PRICE AS A DETERMINANT OF A FOOD PRODUCT’S IMAGE

The article was to achieve two research goals, that is identifying and arranging hierarchically factors which influence the image of a food product and defining the place among them taken by the price. The article is of theoretical-empirical character. In the theoretical part of the article, the method of cognitive-critical analysis of world’s marketing and marketing management literature was used. In the research part, on the other hand, the method of questionnaires was used to gather primary data and also the method of factors’ analysis to carry out statistical deduction. On the basis of research conducted it can be stated that the price of a food product is not a crucial determinant of its image. The first place in the hierarchical structure of image’s determinants was taken by brand factor, whereas the last place went to the price. The knowledge of these factors and their hierarchical structure enables the bidders of food products to manage the image effectively and efficiently, which determines the value of research and conclusions drawn from their results.

Keywords: image, food product, price.

1. Introduction

The image, even though it is one of the key marketing categories and at the same time the result of conscious and unconscious actions of a bidder, is still not defined in the subject literature unambiguously. Three main streams of defining the image can be shown. Some part of authors describes it as a picture of a given subject or of a perception’s subject shaped in a person’s consciousness on the basis of internal factors (connected with this person, e.g. personality traits, previous experiences) and also external ones (from the person’s surrounding, e.g. stimuli from bidder to recipients) [Balmer, Greyser, 2002; Gotsi, Wilson, 2001]. In this group of definitions the emphasis is laid on the effect (that is the picture) gained thanks to the accumulation of stimuli (i.e. internal and external factors).
Therefore, this group can be described with one name - casual and consecutive definitions.

Other authors, on the other hand, focus mainly on the process of perceiving a given product (subject or object) identifying the image with the way of perceiving this object [Dobni, Zinkhan, 1990; Schiffman, Kanuk, Hansen, 2008; Dowling, 2004]. These definitions create a group which can be described as emotional and process definitions since they are based on two pillars: the emotional attitude to the object and the process of its perception.

The image is also defined as an internal, collective awareness, on which corporate efforts (successful or not) are based to present to others [Smith, 1993; Balmer, 1998]. In such a depiction, two groups of aspects are displayed: mental (i.e. consciousness) and purpose (on the one hand planned character of actions and, on the other hand, the desire to present oneself to other subjects from the best side).

The common element for all three groups of definitions is the fact that regardless of the depiction, the image is a category based on the past, which determines the difficulties connected with its improvement since the previous incorrect actions cannot be changed. We can only avoid analogous mistakes or shortcomings in the future. Of course it is therefore not only a complicated but also a long-term process.

Even a small mistake made during this process has its reflection in the image in a cumulative way, making it difficult, and sometimes even impossible, to achieve basic aims of the image policy, among them reducing psychological distance [Trope, Liberman, 2010] between the buyer and the product or the offer designed for them and between the buyer and their bidder by the effective distinguishing from other bids and their bidders. Obviously, we can talk about effective distinguishing only when the image will be positive, which requires from the bidder a strong personality, an unambiguous identity and a good reputation which should be also good with reference to a specific product and the whole offer.

The question of a skilful distinguishing oneself by means of an image becomes significant with reference to food products, which results from their specificity (the needs satisfied, many bidders, relatively small possibilities of distinguishing by means of products’ attributes connected to their technological quality, direct influence on the buyers’ and consumers’ health and life, etc.). The buyers search more often for the so called green food or organic food [Tarkiainen, Sundqvist, 2009; Smith, Paladino, 2010; Zanoli, Naspetti, 2002] perceiving them as food which is safer for them and for the environment surrounding them.

It should be, however, emphasized that in case of food products the relatively greater importance is attached by the bidders to organoleptic features of food products, whereas image aspects are in the background. The evidence
Price as a determinant of a food product’s image

of their underestimation is using unethical practices [Baruk, 2013; Baruk, 2014] which influence directly negatively the perception of food products and bidders seem to give the priority to short-term profits gained thanks to dishonest actions over lost long-term effects which they could achieve when acting totally in an ethical manner. Practices of this kind are used despite the proved positive relationship between the product’s perceived quality (regardless of its type) and the buyer’s satisfaction from buying it [Choi Eun Jung, Kim Soo-Hyun, 2013], which brings many profits also to the bidder (the increase in buyers’ loyalty, improvement of reputation, decrease in buyers’ price sensitivity, improvement of their market competence [Swanson, Kelley, 2001]). Obviously, unethical actions influence negatively the image of the product itself and the bidder who uses these actions, which makes it impossible to build the commitment of the buyers [Michaelidou, Dibb, 2006] and thus to create societies of market partners [Chen Te Fu, Huang Hsuan-Fang, 2011; Chen Te Fu, 2011] combined with the bidder through relationships of emotional character, which is displayed in the subject literature as a key challenge for practically all bidders.

