The impact of Exterior and interior design on customer repurchase intention: Empirical Evidence from Supermarkets in Sri Lanka

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KeyWords
Super markets, Interior design, Exterior design, Repurchase intention.

ABSTRACT
This study is focused on measure the impact of exterior and interior designs in the super market on customer repurchase intention in Sri Lanka due to inconsistency of the findings in the existing literature and lack of substantial studies relevant to the study area. Such as there are very few studies in Sri Lankan context for this topic. Also there is lack of research studies by combining these two variables. Such as exterior and interior design on repurchase intention. Here researcher was concerned specially three super market in the Matara area. Such as Cargeels food city, Keels super and Arpico super center.

Here researcher was used six dimensions to measure the independent variable. Such Parking lot, Color of building and Displayed name boards used as the exterior elements and lightning, scent/ smell and temperature used for interior elements. Hence dependent variable repurchase intention is measured by plan to buy in future, word of mouth and loyalty. Primary data were collected from 100 customers living in Matara district by using a survey based questionnaire through the visit of three super market and collected data by researcher herself. Using SPSS data was analyzed and the result were revealed that there was an impact of exterior design and interior design in the super market such as Parking lot, Color of building, Displayed name board, lightning, scent/ smell and temperature on customer repurchase intention. Finally researcher was concluded that there is a significant impact from exterior and interior design in the super market on customer repurchase intention.
INTRODUCTION

When consider about the retailing growth in Sri Lanka it is take very important place in the business environment. Reason is that consumers needs are rapidly grows up in modern retailing. In modern business context Retail consumers are seems to be very convenience oriented. Hence the concept of super market becomes significant retail format in the retail setting. Under the super market format it carried convenience shopping experience to retail customers. It is shaped by the lifestyle of the consumers in the country. Super markets were created the concept called all the things at one roof. It illustrates that under super markets customers can purchase wide range of products and offerings which wants to them at one place. It is the solution that modern retail customers seek as their convenience.

Not only the convenience, customers are expecting high quality offerings at affordable price. Most of time in the retail business customers is price sensitive people. Therefore supermarket offerings are serving with middle level income customers to high-in customers. As well as the customers are variety seekers due to changes in their life styles.

In order to give superior shopping experience to customers now a days exterior and interior design in the super markets play major role while fulfilling customer requirements at the super markets. Exterior design means that decoration of the retail stores outside of the building. It is about the architectural style of the building, the size of the building, the exterior color, the material of the exterior walls and other signs, the façade of the store, the parking lot, so and so. It includes also space in front of the store. It is very important to attract the customers in to stores and visit the store or to purchase more often in a certain location and ultimately it will leads to creates loyalty towards the particular retail store.

When it come to interior design in the super market it also performs significant role simultaneously with the exterior design. Interior design is about the inside of particular buildings. How looks like inside of a building. Interior elements are numerous and differ from one setting to another. It also refers to multiple aspects. Such as the aspect of walls, ceiling and floor, as well as the materials with which they are covered/papered, how store the goods, the manner in which the stories lightning, the sound in background, temperature, so and so. These interior design elements help creating positive feelings towards the particular retail store.

Repurchase intention means that customers willingness or wish to purchase particular goods or services again and again from particular setting. Repurchasing intention can be considered as how much a certain company can perform to meet the expectation of customers. It can also be defined as the customer’s decision of buying again at a certain products from certain outlet.

Customer’s intention to repurchase intention is shaped by customer satisfaction and brand preference. Repurchase intention refers to the likelihood of using a particular product or service again in the future. It is a consumer behavioral intention that measures the tendency to continue, increase, or decrease the amount of product from current outlet. It refer that the tendency to purchase the same brand, same product/service, from the same company.

Repurchase intention for certain products or from particular outlet will affected by various elements. Such as Physical environment, service and product quality, Brand preference, Customer satisfaction, perceived value... etc.

Through this study it will going to be measure the Impact of Exterior and Interior design in the Super markets on Repurchase intention of customers.

Research Problem

In today’s retail business format supermarket plays major role in order to provide convenience shopping experience by fulfilling customers’ requirements under one roof. When performing in retail business setting revivals creates huge impacts via the competition. In order to face to the competition supermarkets positioning in customers mind based on the retail environment. Especially they make differentiation based on exterior and interior designing. Through that retailers make customer loyalty for their outlets. Then after it will leads to make, increase repurchase from same outlet. Therefor it is important to see whether there is impact of Exterior and Interior design in the Super to the repurchase intention of customers.

