

IMAGE: SLOVAK VERSUS FOREIGN FOODSTUFFS

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Abstract

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In a market situation, where the products of competing companies are becoming more similar, whether in quality or price, it is still necessary to look for new and new tools that should properly differentiate the various products or services from the competitive company. Undoubtedly one of these tools is the image that has become an essential part of marketing. Image is essentially the idea, symbol, which the consumer associates only at the mention the name of the product or company. Image performs several tasks. First, its role is to eliminate the anonymity between producer and consumer and on the other hand, image subjectively facilitates a customer orientation to market and thus facilitate decision making. Customers are fed up with information on the products and services, and so they replace the lack of objective knowledge by creating their own ideas. Sometimes these ideas may be even stronger motive to buy properties as the actual product.

image, country of origin, consumer behaviour, foodstuffs

The English term “image” is derived from the Latin word “imago”, which means an idea or image of the object or person. ČIHOVSKÁ and LIPIAN-SKA (2003) indicate that the image is usually far from fair idea, there dominate only one sub-feature which discolour total anachronism.

As well as products also countries are assessed through a number of stereotypes or on the basis of unsubstantiated information. Just the amount of data it has currently one to process, forcing him to use too large generalizations and simplifications.

As a result of globalization it is increasingly difficult to determine the impact of country image on its products, says HE (2003). Furthermore, products that are by brand assigned to a particular country may not have been made in this country, says CHAO (2001). These hybrid products are according to KOTLER and GERTNER (2002) new challenge for marketers in the new international marketing as it requires a unique marketing strategy.

MATERIALS AND METHODS

The current consumer is not affected when selecting products by only their objective nature, therefore the real properties, but also by the image –

subjective idea, which he himself creates for them. The image is gaining more importance therefore the market is offering quantity of products, among which is not a fundamental difference. It is often the image that is the important factor in consumer decision – making process.

Background data were drawn from primary and secondary sources. Primary data were obtained through market marketing research, namely a questionnaire technique. Secondary data were formed by study of national and foreign literature, scientific and professional journals and statistical sources.

Anonymous questionnaire to survey consumer behavior has been prepared in accordance with the rules applicable to the creation of questionnaires. There was distributed 1080 questionnaires in various regions of Slovakia and completely was filled in 1017. Sample was created by free quota sampling with randomisation in the last step, the controlled variables were gender and age. The survey focused on respondents aged 18 years and older.

There were used available software products to process the underlying data, especially MS Excel and SAS program which allow to use conventional qualitative and quantitative methods.

Summary characteristics of the data were analyzed using the methods of descriptive statistics (frequency, mean rate, rate variability) to enable fast and reliable insight into the examined data.

We have used the association and contingency analysis by examining the relationships and dependencies between the quality characteristics. Association examines the relationship between alternative characters with two variations, contingency between the characters with more variations.

At the beginning of the analysis, we sorted the input data and classification results were arranged into contingency tables. We subsequently verified existence of dependencies between features by the Chi square test of square contingency and Chi square test of good compliance. Chi square test of square contingency is based on a comparison of empirical and theoretical proliferation for each category observed characters. The test criterion for verifying the null hypothesis H_0 is projecting independence between the given quality features. It is calculated according to:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(E_{ij} - T_{ij})^2}{T_{ij}},$$

E_{ij} ... the empirical frequency in the cell in the i - th row and j - th column,

T_{ij} ... the theoretical frequency in the cell in the i - th row and j - th column,

r number of categories of the first (row) character,

c number of categories of the second (column) character.

Theoretical frequencies T_{ij} are calculated:

$$T_{ij} = \frac{(R_i) \times (C_j)}{n},$$

R_i the amount of frequencies in the i - th row,

C_j the amount of frequencies in the j - th column,

n the total frequency.

