The Influence of Promotion Approach and Store Layout on Impulse Buying Behavior

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Abstract
This research aimed to determine factors which influenced impulse buying behavior at one of local clothing retail store in Cikarang. Based on the previous studies, Promotion Approach and Store Layout were hypothesized as the independent variables which influenced Impulse Buying Behavior as the sole dependent variable. The researcher employed SPSS and binomial logistic regression to analyze the data collected from questionnaires spread to 200 customers of the local clothing retail store. The result of this research suggested that Promotion Approach and Store Layout significantly influenced Impulse Buying Behavior. The biggest influencer to Impulse Buying Behavior was Promotion Approach.

Keywords: Promotion Approach, Store Layout, impulse Buying Behavior, Binomial Logistic Regression.

1. Introduction
Retail is defined as all selling activities of goods or services to buyers for their personal consumption (Mishra et al, 2014). According to Jakarta Globe, despite the sluggish economic growth this year, clothing retailers are ready to capture the lucrative share of middle class and its higher income. Moreover, the sales turnover from the nation’s retailer is expected to grow between 10 percent and 12 percent.

From 30 developing countries around the world, Indonesia was ranked 12th in the Global Retail Development Index Ranking (GRDI) issued by AT Kearney in 2015. Even though retail sales per capita were decreased in 2014, it has grown 14.5% in 2015. AT Kearney record that retail in Indonesia reaches $362 billion or equal to IDR 4.306 trillion. Despite the fact that Ministry of Trade limited the maximum numbers of franchise store, it did not spoil the passion and growth of retail business in the country.
According to the Association of Indonesia Retail Industry (APRINDO) on Frontier Consulting Group, the growth for Indonesia retail industry is increasing by 10% - 15% per year. For instance in 2012, the retail sales were expected to reach 138 billion Rupiah. The intensity of retail competition in Indonesia coupled with the high level of buying power in the country supports the growth of retail businesses.

The growth of retail industry in the country is also followed by hedonistic middle class who buy goods or services on impulse, a purchase behaviour in which the purchase decision precludes any thoughtful, intentional contemplation of alternatives (Bhatti & Latif, 2014).

This research was conducted partially to solve the sales decline in one of the clothing stores in Cikarang from 2014 to 2016. A strategy proposed to increase the sales was through the cultivation of factors which influence impulse buying. According to Nooshabadi (2012) impulse buying is a purchased of goods or services by the customers that have no prior planning to obtain them. In accordance with Samarin and Morini (2012) some of factors that stimulate impulse buying are promotion approach and store layout.

2. Literature Review
2.1 Promotion Approach

Promotion approach is when marketers want to boost the sales through the short-term incentives and they hope the consumer will repeat the purchase later without the incentives (Burrow & Bosiljevac, 2011). Promotion approach can be in form of free sample, winning contest, different price packs, and sweep stake (William et al, 2012).

2.2 Store Layout

Store layout is a particular shopping situation constituted by very important determinants such as store density, shop cleanliness, store display, in-store promotion, prices, queue, music, etc to impulse purchases (Ramankutty et al, 2014). Moreover, the store layout has to be objectively organized in order to get customers shop longer and buy more by different sections and aisles of a store (Hubrechts & Kokturk, 2012).

2.3 Impulse Buying Behavior

Impulse buying is a rapid convincing, hedonically compound purchase behaviour in which the quickness of the impulse purchase decision precludes any thoughtful, intentional contemplation of alternatives (Bhatti & Latif, 2014).

Hubrechts & Kokturk (2012) divide the impulse buying into four categories which are pure impulsive buying, suggestion impulsive buying, reminder impulsive buying, and planned impulse buying. Pure impulsive buying is a purchase that is strongly linked to emotional factors. Suggestion impulsive buying is a need triggered after encountering a new product for the first time that can only be fulfilled by getting it. Reminder impulsive buying is a purchase that was made when customers see something or a product in store, causing them to remember that they need to purchase that product. Last is planned impulsive buying which is a purchase that occurs when a customer planned to buy a product with certain criteria in response of what the store can offer.