As an intangible element, the product’s image belongs to key distinguishing mark of an each bidder. Its importance is clearly visible in case of bidders from the branches characterized by intense competition and the food industry can be surely ranked among them. The importance of the image is also great because of its specificity. It is relatively difficult to build and to maintain a positive image. It is, however, much easier and faster to deteriorate it, which results from the fact that subjects who perceive the product in a given manner are buyers as participants of the company’s surrounding who are characterized by individual sensitivity [Kotler, Keller, 2012; T. Jiang, A. Tuzhilin, 2006] to stimuli which surround them (among them marketing ones) and by individual degree of feeling various needs and expectations.

Therefore, it is extremely essential to identify and thoroughly analyse factors influencing the image of food products. The knowledge of them is indispensable for efficient and effective shaping by the bidders the way of perceiving by buyers the products mentioned. The more so, because the image (similarly to other intangible values [Freestone, McGoldrick, 2008]) becomes an increasingly more important factor while making decisions in a shopping process characterized by a higher level of market awareness of buyers [Szmigin, Carrigan, McEachern, 2009].

Two basic aims were to be achieved in this article. The first of them was to identify factors determining the image of a food product and to order them hierarchically. The second aim was to specify the place of the price among factors identified. The choice of food products was determined by their specificity. They are products that are still bought relatively most often and that influence directly health and even life of buyers and consumers who, because of the availability on the market offers of different bidders which are similar
with respect to technological quality, often search for factors enabling them to
distinguish products subjectively and the image is without any doubt one of them.

In the process of realization of the aims mentioned, an attempt was made to
verify the following research hypothesis:

H1 – the price of a food product is a key determinant of its image.

As results from the cognitive-critical analysis of subject literature, one of the
most important factors determining the perception of a product (regardless of its
type) and the assessment of its value made by the buyers is the price [Hansen,
2005; Monroe, 2003; Zeithmal, 1988]. It was strived to identify in the article the
relationship between the food product’s price and its image. It allowed to draw
final conclusions essential from the point of view of economic practice.

2. The characteristics of the research

To obtain the research aims and thus to verify the research hypothesis,
though empirical research were conducted which used the method of a
questionnaire. The research were made among respondents representing Polish
buyers of final food products. In total, 910 fully completed questionnaires were
gathered which were later used in further stages of research process, i.e. creating
a comparative analysis and statistical analysis, within the confines of which
factor analysis was used. The selection of specific units to research was not of
random character and the operate of the population was data from Bank Danych
Lokalnych of Główny Urząd Statystyczny [GUS, Bank Danych Lokalnych].

The factor analysis made it possible to conduct a thorough analysis of
primary data gathered. It is used to reduce the number of variables constituting
primary data gathered from questionnaire research and to discover the structures
in relationships between these variables. The first stage of creating the factor
model was building the matrix of correlation between primary variables and its
initial analysis, the results of which influenced the further way of proceedings
concerning the use of the algorithms identifying hidden factors. To isolate the
factors a method of main ingredients was used and the essential issue was to
specify their number [Sokołowski, Sagan]. To determine the number of common
factors (the so called main ingredients) a technique of Kaiser criterion [Analiza
czynnikowa jako metoda redukcji danych; Sokołowski, Sagan] was used.
Further, the factor loads gathered were subjected to a rotation technique. The
rotation of factors was made by means of normalized varimax. In the final stage
of analysis the value of loads is related to factors and individual variables and
the results of analysis are properly interpreted. For this purpose variables with
the highest factor loads were isolated with respect to factors data (> 0.7 was
adopted) and through the analysis of variables’ names, their common reference
to a given, deeper dimension was found.
3. The hierarchy of determinants of perceiving a food product

One of the aims of research conducted was identifying elements which influence the image of a food product. While striving to achieve it a method of factor analysis was used. It allowed to isolate 6 main factors that influence the perception of food product. The isolation was made by means of the Kaiser criterion in case of which factors were analyzed for which their own values were higher than 1. Taking into consideration the character of elements analyzed, factors were given names reflecting their specificity (Chart 1).

