

## A study to determine influential factors on product positioning

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### ABSTRACT

Product positioning plays an important role on business development especially in food industry. In this paper, we perform an exploration study to find important factors influencing product positioning in Iranian food industry. The study designs a questionnaire in Likert scale and distributes it among 260 randomly selected people from food industry. Cronbach alpha has been calculated as 0.86 in preliminary stage and final 0.697 in final stage, which are statistically acceptable. The study uses factor analysis to find important factors and detects six important factors including marketing organization, market analysis, past perception strategy, product presentation, brand loyalty and dynamic organizational structure.

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## 1. Introduction

Product positioning plays an important role on business development especially in food industry and there are several studies on this subject. Kalafatis et al. (2000), for instance, examined the relevance of positioning within the domain of business marketing through the application of a new typology of positioning strategies. They offered strong support as to the stability of the proposed typology and the relevance of the concept of positioning in business markets. They recommended that although business positioning was predominantly determined by hard criteria (e.g. product quality) and relationship building factors (e.g. personal contact), other considerations such as company structures, breadth of offerings and degree of integration also play an essential role. They also offered some support to the claim that, level of familiarity with a specific company was a contributing factor to perceptions of the pursued positioning strategies. Luo et al. (2012) proposed a method for optimal product positioning by considering negative utility effect on consumer choice rule. In different studies associated with product positioning, probabilistic consumer choice rules assume that a product always gains some market share no matter how small a product's utility value is. Luo et al. (2012) considered this problem for multinomial logit rule by proposing a piecewise function and building a

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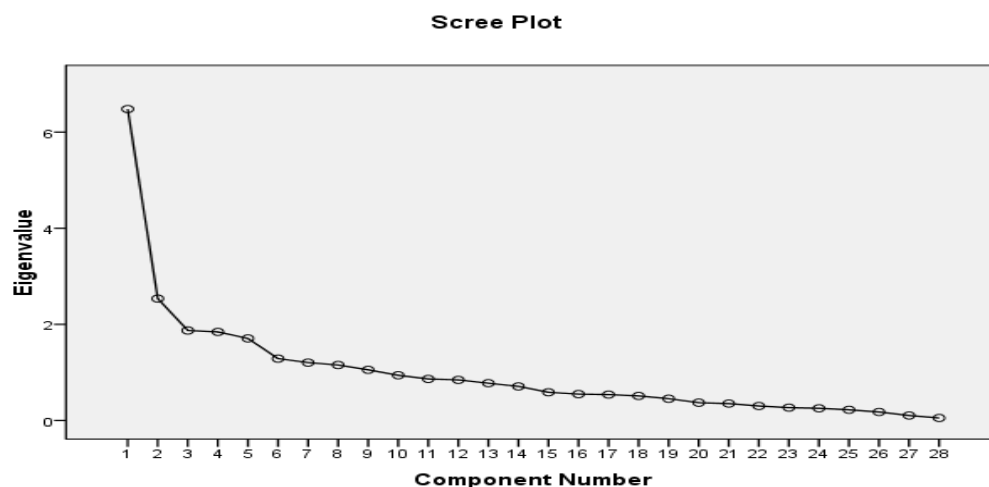
conjoint-analysis-based one-step optimization model for product positioning. They used interval analysis to obtain the optimal price of the new product from the model, and analysed the mathematical properties of the profit-maximizing model. They used an interval-analysis-embedded Tabu Search (TS) method to solve the resulted model. Poulos et al. (2012) investigated consumer preferences for household water treatment products in Andhra Pradesh, India. Iannario et al. (2012) performed sensory analysis in the food industry as a tool for marketing decisions. They demonstrated how interesting information useful for marketing management could be measured by combining the results from cub models and algorithmic data mining approaches. Chowdhury and Kabir (2012) performed an empirical investigation on the factors ruling pharmaceutical product management in Bangladesh. They reported that promotional expenditure had a significant impact on sales growth and customer-based product positioning was related to significantly more sales growth than disease-based product positioning. Xue et al. (2013) considered the association of strategic group and organizational culture with hospital performance in China. They reported that Chinese public general hospitals were classified into five strategic groups that had substantial differences in product positioning, competitive posture, and market position.

