Investigating the Effect of Brand Extensions on Brand Mental Image  
(Case Study: Distribution Branches of Minoo Foodstuffs in Mazandaran)

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Abstract  
The aim of the present paper is to study the effect of brand extensions on brand mental image distribution branches of Minoo Foodstuffs in Mazandaran during 2013. In this paper, the effects of the related variables were studied such as the effects of mental image of Initial Brand and its fitness with the perceived one based on the brand extensions approach, its fitness with the mental and its effect between initial and final mental image, the effect of mental fitness based on the brand extensions approach and also the brand extensions approach based on the final mental and the perceived fitness based on the brand extensions approach. This paper is a functional and measuring study based on its aim and method, respectively. The method used for collecting data is field as well as a standardized questionnaire in the papers of Martinez et al. There are 24 questions in this questionnaire, which were arranged in the form of Likert Scale. The statistical method in this paper is structural equations which were analyzed by Lisrel software. In this paper, 7 hypotheses were presented as all of them were confirmed except 5th one.  

Keywords: Brand Image, Mental Image, Fit Brand, Extensions Approach

Introduction  
Brand extensions, in fact, refers to the use of an old and confirmed or approved brand in order to enter a class of a new product group (Keller and Aker, 1992). During the recent 15 years, the development of experimental and important documents and evidences about the approaches of consumers alongside the brand extensions was observed. The systematic studies about the behavior of consumers to the brand extensions were done, first, in the north of America by two effective researches. Expanding the brands with high quality in other classes of a product is possible. Also, consumers evaluate the extensions resulted from the brands with high quality compared to the other ones with moderate quality (Milberg, 2007).

Brand (Trade Name and Symbol)  
Based on the definition of America marketing society, a trade name includes name, symbol, mark, design or a combination of them which discriminates a product from other ones (Walley, 2007) 38. In a comprehensive definition, trade brand refers to a collection of the real features which is in relation with the defined features of a product or service and also separates it from the other sections or segments of a market (Egan, 2007). Apsua believed that the trade brand was formed from two components; nature of trade name or symbol and strategic situation of that name (Gabay et al., 2009).

Brand Extensions (Trade Name and Mark)  
It refers to the use of an approved brand in order to introduce the new products. There are two kinds of brand extensions including linear extensions in which a new product is being introduced in the current class / group of a product and classified extensions in which a new product is being introduced in a new and different class of a product (Young, 2003). The consumers’ approach toward the brand extensions and the value of main brand after extensions depends on the level of similarity or fitness between the main brand and its extensions (Buil et al., 2009)
Brand's Character
This concept refers to the meaning of a brand for a person as well as a collection of human characteristics in relation with a brand. A different and distinct character of a brand can lead to desirable concepts in the mind of consumers and also it reinforces the brand's name (Diamantopolulos et al., 2005)

Perceived Fit
Perceived fitness was defined as:
- A common similarity or fitness between the main brand or its class in which extensions happens;
- Similarity with the class or group of a product or homogeneity with the brand's concept;
- An especial mental relation with the main brand in the field of brand extensions;
- A significant relation with the main brand in the brand extensions such as class, group, brand's concept, revealing the especial meanings, (Young, 2003).

Information about Trade Symbol and Name (Brand Mental)
It refers to the ability of potential buyers to recognize a product. This concept means having information about trade brand referring to a trade name in the minds of customers and depends on how long a customer remembers that brand. This information is being measured by recognizing trade brand or reminding it (Wilcox et al., 2008). Accessing more information about trade brand increases the purchase quantity of customers and also in this case, the customers pay more costs to buy a product (Baldauf et al. 2003).

Especial Value of a Trade Brand:
This concept refers to the different effects of information toward trade brand on a response of a customer to that brand. This value is a concept including the views of unique customers and it happens when the customer has familiarity with a trade brand and also he / she will have a mental communication with that brand due to the desirability, power and uniqueness features of the products of that brand (Lassar et al, 1995). The strong trade brand does not lose their value over time but they increase the income resulted from selling the products which are related to that category (of that trade brand) (Wilcox et al., 2008). Based on the view of customers, the marketing effects refers to the approach, insight and the concept of trade brand and in terms of the organizational viewpoints, the results can be price, cost, income and flow (Lee and Beck, 2006).

Trust in Trade Brand
Customer's tendency toward the trade brand and being assured of that was defined as his / her trust in a trade brand; it can be said that this trust changed the customer's viewpoint and also plays an important role in the competitive advantage of an organization (Matinez et al., 2008).

Mental Image toward a Trade Brand
This image refers to the mental of consumers about a trade brand which is being reflected by the symbols or marks of that brand. This image is a collection of mental images which are created in the minds of consumers. In other words, the mental image of consumer is the prominent features of a product (Kuhn et al., 2008).

