purchase Intention

+ Corresponding author. Tel.: + (662-329-8459); fax: + (662-329-8461).
E-mail address: (yuyja@hotmail.com, kcwornch@kmitl.ac.th).
Purchase intention is used to demonstrate intention of buyers to buy goods or services [8]. Consumer’s decision is based on a complex set of factors such as quality, value, and satisfaction, which can directly influence behavioural intention [9]. Intentions have normally been accepted as the cognitive component of an attitude and it is usually assumed that this cognitive component is associated with the attitude’s affective component [10]. Purchase intention is more suitable for short time measurement than for long time measurement [11]. Intention can be used to describe customer’s loyalty [12]. So, we conjectured that purchase intention (X3) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 3).

2.3. Customer Loyalty

Customer loyalty is an imperative requirement of all sorts of retail stores [13]. According to Kumar & Shah [14], “Customer loyalty can be a double edged sword. If mismanaged, it can seriously hurt the company’s bottom-line. That is, profitability may be compromised for loyalty. But, if customer loyalty is managed prudently and in conjunction with profitability, it could be the most potent weapon against competition in the company’s marketing arsenal [14].” Therefore, we assumed that customer loyalty (X4) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 4).

2.4. Customer Satisfaction

Modern retailers believe that customer satisfaction is a major factor in doing successful business [15]. Customer satisfaction refers to customers’ feelings of satisfaction or dissatisfaction arising from comparing a product’s or service’s performance or outcome along with their expectation [1]. The role of satisfaction can be seen as a factor that affects purchasing intention of consumers [9], and also customer satisfaction is responsible for store sales performance [15]. The American Customer Satisfaction Index divides customer satisfaction into three components: overall satisfaction, expectancy-disconfirmation, and real performance of a product or service versus performance of an ideal product or service [16]. Taking the above into account, we assumed that customer satisfaction (X5) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 5).

2.5. Perceived Value Factors

Offering excellent value to customers is a continuing concern of management in many business markets nowadays. Knowing how customers evaluate product or service value has become essential for firms [17]. Nonetheless, perception of value is subjective since different customers from different cultures and different time seem to evaluate different value. This notion depicts value as a changing variable, at any given time e.g. before purchase, at the moment of purchase, at the time of use, and after use [18]. Perceived value has a positive effect on customer satisfaction [19]. Value normally consists of quality, service, and price (QSP), known as the customer value triad [20]. Consequently, we assumed that perceived quality (X6), perceived price (X7), and perceived service quality (X8) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 6, 7, and 8).

2.6. Store Assortment

An important issue of managing retail stores is to offer customers an opportunity to visit a retail store at one time for one-stop shopping and get multiple products or services [4]. Generally, managers of supermarkets view the importance of assortment differently from their customers. Customers are more concerned about product and service assortment than the managers of supermarkets [21]. Stores which allow customers shopping multi products tend to outperform those which focus on single product outlets in that multiple product stores can help customers economize by making fewer trips to buy products [4]. Thus, we assumed that store assortment (X9) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 9).

2.7. Socioeconomics

Income (both individual and family) is one crucial factor of socioeconomics; it divides people into social standing by estimating their amount and source of revenue [22]. Poor customers tend to buy from low price store and purchase little from supermarkets because of their limited resources [23]. Customers make
decisions based on their personal characteristics such as age, occupation and economic circumstances. Such factors have a direct impact on customer behavior [1]. Hence, we assumed that personal income (X10) and household income (X11) would have a relationship with the amount of purchase (Y) from retail stores (hypothesis 10 and 11).

3. Methodology

3.1. Samples and the sampling method
In this research, the number of respondents was 424, selected by using area sampling (cluster sampling) from 4 locations in Bangkok Thailand. The samples were asked for information about the most visited retail store (a hypermart, discount store, or supermarket). A 7-semantic differential scale was employed to measure question items.