As you can see, there are 6 main elements which have the greatest influence on the food product’s image and which can be related with proper variables. The first own value (5.975) explains 25.979% of variation, whereas the last own value (1.138) explains only 4.948% of variation. The results obtained for specific features of percentage of total variance prove the significance of elements isolated for the customers. The highest percentage of total variance (25.979%) shows the greatest importance of elements creating the first factor (the brand). Whereas the lowest percentage of total variance (4.948%) proves the lowest significance of elements that belong to the last factor isolated (the price).

The second aim of the research was specifying the position of price among factors influencing the image of a food product. It results from the factor analysis conducted, that for the first factor, positive factor loads were obtained of value equal or higher than 0.7 for the features named as the product’s brand (0.787) and producer’s brand (0.800). It can be therefore stated that brand factor represented by the brand of a given product and producer’s brand decided most of the food product’s image (Chart 2). The results of research conducted show that the second place, as far as the importance of an image is concerned, was
taken by product factor represented by product’s features such as the composition (0.738), health value (0.760) and the nutritive value (0.777). Next 4 factors isolated, determined the perception of a food product in an increasingly lower extent. On the basis of their analysis it can be stated that the third position with regard to the image importance belongs to promotion factor which includes promotional stimuli such as competitions (0.706) and cut-price (0.743). Even less important was trade factor isolated on the basis of variables such as qualifications of employees of trade institutions (0.743) and the level of service (0.766). Elements determining the product’s image of ethnocentric character (country of origin (0.794) and the region of country of origin of a given food product (0.798)) had relatively less image importance.

Chart 2. The results of factor analysis of elements determining the image of a food product

<table>
<thead>
<tr>
<th>Element analysed</th>
<th>Cm1</th>
<th>Cp2</th>
<th>Cp3</th>
<th>Ch4</th>
<th>Ce5</th>
<th>Cc6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td>-0.066</td>
<td>-0.064</td>
<td>0.348</td>
<td>0.051</td>
<td>0.066</td>
<td><strong>0.781</strong></td>
</tr>
<tr>
<td>Quality</td>
<td>0.193</td>
<td>0.421</td>
<td>-0.161</td>
<td>0.011</td>
<td>0.023</td>
<td>0.581</td>
</tr>
<tr>
<td>Producer’s image</td>
<td>0.615</td>
<td>0.079</td>
<td>-0.116</td>
<td>0.252</td>
<td>0.134</td>
<td>0.266</td>
</tr>
<tr>
<td>Tradesman’s image</td>
<td>0.381</td>
<td>0.001</td>
<td>-0.023</td>
<td>0.563</td>
<td>0.202</td>
<td>0.259</td>
</tr>
<tr>
<td>Organoleptic features of a product</td>
<td>0.328</td>
<td>0.379</td>
<td>-0.050</td>
<td>0.122</td>
<td>-0.274</td>
<td>0.056</td>
</tr>
<tr>
<td>Product’s brand</td>
<td><strong>0.787</strong></td>
<td>0.079</td>
<td>0.191</td>
<td>0.018</td>
<td>0.048</td>
<td>-0.060</td>
</tr>
<tr>
<td>Producer’s brand</td>
<td><strong>0.800</strong></td>
<td>0.105</td>
<td>0.129</td>
<td>0.077</td>
<td>0.130</td>
<td>0.030</td>
</tr>
<tr>
<td>Packaging</td>
<td>0.567</td>
<td>0.041</td>
<td>0.347</td>
<td>0.063</td>
<td>0.170</td>
<td>-0.069</td>
</tr>
<tr>
<td>Additional marking of a product</td>
<td>0.290</td>
<td>0.296</td>
<td>0.152</td>
<td>0.155</td>
<td>0.530</td>
<td>0.049</td>
</tr>
<tr>
<td>Country of origin of a product</td>
<td>0.101</td>
<td>0.236</td>
<td>-0.010</td>
<td>0.076</td>
<td><strong>0.794</strong></td>
<td>0.144</td>
</tr>
<tr>
<td>Region of country of origin of a product</td>
<td>0.050</td>
<td>0.153</td>
<td>-0.013</td>
<td>0.269</td>
<td><strong>0.798</strong></td>
<td>0.052</td>
</tr>
<tr>
<td>Label</td>
<td>0.411</td>
<td>0.133</td>
<td>0.142</td>
<td>0.201</td>
<td>0.557</td>
<td>-0.099</td>
</tr>
<tr>
<td>Reputation of the place of purchasing a product</td>
<td>0.389</td>
<td>-0.022</td>
<td>0.074</td>
<td>0.526</td>
<td>0.279</td>
<td>0.099</td>
</tr>
<tr>
<td>Qualifications of employers of a trade institution</td>
<td>0.093</td>
<td>0.146</td>
<td>-0.056</td>
<td><strong>0.743</strong></td>
<td>0.192</td>
<td>0.064</td>
</tr>
<tr>
<td>Product’s composition</td>
<td>0.018</td>
<td><strong>0.738</strong></td>
<td>0.024</td>
<td>0.055</td>
<td>0.289</td>
<td>0.096</td>
</tr>
<tr>
<td>Lack of quality changes in a long term period</td>
<td>0.187</td>
<td>0.649</td>
<td>0.058</td>
<td>0.115</td>
<td>0.059</td>
<td>-0.052</td>
</tr>
<tr>
<td>Nutritive value of a product</td>
<td>-0.051</td>
<td><strong>0.777</strong></td>
<td>0.164</td>
<td>0.113</td>
<td>0.187</td>
<td>0.071</td>
</tr>
<tr>
<td>Product’s health value</td>
<td>0.059</td>
<td><strong>0.760</strong></td>
<td>0.079</td>
<td>0.122</td>
<td>0.167</td>
<td>0.021</td>
</tr>
<tr>
<td>Additional services in a selling point</td>
<td>0.072</td>
<td>0.119</td>
<td>0.372</td>
<td>0.662</td>
<td>0.117</td>
<td>-0.085</td>
</tr>
<tr>
<td>Level of service</td>
<td>-0.040</td>
<td>0.268</td>
<td>0.205</td>
<td><strong>0.766</strong></td>
<td>0.008</td>
<td>-0.064</td>
</tr>
<tr>
<td>Marketing stimuli such as cut-price</td>
<td>0.052</td>
<td>0.163</td>
<td><strong>0.743</strong></td>
<td>0.232</td>
<td>-0.105</td>
<td>0.221</td>
</tr>
<tr>
<td>Marketing stimuli such as competitions</td>
<td>0.188</td>
<td>-0.110</td>
<td><strong>0.706</strong></td>
<td>0.255</td>
<td>0.114</td>
<td>0.129</td>
</tr>
<tr>
<td>Family’s/acquaintances’ opinion</td>
<td>0.180</td>
<td>0.203</td>
<td>0.542</td>
<td>-0.096</td>
<td>0.081</td>
<td>-0.094</td>
</tr>
</tbody>
</table>