Loyalty to the Trade Brand
It refers to the in-depth commitment for keeping and re-buying an especial product or service in the future as well that brand is being bought again (Beerli et al., 2004). The related studies about this field were done not only in USA but also in the whole world such as Britain, French, News land, and Taiwan. Most results from the primary and main studies were
investigated and reviewed in the similar papers. The resulted findings from this study (brand extensions) were studied in terms of management viewpoints (Kapoor and Keller, 1997). Recently, Klink and Smith in 2001, about the limitation of current studies toward the approach of consumers to the brand extensions said: "in this field, by considering the primary stages of creating information and knowledge, concern about the external validity to the internal one is less". Most studies on the brand extensions were focused on the related issues with fitness between main (mother) brand and brand extensions as well the variable adjustment which affect the level and type of fitness and the result of this method was findings which were focused on the unordinary evaluation of brand extensions in these situations. In other words, the competitive brands not only were removed from the related categories but also they were omitted in the plan of this study. Unordinary evaluations are being done considerably and in comparison with the competitive brands in the related categories, they do not show the power and situation of brand extensions (Kapoor and Heslop, 2009). Different studies were done in the field of brand extensions into various categories of a product. One of the concerns in this field is that the extensions of a brand more than its defined limitation can damage management of a main brand and also may weaken its communications (Aker, 1991).

Koller and Aker in 1992, believed that most studies in this field were focused on the effect of brand extensions strategies in a form of a brand name extensions of a unit into a category of another product. The view of some researchers was based on the forward effect or communication transfer from the mother/main brand into new extensions. In any case, feedback or returning effect from a new group into a generalized or expanded brand attracts the attention of researchers because this issue can damage the communication with this expanded brand (Martinez et al., 2009). In accordance with the theories based on psychology, some writers tried to explain the feedback effect of brand extensions. Kim in 1998 declared that the feeling or meaning of trade brand can affect the approach of customers, although the role of these issues means sensitive one are being ignored in the market interactions and communication (Taylor et al., 2004).

Other researchers analyzed the effect of other factors such as consumer's approach toward an expanded or generalized product on the brand mental image (Alexander and Kolgit, 2005). Therefore, in these studies, a rare number of variables which limit a domain of this paper and make problem for generalization was used.

**Research variables**

This study was done in terms of Martinez et al. And the 5 variables studied were as follows: initial brand, mental image, perceived fit, brand extensions approach, fitness with the brand image mental, and final brand image mental

**Research hypotheses**

Based on the objectives of the study, the following hypotheses were suggested:

H1: Initial Brand Mental Image has a positive effect on the Perceived Fit

H2: Initial Brand Mental Image has a positive effect on the Brand Extensions Approach

H3: Initial Brand Mental Image has a positive effect on the Fitness with the Brand Mental Image

H4: Initial Brand Image has a positive effect on the Final Brand Mental Image

H5: Perceived Fit has a positive effect on the Brand Extensions Approach

H6: Fitness with the Brand Mental Image has a positive effect on the Brand Extensions Approach

H7: Brand Extensions Approach has a positive effect on the Final Brand Mental Image.
Figure 1: Theoretic model

Methodology
This study was done through a measuring method. Measuring means collecting information which is being done by a plan as a scientific guide of description or prediction or for analyzing a relation among variables such as cancer and cigarette. Measuring always is being done in an extensive scale and is the opposite point in the laboratory experiences. Information collection was done through questionnaire, interview, and other methods but for the experiences which are being done in a small volume, as class, the above points are usable. The main method of this study based on the subject of research, the population spread, using the questionnaire for information collection about the objective and subjective facts and also based on the descriptive questions and correlation assumptions is measuring which is a most common method in the social science. But in the theoretic part, library method was used.

Data collection
Based on the previous points, this study is based on collecting methods such as questionnaire, interview and in some cases, observations. In this study, information collection is based on the questionnaire. Of course, interview was used in the primary step as well as document tools for studying the theoretical dimensions. In this paper, in order to collect information and achieving the aims, an anonymous questionnaire taken from the article of Martinez et al. has been used which was completed by the Minoo customers in the city of Mazandaran. The questions included in the form of items and each item of this questionnaire in terms of main aim and the related questions was considered and consequently the answer of each question was accounted as a step toward accomplishing the main aim of this paper. The questionnaire contains 24 questions as the below table:

<table>
<thead>
<tr>
<th>Number of questionnaire answers</th>
<th>Variable in question</th>
<th>N w</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-1</td>
<td>Initial Brand Image Mental</td>
<td>1</td>
</tr>
<tr>
<td>10-9</td>
<td>Perceived Fit</td>
<td>2</td>
</tr>
<tr>
<td>13-11</td>
<td>Fitness with the Brand Image Mental</td>
<td>3</td>
</tr>
<tr>
<td>16-14</td>
<td>Brand Extensions Approach</td>
<td>4</td>
</tr>
<tr>
<td>24-17</td>
<td>Final Brand Image Mental</td>
<td>5</td>
</tr>
</tbody>
</table>

Statistical population, sample and sampling method
Statistical population includes Minoo customers of Mazandaran city. The overall sample size in structural equation modeling was determined between 5 to 15 for each variable.
5q ≤ n ≤ 15q
In which: q = The questionnaire items (Observed variables) n = sample

**Data analysis method**

One of the most important methods in analyzing data is multi-variant method, because this type of issues is multi variant and it is not possible to solve them by a bi-variant method. Lisrel or SEM (Structural equation modeling) is a powerful multi variant technique from the group of multi variant regression or is a General linear model which allows researchers to do some of the regression equations simultaneously. In this research, this method (LISREL) was used.