3.2. Construct reliability and validity
To measure reliability of factors, the researchers employed Cronbach’s Alpha test for all variables (except the variable which consisted of one question). It is generally accepted that Cronbach’s Alpha should be greater than 0.7. Our measurement of all variables had Cronbach’s Alpha greater than 0.8. To measure validity, the researchers employed exploratory factor analysis (EFA) to analyze factor loading for all variables (except the variable that consisted of only one question).

4. Results

4.1. Correlation analysis
In this research, the amount of retail purchase (the total score of Y) was measured by using the following equation:

\[ Y = Y_1 Y_2 + Y_3 Y_4 + Y_5 Y_6 \]  (1)

In equation 1, Y1 = the amount of food purchased per time, Y2 = frequency of food purchased in a month, Y3 = the amount of consumer goods purchased per time, Y4 = frequency of consumer goods purchased in a month, Y5 = the amount of purchase from shops inside the store (e.g. book stores, restaurants, and so on) per time, and Y6 = frequency of purchase from shops inside the store in a month. According to Table 1, an amount of purchase (Y) had a relationship with X1 (distance from home), X2 (distance from workplace), X3 (purchase intention), X5 (customer satisfaction), X8 (perceived service quality), X10 (personal income), and X11 (household income). Hence, we accepted hypotheses: 1, 2, 3, 5, 8, 10 and 11.

Table 1: correlations among variables

<table>
<thead>
<tr>
<th></th>
<th>Y</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
<th>X5</th>
<th>X6</th>
<th>X7</th>
<th>X8</th>
<th>X9</th>
<th>X10</th>
<th>X11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X1</td>
<td>.161(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X2</td>
<td>.201(**)</td>
<td>.357(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X3</td>
<td>.321(**)</td>
<td>.149(**)</td>
<td>0.058</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X4</td>
<td>0.088</td>
<td>0.074</td>
<td>0.014</td>
<td>.249(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X5</td>
<td>0.098(*)</td>
<td>.166(**)</td>
<td>0.075</td>
<td>.190(**)</td>
<td>.479(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X6</td>
<td>0.047</td>
<td>0.082</td>
<td>-0.002</td>
<td>.152(**)</td>
<td>.485(**)</td>
<td>.550(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X7</td>
<td>0.047</td>
<td>0.08</td>
<td>-0.008</td>
<td>.129(**)</td>
<td>0.09</td>
<td>.102(*)</td>
<td>.187(**)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X8</td>
<td>.116(*)</td>
<td>0.022</td>
<td>-0.009</td>
<td>.139(**)</td>
<td>.365(**)</td>
<td>.444(**)</td>
<td>.493(**)</td>
<td>.104(*)</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X9</td>
<td>0.023</td>
<td>0.07</td>
<td>0.056</td>
<td>.119(*)</td>
<td>.429(**)</td>
<td>.548(**)</td>
<td>.545(**)</td>
<td>-0.026</td>
<td>.483(**)</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X10</td>
<td>.191(**)</td>
<td>0.089</td>
<td>.173(**)</td>
<td>0.007</td>
<td>-0.05</td>
<td>0.039</td>
<td>0.013</td>
<td>-0.068</td>
<td>0.024</td>
<td>-0.033</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>X11</td>
<td>.133(**)</td>
<td>0.025</td>
<td>0.069</td>
<td>-0.04</td>
<td>-0.044</td>
<td>-0.024</td>
<td>-0.044</td>
<td>-1.173(**)</td>
<td>-0.042</td>
<td>0.039</td>
<td>.496(**)</td>
<td>1</td>
</tr>
</tbody>
</table>

(*) = significance at 0.05, (**) = significance at 0.01

4.2. Multiple Regression Analysis
In this research, stepwise multiple regression analysis was employed to create a linear equation. The results from table 2 delineate three possible models, and we decided to select model 3 since the value of $R^2$ was more than the other two.