Does the Exterior and Interior design in the Super markets is affect to the Repurchase intention of customers?
This research has been belongs to triangular research method. Because as per the basic research methodology is concerned this study was measure the qualitative phenomena and for the purpose of facilitating the data analysis it has been used the quantitative techniques such as the SPSS.

In this study research context is a consumers in Sri Lanka who purchase the products from super markets. There is huge trend in retail business to super market format. Now a day Sri Lankan consumers are shifting from traditional retail outlets in to super markets. Therefore data were collected from consumers who are purchasing from supermarket in Sri Lanka.

Population of this study is consumers in Sri Lanka who purchase the products from super markets. Due to the constraint of reach to all the population used 100 respondents from Matara district who are purchasing goods from super markets. As a sampling method convenience sampling method was used to select the respondents to the sample.

The researcher was collected primary data through a survey. Through the questionnaire data were gathered from the respondents. The questionnaires were distributed among the 100 respondents in the sample. To collect primary data from respondents self-administrated questionnaires were prepared and distribute among the 100 respondents of the sample. Questionnaire was designed on three sections. The first section included demographic factors. Such as an Age, approximately monthly expenses, occupation, and living area. The second section was included questions to measure the independent variable. From those questions it measures the independent variables. Such response regarding exterior design and interior design elements of the super market.

The main purpose of the questionnaire was to identify the key elements in exterior and interior design which influence in order to make repurchase intention on consumers mind on purchase form super markets.

The analysis was done by using the package SPSS (Statistical Package for Social Science). In here researcher used Frequency Test for analyze the demographic data. Scale based questions were measured by using descriptive statistic. Such as the Mean value and standard deviation (SD). The liability analysis has been tested the internal consistency if the study. To present the analyzed data several tables were used.

Hypothesis

In order to selection of the research variables and development of hypothesis researcher was used the previous research studies. Through the research articles, text books, journals, research papers research variable was selected. In here researcher has selected two independent variables to measure the impact on dependent variable. Those are the exterior design and interior design in the super market. In order to measure the impacts from independent variable repurchase intension selected as a dependent variable for this study. Independent and dependent variable was used for this study via the support of literature.

Therefore under the independent variables there are 08 dimensions with consist of four exterior elements and four interior elements. To get the approach for the data analysis research hypothesis was developed. To develop the hypothesis the previous research findings was used by the researcher. There are many research studies on exterior and interior design in the retail stores and other services organizations in order to identify the impact on several customer aspects. Such as on purchase, repurchase, satisfaction, brand loyalty ...etc.

Riaz Hussain1 & Mazhar (2015) conduct the research study in order to identify the impact of atmospheric variables on the consumer purchase intention in the international Retail chain outlets in Karachi. In their study they examined the impact of cleanliness, music, scent, color, lighting, temperature, display/layout on purchase intention of consumers. As a context they use selected retail stores in Karachi. In their study they found that Cleanliness, Scent, Lighting and Display/Layout have significant positive influence on the consumers' purchase intention while music and color have minimal impact on the consumer purchase intention.

According with the Wakefield & Baker (1998) in his research article he explained that the probability of customers staying longer in store increases due to atmospheric stimulus. When a consumer feels satisfied from the retail environment of the store, he spends more time in a particular store and buys more because of pleasant environmental stimuli. And it will attempt to make revisiting the outlet one or more time.

According to Baker in his research study he was defined the role of the physical environment of service firms as improving a brand image and stimulating buyers’ behavior such as through attractive interior design and decoration, prepared background, and the exterior design. Further he suggested that it creates loyalty and it may be leads to revisit the firm.

Based on above findings on previous research studies following alternative and null hypothesis were developed.

Hoa - There is no Impact of interior design in the Super markets on Repurchase intention of customers.

H1a – There is an Impact of interior design in the Super markets on Repurchase intention of customers.
Hob - There is no Impact of exterior design in the Super markets on Repurchase intention of customers.

H1b – There is an Impact of exterior design in the Super markets on Repurchase intention of customers.

RESULTS AND DISCUSSION

Reliability Analysis

Cronbach’s alpha is used to determine the reliability of the variables which are used in this study.