Impulse buying behavior is both internally and externally driven (Karbasivar & Yarahmadi, 2011). Consumer’s personality traits, emotional state, mood, and self-feelings are some of internal factors which trigger impulse buying behavior. Meanwhile, promotional incentives and store layout and atmosphere are some of external factors which trigger impulse buying behavior.
3. Research Objectives, Theoretical Framework and Hypothesis

3.1 Research Objectives

The objectives of this research are as follows:
1. To measure the influence of Promotion Approach towards Impulse Buying
2. To measure the influence of Store Layout towards Impulse Buying

3.2 Theoretical Framework

![Theoretical Framework Diagram]

Figure 1: Theoretical Framework

3.3 Hypotheses

The hypotheses of this research are as follows:
1. \(H_01\): There is no significant influence of Promotion Approach towards Impulse Buying Behavior
   \(H_{A1}\): There is significant influence of Promotion Approach towards Impulse Buying Behavior
2. \(H_02\): There is no significant influence of Store Layout towards Impulse Buying Behavior
   \(H_{A2}\): There is significant influence of Store Layout towards Impulse Buying Behavior

4. Research Methodologies

4.1. Data Sources

The data were collected from one of the clothing retail stores in Cikarang. The main reason for choosing this retailer was the decline of sales from 2014 to 2016. 200 customers were approached randomly as they finished their shopping from the store. This was done for 5 working days till the desired numbers for sample was achieved. Based on the response received by administering a structured questionnaire, 200 responses were found to be useful for further analysis. The researcher employed binary logistic regression which allowed the researcher to predict which of the two categories a person is likely to belong: impulsive buyer or not impulsive buyer.

4.2. Questionnaire Design

The questionnaire contains two sections; first section was the respondent profile such as gender, monthly income, marital status, age, residence distance, frequency of shopping in a month, etc. The second section was the measurement scales for the five variables...
hypothesized in this research. All the variable constructs were measured on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

4.3. Binary Logistic Regression

Steingrimsson et al (2010) described that binary logistic regression is the method of choice used when the dependent variable is binary and when a researcher would like to explore the relative influence of continues and/or categorical independent variables on the dependent variable, and to access interaction effects between the independent variables. Binary logistic regression is used when the data is assumed to be ordinal-categorical data, such as Likert-type scale response, typically from “Strongly Disagree” to “Strongly Agree”.

The formula for binary logistic regression for multivariate is as follows:

\[ P(Y) = \frac{e^{b_0+b_1x_1+b_2x_2+...+bnX_n}}{1+e^{b_0+b_1x_1+b_2x_2+...+bnX_n}} \]

Where P is probability of Y occurring, e is natural algorithm base, \( b_0 \) is interception at y-axis, \( b_j \) is line gradient, \( b_n \) is regression of coefficient of \( X_n \), \( X_j \) is predictor variable.

However, according to Grimbeek et al (2005) Likert-scale response categories not only provide a positive opportunity for a smoother distribution of responses (i.e., a normal spread of choices across categories) but also allow “negative” opportunities for participants to misjudge the intensity of what is inherently a qualitative response. That is, the range of available response categories can obscure rather than clarify the intent of the respondent. A strategy for minimizing respondent ambiguity is to collapse across response categories.

The implication of the above-mentioned strategy on attitude scale data is the reduction of the normal 5-point response categories (Strongly Disagree, Disagree, Undecided/neutral, Agree, and Strongly Agree) into dichotomous categories representing the respondent's inherently dichotomous classifications/categories: Impulsive Buyer (collapsing across Agree and Strongly Agree) or Non-Impulsive Buyer (collapsing across Strongly Disagree, Disagree, and Neutral). Through the use of SPSS statistical tool the value of each variable is then collapsed or recoded: 1-3 into “0” or “Non-Impulsive Buyer”, and 3.01-5 into “1” or “Impulsive Buyer”. Finally, through binary logistic regression, the researcher aim to predict whether a person tends to be loyal or disloyal after assessing each variable.

5. Data Analysis

5.1. Data of Respondents

There were 200 questionnaires distributed to the customers of a clothing retail in Cikarang. All of the respondents that help to fill in the questionnaire were credit card users. 87 respondents were male and 113 respondents were female.

In terms of age, the respondents were classified into 5 categories: 10 respondents below 20 years old, 77 respondents were somewhere between 20 to 30 years old, 84 respondents were somewhere between 30 to 40 years old, 27 respondents were somewhere between 40 to 50 years old and 2 respondents were above 50 years old.

In terms of education, 2 respondents were high school and lower degree, 67 respondents were associate degree, 88 respondents were bachelor degree, 37 respondents were master degree and 6 respondents were PhD and higher degree.

In terms of monthly income, 7 respondents had monthly income less than Rp. 3.000.000, 43 respondents had monthly income between Rp. 3.000.000 – Rp. 5.000.000, 74 respondents had monthly income between Rp. 5.000.001 – Rp. 7.500.000, 36 respondents had monthly income between Rp. 7.500.001 – Rp. 10.000.000, 2 respondents had monthly income above Rp. 10.000.000.
income between Rp. 7.500.001 – Rp. 10.000.000, 22 respondents had monthly income between Rp. 10.000.001 – Rp. 15.000.000 and 18 respondents had monthly income above Rp.15.000.000.

In terms of visit frequency, 71 respondents visited the store once a month, 38 respondents visited the store twice a month, 52 respondents visited trice a month, and 39 respondents visited more than three times a month.