The alternative hypothesis (H_1) implies that it exists dependency (association) between the given qualitative features. If H_1 is valid, then H_0 is refused. If the calculated value of the test criteria $\chi^2 < \chi_{\alpha}^2$ where χ_{α}^2 is tabulated value found for $(c - 1) \cdot (r - 1)$ degrees of freedom, so true $P((\chi^2 > \chi_{\alpha}^2) = \alpha$ (α is the significance level at which the test is conducted). If $\chi^2 > \chi_{\alpha}^2$, we accept the hypothesis H_1 , therefore, we consider the characteristics dependent on the chosen level of significance. Interdependencies are tested by P - value. What is the value closer to zero, the degree of interdependence is higher.

Chi square test of good compliance allows to determine whether obtained empirical values are statistically significantly different from theoretical values that characterize the conditions of the sample. Test criteria for verifying the null hypothesis H_0 , projecting compliance of the basic categories and the sample is variable:

$$\chi^2 = \sum_{i=1}^m \frac{(E_i - T_i)^2}{T_i},$$

where:

E_i ... empirical frequencies (i -th category of the sample),

T_i ... theoretical frequencies (calculated as the product of range of the sample n and the relative share of i category of the sample).

The test criterion has χ^2 - distribution with $m - 1$ degrees of freedom, where m is the number of categories (classes). If the calculated value of the test criteria $\chi^2 < \chi_{1-\alpha}^2$, where $\chi_{1-\alpha}^2$ is the tabulated value found for $(m - 1)$ degrees of freedom, then we accept the null hypothesis H_0 and the sample is representative on significance level α in comparison with a sample. Otherwise H_0 is rejected.

We used analysis of variance ANOVA for exploring the relationships between the dependent variable Y and one or more nominal variables (factors). In this method, the sample is divided into groups according to individual variations in factors and there is tested whether there can be significant differences between groups averages only random or are statistically significant. If the averages of these groups differ significantly, this factor is statistically significant, there is a relationship between the dependent variable and the factor.

There was a lot of scaling questions as part of the questionnaire. We used reliability analysis to evaluate the scales. There are several methods to evaluate the reliability of scales. The most used is a measure of internal scale consistency - Cronbach alpha coefficient. Scales rating is based on examining correlations between individual items or measurements in relation to the variability of items. Rated Cronbach alpha 0.7 and more means sufficient internal scale consistency.

Cluster analysis was used to the assessment of the image of food component. This method deals with how the statistical units should be grouped that would be the greatest possible similarity within groups and the greatest possible difference between the groups. Cluster analysis involves a number of methods. There are two basic groups distinguished - non-hierarchical and hierarchical cluster methods. We used hierarchical cluster methods based on individual objects, which represent clusters. Joining them in every step we gradually decrease the number of clusters until finally all clusters are combined into one unit.

RESULTS AND DISCUSSION

Food is much stronger associated with the country, its cultural background and local natural conditions than other groups of goods. If the following countries or regions raise consumer awareness as a country of origin of certain foods they may affect the country image on one side and on the other hand, foreign markets may serve as a tool to differentiate themselves from competitors.

Spontaneous associations give a first impression of image food structure. 1017 respondents reported total 946 responses to words „Slovak food“.

Most associations were positive, whereas the most frequent responses were the quality (31.7%), goat cheese and dairy products (28.7%) and made in Slovakia / home food (13.0%).

There were declared together 851 associations to the foreign food. In response dominated price (expensive / cheap), quality, nice packaging, diversity and chocolate.

Image of Slovak and foreign food was also evaluated separately based on the closed question (‘‘To what extent do you think the following statements are true for foods from different countries?’’) on a five step Likert scale.

The basis for identifying relevant indicators of food image were work Gerschau (1990), Janssen (2003), Leitow (2005) and Sedláková (2008). Based on the results of cluster analysis the components of the food image can be summarized into three groups:

- quality / inter properties (quality, tasty, fresh),
- environment / health / safety (environmentally friendly production, preservative content is low, safe, regularly inspected, healthy),
- market position (known brand, good look, available in many stores, the price appropriate to quality, wide selection).