**Results and Discussion**

Analysis as a scientific step and substantial base of every research control all research activities until result achievement, in other words, analyzing the result is a method through which all processes of research from problem selection to result achievement could be controlled. To analyze the research hypotheses, and based on the presented model, to analyze effect of existent elements on each other, structural equations was used. As shown in figure 2, variables which have been defined in model are independent in one equation and dependent in another one and this cause interconnection and intertwining of equations in this figure. Therefore, all equations should be considered concurrently.

In fact, this group of equations determines hypothesized relations between latent variables in model, and through its indefeasibility, standardized regression coefficients are calculated (B, route coefficients). Also, to evaluate significance of each coefficient, t-test was utilized and related values are exhibited in Figure 3.

![Figure 2: T-test value for each coefficient](image-url)
Evaluating effect of variables on each other

Brief results of structural equations, including route coefficients and related t-value, are shown in following table. Table 2 shows direct effects of latent independent variables on dependent ones and direct effects of latent dependent variables on dependent ones.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relation</th>
<th>Parameters</th>
<th>Structural coefficient</th>
<th>T</th>
<th>Comparison with critical value</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>V1</td>
<td>V2</td>
<td>γ</td>
<td>0.68</td>
<td>5.56</td>
<td>5.56&gt;1.96</td>
</tr>
<tr>
<td>H2</td>
<td>V1</td>
<td>V3</td>
<td>γ</td>
<td>0.31</td>
<td>1.97</td>
<td>1.97&gt;1.96</td>
</tr>
<tr>
<td>H3</td>
<td>V1</td>
<td>V4</td>
<td>γ</td>
<td>0.71</td>
<td>7.62</td>
<td>7.62&gt;1.96</td>
</tr>
<tr>
<td>H4</td>
<td>V1</td>
<td>V5</td>
<td>γ</td>
<td>0.31</td>
<td>2.25</td>
<td>2.25&gt;1.96</td>
</tr>
<tr>
<td>H5</td>
<td>V2</td>
<td>V3</td>
<td>β</td>
<td>0.04</td>
<td>0.30</td>
<td>0.3&lt;1.96</td>
</tr>
<tr>
<td>H6</td>
<td>V4</td>
<td>V3</td>
<td>β</td>
<td>0.68</td>
<td>4.18</td>
<td>4.18&gt;1.96</td>
</tr>
<tr>
<td>H7</td>
<td>V3</td>
<td>V5</td>
<td>β</td>
<td>0.57</td>
<td>3.33</td>
<td>3.33&gt;1.96</td>
</tr>
</tbody>
</table>

Goodness of fit tests

When a model has sufficient theoretical background, in the next step, we should assess the proportion of this model with collected data by the researcher. Therefore, some of goodness of fit tests, used for this research data and model are surveyed.

Goodness of Fit (GFI) and Adjusted Goodness of Fit (AGFI)

These values are impressive by sample size and for models which have been poorly determined could be high. Values higher than 0.9 for these indices indicate that fitness of data for this model is adequate. Values gained for this model are as follows:

Goodness of Fit Index (GFI) = 0.79
Adjusted Goodness of Fit Index (AGFI) = 0.74

Both items show that this research data fit the model near sufficiently.

Root Mean Square Residual (PMSR) and (SRMR): Lower than 0.08, implies good fitness of model on the data. In this paper values gained via software are as following: Root Mean Square Residual (RMR) = 0.086

Standardized RMR = 0.086
Normed Fit Index (NFI), Non- normed Fit Index (NNFI) and Comparative Fit Index (CFI)
Values higher than 0.9 for these indices imply good fitness of model on the data. Values gained for these indexes are as follows:

- Normed Fit Index (NFI) = 0.88
- Non-Normed Fit Index (NNFI) = 0.94
- Comparative Fit Index (CFI) = 0.95
- Incremental Fit Index (IFI) = 0.95

According to the above numbers, value of indexes are higher than 0.9, therefore the data could fit the model relatively good.

**Conclusion**

Based on data analysis by using LISREL method and confirming the related hypotheses except 5th one, it was observed that all variables have a significant relationship with each other and affect each other positively and directly. Finally, it can be concluded that the initial brand mental image has a positive and direct effect with perceived fitness, approach toward brand extensions, fitness with brand mental image and also the final brand mental image. Also, there is positive and direct impact between fitness with brand mental image based on an approach toward brand extensions and this approach with the final brand image mental. But, there is a positive relationship between perceived fit with an approach toward brand extensions except a significant relationship. Since trade brand, introducing and expanding it is very important for the organizations and marketing managers, and also it plays a significant role in controlling and decreasing the costs, therefore, they are the most important intangible assets of companies and due to the response of consumers to these trade brands, studying the effective factors in this field is very important.

**References**