Table 2: models derived from stepwise multiple regression analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Squared</th>
<th>Adjusted $R$ Squared</th>
<th>Std. Error of the Estimate</th>
<th>$R$ Square Change</th>
<th>$F$ Change</th>
<th>df1</th>
<th>df2</th>
<th>Sig. $F$ Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.321(1)</td>
<td>0.103</td>
<td>0.101</td>
<td>14.72394</td>
<td>0.103</td>
<td>47.899</td>
<td>1</td>
<td>418</td>
<td>0.000</td>
</tr>
<tr>
<td>2</td>
<td>.372(2)</td>
<td>0.139</td>
<td>0.134</td>
<td>14.44518</td>
<td>0.036</td>
<td>17.289</td>
<td>1</td>
<td>417</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>.402(3)</td>
<td>0.162</td>
<td>0.156</td>
<td>14.26427</td>
<td>0.023</td>
<td>11.645</td>
<td>1</td>
<td>416</td>
<td>0.001</td>
</tr>
</tbody>
</table>

(1) variables: Constant and $X_3$, (2) variables: Constant, $X_3$, and $X_{10}$. (3) variables: Constant, $X_3$, $X_{10}$, and $X_2$.

According to table 3, factors that had a statistically significant impact on an amount of purchase were $X_3$ (purchase intention), $X_{10}$ (personal income), and $X_2$ (distance from workplace).

Table 3: constants and coefficients deprived from stepwise multiple regression analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Before Standardization</th>
<th>Standardized Coefficients</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficients</td>
<td>Standard Error</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>11.352</td>
<td>1.672</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>$X_3$</td>
<td>4.829</td>
<td>.311 .000</td>
</tr>
<tr>
<td></td>
<td>$X_{10}$</td>
<td>1.707</td>
<td>.161 .000</td>
</tr>
<tr>
<td></td>
<td>$X_2$</td>
<td>1.098</td>
<td>.156 .001</td>
</tr>
</tbody>
</table>

The solely three factors which affected an amount of purchase were purchase intention ($X_3$), personal income ($X_{10}$), and distance from workplace ($X_2$). Here, we determined two equations predicting the amount of purchase of retail customers.

$Y=11.352 + 4.829 X_3 + 1.707 X_{10} + 1.098 X_2$                                                                             (2)

$Z=0.311 X_3 + 0.161 X_{10} + 0.156 X_2$                                                                                         (3)

Equation 3 is the equation before standardization, whereas equation 4 is the equation after standardization. This research shows that purchase intention was the greatest predictor of the amount of purchase, followed by household income, and the distance from workplace.

5. Discussions

In this research, when considering variables that had a direct effect on the amount of purchase, we found that a far distance from workplace ($X_2$) had a positive effect on the amount of purchase ($Y$); this result was in contrast to that of Hansen & Solgaard [6] which showed that a far distance had a negative impact on the amount of purchase. However, we scrutinized the components of the amount of purchase ($Y$) by using regression analysis; then we found that distance from workplace had a positive effect on the amount of purchase per time (e.g. $Y_1$, $Y_3$, and $Y_5$); in contrast, distance from workplace has no relationship with frequency of purchase (e.g. $Y_2$, $Y_4$, and $Y_6$). The following equations explain impacts of distance on the components of purchase ($Y$).

$Y_1 = 2.544 + .171 (X_2)$  \( R^2 = 0.056, \text{sig} = 0.000 \) (4)

$Y_2 = 2.480 - .035 (X_2)$  \( R^2 = 0.003, \text{sig} = 0.226 \) (5)

$Y_3 = 2.399 + .151 (X_2)$  \( R^2 = 0.041, \text{sig} = 0.000 \) (6)

$Y_4 = 1.991 + .022 (X_2)$  \( R^2 = 0.002, \text{sig} = 0.421 \) (7)

$Y_5 = 1.900 + .151 (X_2)$  \( R^2 = 0.038, \text{sig} = 0.000 \) (8)

$Y_6 = 1.871 + .045 (X_2)$  \( R^2 = 0.005, \text{sig} = 0.142 \) (9)

Such equations suggest that future research should be conducted by questioning customers about which store is customer’s last visited retail store, not which store is customer’s most visited store. Doing so may enable the finding showing the impact of frequency on the amount of purchase.

6. References