Before examining the image of a certain food there was proven reliability of the scales using the measure of internal scale consistency – Cronbach alpha coefficient. The evaluation was based on examining correlations between individual items of the food image for all countries separately and for all countries together, as shown in Tab. I. The value of Cronbach’s alpha coefficient for all countries together (0.82), Slovakia (0.79), Czech Republic (0.79), Germany (0.79), Poland (0.79) and Hungary (0.86)

means adequate internal consistency of the scale, and therefore in the next step, we focus on the food image analysis of products from Slovakia, Czech Republic, Germany, Poland and Hungary.

To make the most accurate presentation of the image of Slovak food there were subsequently analyzed variables of all three categories. If we summarize, the average values of individual image elements were placed in the positive part of the scale in all cases.

In the category of quality / inter properties there is evident supernormal rating of all components. Most respondents indicated by the variable ‘‘quality’’, ‘‘delicious’’ and ‘‘fresh’’ that they fully agree. Inter properties of products were also the most important criteria of food choice at all. Freshness and taste of food had a very strong influence on food purchase up to 70% of respondents. A separate question about the preference of domestic food confirmed that just taste and freshness are the characteristics of products for which the Slovak consumers prefer domestic to foreign food.

In the second category – environment / health / safety, the individual components were not rated as clearly positive. Only 14.7% of respondents fully agreed that the Slovak food production is environmentally friendly and 12.4% of respondents indicated that the content of preservatives and additives in Slovak foods is low. Overall, consideration of production to the environment has only very weak effects on Slovak consumer’s food choice. Regular and neutral control and safety of Slovak food was better evaluated (29.6% of respondents fully agreed). At the time of large number of food scandals we shall see more clearly that consumers are interested what they are buying. Being positive, there is the fact that most respondents perceived Slovak food as safe and regularly inspected.

I: Reliability of the scales by using Cronbach alpha coefficient

Variables	Row variables		Standardized variables	
	Correlation	Alpha	Correlation	Alpha
Tasty	0.3768	0.8062	0.3805	0.8078
Environmentally friendly	0.3742	0.8089	0.3794	0.8079
Known brand	0.4627	0.8020	0.4655	0.8009
Quality	0.3015	0.8142	0.3043	0.8137
Healthy	0.4025	0.8068	0.4068	0.8057
Wide selection	0.4627	0.8020	0.4601	0.8014
Available in shops	0.4760	0.8010	0.4752	0.8002
Nice packaging	0.5014	0.7987	0.4986	0.7983
Price reasonable to quality	0.5460	0.7951	0.5406	0.7949
Preservative content is low	0.5217	0.7972	0.5196	0.7966
Fresh	0.4933	0.7995	0.4892	0.7991
Expansive	0.4567	0.8025	0.4546	0.8019
Safety	0.4887	0.8001	0.4854	0.7994
Cronbach alpha	0.8153		0.8146	

Source: Own questionnaire survey and author’s calculations

As regards price, most consumers perceive Slovak food price reasonable to quality. Only 15.6% of respondents believe that the Slovak foods are expensive. Results also showed that price is after the primary characteristics of food the second most important factor in selecting food at all.

Other variables of category "market position" (availability in trade, diversity / large selection and reputation of brands of the Slovak food) were assessed mark 2 (rather agree). As a conclusion, we can summarize that the image of the Slovak food is rated very positively, although in general it can not be viewed better than image of foreign foods. Food from each country has their stronger and weaker components of the image.

As we expected, the division of countries into two groups was confirmed. Slovakia, Czech Republic and Germany were on the one side and Hungary and Poland on the other side. From the perspective of respondents, the food of the two last mentioned countries has particularly weak market position – known brands, diversity and availability is low, as confirmed also the results of the survey for known brands and producers from those countries.

Paired t – test for mean values showed that overall there are no significant differences in Slovak, Czech and German food image rating. However, there are significant differences both among all the above mentioned countries and Poland and Hungary and on the other hand between Hungary and Poland itself. There is order of food image from the selected countries:

1. Czech Republic, Slovakia, Germany
2. Hungary
3. Poland.

The image of Polish food has the worst rating of all categories from all countries surveyed. But all the average figures are about ambivalent value of scale, so we can rather talk about the neutral position of Slovak consumers to Polish food. Poland is considered as the country with lack of trust in security checks and neutral foods control.