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of Items</th>
<th>Cronbach’s Alpha Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior design</td>
<td>9</td>
<td>0.811</td>
</tr>
<tr>
<td>Exterior design</td>
<td>9</td>
<td>0.770</td>
</tr>
<tr>
<td>Repurchase intention</td>
<td>5</td>
<td>0.771</td>
</tr>
<tr>
<td><strong>Overall Repurchase intention</strong></td>
<td><strong>23</strong></td>
<td><strong>0.884</strong></td>
</tr>
</tbody>
</table>

Overall Cronbach’s alpha value for the repurchase intention is 0.884, it is indicated that measurement which are used in this study also good and acceptable instrument (0.8 ≤ CAC ≤ 0.9 = Good reliability).
Descriptive Statistics

The descriptive statistics gives the mean, minimum, maximum, standard deviation and variance values of each of the distribution related to each indicator for the variable.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td>100</td>
<td>1.33</td>
<td>3.22</td>
<td>2.1956</td>
<td>.49366</td>
</tr>
<tr>
<td>Interior</td>
<td>100</td>
<td>1.33</td>
<td>3.56</td>
<td>2.2344</td>
<td>.48055</td>
</tr>
<tr>
<td>Repurchase</td>
<td>100</td>
<td>1.20</td>
<td>3.40</td>
<td>2.2400</td>
<td>.54606</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>100</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Interior and exterior design is the independent variable which was to study on the “Does the Exterior and Interior design in the Super markets is affect to the Repurchase intention of customers”. Interior and exterior design is evaluated with six dimensions; packing role, colour & materials of building, displayed name board for exterior design, lighting, scent/smell and temperature for interior design.

Interior design as an independent variable has high level of attribute of the customers (Mean X1=2.2344). Exterior design as an independent variable has high level of attribute of the customers (Mean X1=2.1956). In addition, most of the customers expressed generally a common opinion regarding the variable of interior and exterior design (Standard Deviation=0.49366 and 0.48055). With individual analysis, it is also noted that about all customers in this study have high level of attribute for the interior and exterior design.

In evaluating interior design; Repurchase, lighting, scent/smell and temperate are considered as indicators of interior design. Though their mean values are 2.06, 2.33, 2.86 and 2.30 respectively. Accordingly scent/smell and temperature have high level attribute of customers and lighting has low level of attribute of the customers.

By evaluating exterior design packing lot, colour and materials of building and displayed name board it are considered as indicators of exterior design. Although their mean values are 2.12, 2.23 and 2.22 respectively. Displayed name board and material of building have high level attribute of customers and others are low level attributes of the customers.

In overall view interior design is highly contributed (mean value X1=2.2344) to repurchase intention when compare with other dimension.
Hypothesis testing

In this research study researcher was developed the two main hypotheses. Therefore, to measure the impact of exterior and interior design on repurchase intention there were two hypotheses. In the hypothesis testing researcher was test the stated hypothesis by using regression analysis. Based on the R Square value and the p value researcher was test the alternative hypothesis.

Hoa - There is no Impact of interior design in the Super markets on Repurchase intention of customers.

H1a – There is an Impact of interior design in the Super markets on Repurchase intention of customers.

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td>1</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Exterior

The regression analysis also conducted to test the model which was influenced the exterior design in the supermarket on customer repurchase intention. In the model summary above, it shows the predictor, exterior design as the independent variable. The R square shows 0.402 in value and it means that 40.2% of the variance in the customer re-purchase intention has been significantly influenced by the exterior design. Thus, the remaining percent which is 59.8 % were explained by other factors.

<table>
<thead>
<tr>
<th>ANOVA*</th>
</tr>
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<tr>
<td>Model</td>
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<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Repurchase

b. Predictors: (Constant), Exterior

As far as the table 5.2 is concerned there was .000 p value. It is less than .005. It indicated that the exterior design has significant impact to determine the repurchase from the current super market by the customers.
Hence that the stated alternative hypothesis can accepted and null hypothesis was rejected.

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
</table>
| Regression | 8.622          | 1  | 8.622       | 40.435| .000*
| 1 Residual   | 20.898         | 98 | .213        |       |       |
| Total       | 29.520         | 99 |             |       |       |

*a. Dependent Variable: Repurchase

b. Predictors: (Constant), Interior

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.540*</td>
<td>.292</td>
<td>.285</td>
<td>.46178</td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), Interior

The regression analysis also conducted to test the model which was influenced the interior design in the supermarket on customer repurchase intention. In the model summary above, it shows the predictor, interior design as the independent variable. The R square shows 0.292 in value and it means that 29.2% of the variance in the customer re-purchase intention has been significantly influenced by the interior design. Thus, the remaining percent which is 70.8 % were explained by other factors.