From the respondents profile, it can be concluded that most of respondents were female, they were between 30 to 40 years old, most of them had bachelor degrees, their monthly incomes were between Rp. 5,000,001 to Rp. 7,500,000 and most of them visited the store once a month.

5.2. Correlation

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>PA Correlation Coefficient</th>
<th>SL Correlation Coefficient</th>
<th>IB Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.000</td>
<td>652”</td>
<td>.758”</td>
</tr>
<tr>
<td></td>
<td>.652”</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>.758”</td>
<td>.712”</td>
<td>1.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on Table 1:

1. The correlation between Promotion Approach (PA) and Impulse Buying (IB) behavior is significant; the correlation is 0.758 indicates as strong. The nature of correlation is positive, which means when the promotion approach increase, impulse buying behavior variable will also increase. Otherwise, when the promotion approach decreases, impulse buying behavior variable will also decrease.

2. The correlation between Store Layout (SL) and Impulse Buying (IB) behavior is significant; the correlation is 0.712 indicates as strong. The nature of correlation is positive, which means when the store layout increase, impulse buying behavior variable will also increase. Otherwise, when the store layout decreases, impulse buying behavior variable will also decrease.

5.3. Multicollinearity

According to (Perwirana, 2014) if correlation coefficient data is less than 0.8 it means that the data does not have multicollinearity, it means fine to be further used in this research. Based on Table 1, the power of correlation coefficient among independent variables are less than 0.8, so the data in this research does not have multicollinearity.

5.4. Binomial Logistic Regression

This research is analyzed using Binomial Logistic regression in order to predict or guess the outcome of some categorical variable with only two outcomes: impulse of not impulse.
5.4.1 Model Summary

<table>
<thead>
<tr>
<th>Step</th>
<th>-2 Log likelihood</th>
<th>Cox &amp; Snell R Square</th>
<th>Nagelkerke R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>72.053*</td>
<td>.410</td>
<td>.710</td>
</tr>
</tbody>
</table>

a. Estimation terminated at iteration 7 because parameter estimates changed by less than .001

Based on Table 2, the value of Cox & Snell R Square is 0.410 whereas the value of Nagelkerke R Square is 0.710 which indicates the ability of independent variable in explaining the variance in the dependent variable is suggesting between 41% and 71%. In other words, the contribution of all variables in the model is predicted to be between 41% and 70.9%.

5.4.2 Omnibus Test

<table>
<thead>
<tr>
<th>Step</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>102.466</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Block</td>
<td>102.466</td>
<td>2</td>
<td>.000</td>
</tr>
<tr>
<td>Model</td>
<td>102.466</td>
<td>2</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on Table 3, the Chi-square shows 102.466 on 2 degree of freedom. The Chi-square, 102.466 > Chi-square distribution table on 2 degree of freedom (5.991) and a significance of 0.00 (< 0.05); this indicates that the addition of independent variable could influence significantly to dependent variable. Therefore there is significant simultaneous influence of Promotion Approach and Store Layout towards Impulse Buying Behavior.

5.4.3. Hypothesis Testing

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>df</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>PA</td>
<td>2.424</td>
<td>.667</td>
<td>10.283</td>
<td>1</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>SL</td>
<td>1.355</td>
<td>.726</td>
<td>4.105</td>
<td>1</td>
<td>.022</td>
</tr>
<tr>
<td></td>
<td>Constant</td>
<td>-2.103</td>
<td>.522</td>
<td>13.226</td>
<td>1</td>
<td>.000</td>
</tr>
</tbody>
</table>

Based on Table 4, the results of hypothesis testing are as follows:

1. Since the significant value of Promotion Approach (PA) is 0.000 or below 0.05, shows that promotion approach has partial significant influence toward Impulse Buying. Therefore, the Null Hypothesis (H01) is rejected and the Alternate Hypothesis (H1) is accepted.
2. Since the significant value of Store Layout (SL) is 0.022 or below 0.05, shows that store layout has partial significant influence toward purchasing decision. Therefore, Null Hypothesis (H02) is rejected and the Alternate Hypothesis (H12) is accepted.

6. Conclusions

Promotion Approach has a significant influence toward Impulse Buying Behavior (Sig. 0.000). Every agreement of the respondents in Promotion Approach’s items will increase the probability of the respondents to be impulsive buyers by 12.781 times.
Store Layout has a significant influence toward Impulse Buying Behavior which is (Sig. 0.022). Every agreement of the respondents in Store Layout’s items will increase the probability of the respondents to be impulsive buyers by 5.773.

All in all, the result of this research suggested that Promotion Approach and Store Layout significantly influenced Impulse Buying Behavior. The biggest influencer to Impulse Buying Behavior was Promotion Approach.

References