Image of Hungarian food reached the average value in all categories, and therefore there are no specific strengths.

Conversely, to the strengths of German food belonged good look, diversity and a large selection of brands and reputation. In addition, German foods are perceived as the most expensive from all the countries.

Assessment of individual Slovak food image components may also be differentiated in terms of various socio-demographic characteristics. Using ANOVA we identified statistically significant differences in ratings of image in terms of age, net monthly household income and number of household members, as given in Tab. II. In terms of gender, residence, economic activity and the highest educational attainment the image of the Slovak food is perceived very similarly by different categories. When rating under age there is a clear polarization.

Older ages (65 and over) evaluated all components of the image most positively and young people from 18 to 35 years the worst. In terms of net monthly household income, it shows the higher income, the more critical assessment.

II: *Image of Slovak foodstuffs according to socio-demographic characteristics*

	Test value	Critical value
Gender	0.0014	4.7472
Age	6.3224 *	2.5652
Residence	1.5057	4.7472
Economic activity	1.6756	2.8663
Education	1.1529	2.8663
Income	15.9676 *	2.5652
Household	4.5514 *	2.5652

Source: Own questionnaire survey and author's calculations

Note: * refers to groups whose individual categories show different characteristics in the evaluation of image of Slovak foodstuffs

CONCLUSION

Knowledge of survey may serve to create marketing strategies and provide the basis for further research. At present it is still valuable to know for producers and marketers what image consumers have created about the EU countries, because it can be a significant barrier or on the other side it can facilitate access to foreign markets.

The importance of the image itself, whether brand or product and country should be seen primarily as a tool for differentiation from the competition, thus getting rid of the uniformity of today's global marketplace. Product supply range is still wider, and therefore can not be objectively examined. This is where can be the space for the product image – idea that the customer creates about the product, which may be inconsistent with objective reality. Moreover, the consumer has access to a wide range of foreign products on the domestic market, the opportunities to travel – that all leads to a growing acceptance of foreign products, but on the other side the large number of products is forcing consumers to make simplified decisions and perhaps based on the product country of origin.

Described characteristics of country and food image from selected countries, as well as the potential effect on consumer behavior, justifying the need of noticing them in business marketing. As the country's image and the image of a certain food may act positive and also negative for the market success, it must be taken into account in marketing planning. In positive case it allows convenient positioning via image transfer to a bid, otherwise the transfer should be avoided. Especially foods are very sensitive commodity for consumers. Many products are closely related to certain countries what may lead at least to short – term image shaken in the case of food

scandals, which can be hardly eliminated by unfortunately affected enterprises.

National governments can also help to create a positive image of food and thereby increase their international competitiveness that they will be systematically involved in building the image of the

country as a whole. Another possibility for the state how to raise the profile and to promote a positive image of Slovak food is the use of food programs of the European Union to promote quality branded products as on the domestic market as well as on the EU internal market and third country markets.

SUMMARY

The current consumer is not affected by the choice of products only by their objective nature, therefore real properties, but also by the image – a subjective idea that he creates himself for them. Image is gaining more important and also because of the fact that the market is offered quantity of products which are without fundamental differences. In this paper, we focused on comparing the image of Slovak and foreign foodstuffs. From foreign foodstuffs, we examined the Czech, German, Polish and Hungarian food because of their dominant position on the Slovak food market. Survey results indicate that the image of the Slovak food is rated very positively, although in general, it can not be viewed better than the image of foreign foods. Foodstuffs from each country have their stronger and weaker components of the image. As we expected, the division of countries into two groups was confirmed. Slovakia, Czech Republic and Germany were on the one side, and Hungary and Poland on the other side. Knowledge of our realized survey may serve to create marketing strategies and provide the basis for further research.

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