As far as the table is concerned there was .000 p value. It is less than .005. It indicated that the interior design has significant impact to determine the repurchase from the current super market by the customers.

Hence that the stated alternative hypothesis can accepted and null hypothesis was rejected.

H0a – There is no Impact of interior design in the Super markets on Repurchase intention of customers.

H1a – There is an Impact of interior design in the Super markets on Repurchase intention of customers

H0b – There is a no Impact of exterior design in the Super markets on Repurchase intention of customers.

H1b – There is an Impact of exterior design in the Super markets on Repurchase intention of customers
Coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.512</td>
<td>.213</td>
</tr>
<tr>
<td>Exterior</td>
<td>.547</td>
<td>.115</td>
</tr>
<tr>
<td>Interior</td>
<td>.235</td>
<td>.118</td>
</tr>
</tbody>
</table>

Accordance with the coefficients table it disclosed that both of independent variable was significantly impact on the dependent variable. It illustrated that the exterior and interior design in the super market has significant impact on customer repurchase intention on super market. It is proved by the P value in ordinary .000 (P< .005). As for as the B value it suggested that when exterior design variable changed by 1% the dependent variable. Repurchase intention changed by .547. Also the B value for the interior design variable it is about .235. It implies that when interior variable changed by the 1% dependent variable: repurchase intention changed by the .235.

Repurchase intention=0.512+0.547 (Exterior)+ 0.235(interior)

Hence, that researcher come to the conclusion via the analysis that there is an impact of exterior and interior design on repurchase intention due to the significant values for the variables were less than standards significant value. (.005).

Correlation Analysis

The correlation analysis is initially carried out to explore the linear relationship of interior and exterior design with repurchase intention, if it exists. Results indicate that there is statistically linear significant and positive relationship ($r = 0.540, p <0.01$) and ($r = 0.634, p <0.01$) and between interior and exterior and repurchase intention (see Table 4.9.1).Thereby, accept the Hypothesis 1 H1 – i.e., interior and exterior design significantly influences on repurchase intention.
<table>
<thead>
<tr>
<th></th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior</td>
<td>.674**</td>
<td>.000</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repurchase</td>
<td>.540**</td>
<td>.000</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.634**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
Conclusion

To give superior shopping experience to customers now a day exterior and interior design in the super markets play major role in the super markets. These elements in the store environment lead to create positive involvement with the customers. Customer’s willingness to purchase particular goods or services again and again from particular setting was shaped by these exterior and interior elements. Therefore, through this research it measured the how exterior and interior elements in the super market impacted on repurchase intention of super market customers.

Statistical package for social sciences (SPSS) version 19 was use for the representation and analyze the collected data. For the analysis of demographic factors frequency test conducted. Scale based questions were analyzed by using Mean value and Standard deviation. To test the hypothesis regression analysis was conducted. By using the regression analysis finally it was measure the overall impact of interior design and exterior design in super market on repurchase intention of customers.

Through the analysis it was revealed that all alternative hypotheses were accepted and the all null hypothesis were rejected. It was proved by the p values were less than .005. In the analysis researcher could be able to identify the most influential dimension in both exterior and interior design in the super market that effect on customers repurchase decisions. Respectively colour and materials of the building, displayed name boards, smell are the most influential factors that encourage the repurchase. While temperature, lightning and parking lots have lower level impact on repurchase intention. It was proved by the R-Square value from the regression analysis.

As far as the regression analysis it was revealed that the P value for the significance is .000 which is less than .005. It implied that there was impact of exterior and interior design (independent variable) on repurchase intention (dependent variable).

As well as Accordance with the coefficients table in the regression analysis it disclosed that both of independent variable were significantly impact on determine the dependent variable. It illustrated that the exterior and interior design in the super market has significant impact on customer repurchase intention on super market. It is proved by the P value in ordinary .000 and .002. (P < .005). As for as the B value it suggested that when exterior design variable changed by 1% the dependent variable: repurchase intention changed by .547. Also the B value for the interior design variable it is about .235. It implies that when interior variable changed by the 1% dependent variable: repurchase intention changed by the .235.

Hence overall it can be concluded that there is an Impact of exterior and interior design in the Super markets on Repurchase intention of customers

References