Source: own study on the basis of S. Bialoskurski, Marketing lateralny w procesie kształtowania wizerunku produktów spożywczych, unpublished doctoral thesis prepared under scholarly guidance of A. Baruk.
To the smallest extent, the food product's image was influenced by the price factor. The third place was, as a matter of fact, taken by a promotional factor including among others marketing stimuli such as cut-price which is connected with the price. However, the standard price took the last position among determinants influencing the perception of a food product.

4. Conclusions

Summing up the deliberations presented, it can be stated that the product's price in case of food products takes the last position in the determinants' hierarchy. Therefore, it can be stated that the H1 hypothesis is not true. Relatively greater importance was put on actions which consisted in promotional cut-prices (0.743) that is actions relatively easier to carry out by the bidders than other actions belonging to the group of promotional factor (competitions (0.706)) the preparation and realization of which require much more effort for the bidders' part. The price factor represented by a standard price of a product was the least important in the image context (Figure 1). The value of total variance was in this case 5 times lower than in case of a key factor, that is brand factor.

![Diagram of main determinants of a food product's image](image.png)

Fig. 1. Main determinants of a food product's image with taking the strength of their influence under consideration

*Source: own study.*
The research conducted have the following limitations. Firstly, they apply for food products, so their results cannot be extended to other groups of products. Secondly, the research were not focused on identifying the determinants of a product’s image typical for definite buyers’ sections, for example people in a specific age, which would allow bidders to vary image actions in order to maximize their effectiveness and efficiency thanks to taking into consideration the specificity of a given homogeneous group of addressees of these actions. Therefore, future research will be extended to other groups of products and will be directed to specific segments of buyers.

Conclusions drawn on the basis of research conducted have essential applicative value for bidders of food products. They make it easier for the bidders to shape the image of a product effectively and efficiently through taking up appropriate actions, as far as their subject and hierarchy is concerned.

**Literature**


Price as a determinant of a food product’s image