## 2. The proposed method

The proposed model of this paper uses factor analysis (Azad & Hassanabadi, 2013; Azad & Mohammadi, 2013) to determine important factors influencing product positioning in food industry. The study designs a questionnaire consists of 33 questions and in Likert scale. The study is performed among all existing employees of one of Iranian food industry in city of Tehran, Iran and the sample size is calculated as follows,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N-1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where  $N$  is the population size,  $p=1-q$  represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p=0.5, z_{\alpha/2}=1.96$  and  $N=2700$ , the number of sample size is calculated as  $n=260$ . Cronbach alpha has been calculated as 0.86 in preliminary stage and final 0.697 in final stage, which are statistically acceptable. In addition, Kaiser-Meyer-Olkin Measure of Sampling Adequacy is calculated as 0.697, which is within an acceptable limit and validates the results. Since factor analysis is sensitive on skewness of factors, we have decided to delete ten questions. Fig. 1 demonstrates Scree plot on questions of the survey. In addition, Table 1 shows details of principles component analysis before and after rotation



**Fig. 1.** The Scree plot



Based on the results of Table 2 and Fig. 1, six important factors are extracted described next.

### 3. The results

In this section, we explain details of our finding on six factors.

#### 3.1. The first factor: Marketing organization

The first factor, marketing organization, consists of six sub-factors, which are summarized in Table 2.

**Table 2**

The results of factors associated with marketing organization

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Supplying necessary demand	0.710			
Pricing strategy	0.814	3.038	50.632	50.632
Product development strategy	0.715			
Consumer sensitivity on price changes	0.671			
Imitating from previous successful products	0.577			
Product discount	0.577			

Cronbach alpha =0.803

As we can observe from the results of Table 2, pricing strategy is the most important factor followed by product development strategy, supplying necessary demand. In addition, consumer sensitivity on price changes is on lower priority followed by imitating from previous successful products and product discount. The factors describe approximately 51% of the changes.

#### 3.2. The second factor: Market analysis

The second factor, market analysis, consists of three sub-factors summarized in Table 3.

**Table 3**

The results of factors associated with market analysis

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Firm position on the market	0.788			
Awareness on other products offered on market	0.867	2.068	68.937	68.937
Competitive advantage of firm	0.835			

Cronbach alpha =0.774

According to Table 3, awareness on other products offered on market is number one priority followed by competitive advantage of firm and firm position on the market comes last in priority.

#### 3.3. The third factor: Past perception strategy

The third factor, past perception strategy, consists of four sub-factors, which are summarized in Table 4 as follows,

**Table 4**

The results of factors associated with past perception strategy

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Consumer behavior	0.819			
Consumer perception from previous products	0.659			
Understanding consumer's preferences	0.854	2.444	61.097	61.097
Market segmentation based on consumer's needs	0.780			

Cronbach alpha =0.76

As we can observe from the results of Table 4, understanding consumer's preferences is number one priority in this factor followed by learning more about consumer behavior, market segmentation based on consumer's needs and consumer perception from previous product is the last priority in our survey.

### 3.4. The fourth factor: product presentation

The fourth factor, product presentation, consists of two sub-factors, which are summarized in Table 5 as follows,

**Table 5**  
The results of factors associated with product presentation

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Appropriate design perspective	0.594			
Product packaging	0.787	1.699	42.467	42.467
Market diversity	0.603			
Paying more attention to product life cycle	0.603			

Cronbach alpha =0.734

As we can observe from the results of Table 5, product packaging is number one priority followed by market diversity and paying more attention on product life cycle. In this part, design perspective comes at last in terms of priority.

### 3.5. The fifth factor: Brand loyalty

The fifth factor, brand loyalty, consists of three sub-factors, which are summarized in Table 6 as follows,

**Table 6**  
The results of factors associated with brand loyalty

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Customer loyalty to products	0.462			
Customer satisfaction from brand	0.813	1.428	47.603	47.603
Brand name	0.744			

Cronbach alpha =0.64

As we can observe from the results of Table 6, customer satisfaction from brand is the most important items followed by brand name and customer loyalty to products.

### 3.6. The sixth factor: Dynamic organizational structure

The last factor, dynamic organizational structure, consists of three sub-factors, which are summarized in Table 7 as follows,

**Table 7**  
The results of factors associated with dynamic organizational structure

Option	Factor weight	Eigenvalues	% of variance	Accumulated
Inside organization coordination	0.669			
New market achievement	0.756	1.463	48.780	48.780
Taking advantage of economic change	0.669			

Cronbach alpha =0.470

As we can observe from the results of Table 7, new market achievement is number one priority in this group followed by inside organization coordination as well as taking advantage of economic change.

#### 4. Conclusion

In this paper, we perform an exploration study to find important factors influencing product positioning in Iranian food industry. The study used factor analysis to find important factors and it has detected six important factors including marketing organization, market analysis, past perception strategy, product presentation, brand loyalty and dynamic organizational structure.

The first factor, marketing organization, pricing strategy is the most important factor followed by product development strategy, supplying necessary demand. In addition, consumer sensitivity on price changes is on lower priority followed by imitating from previous successful products and product discount. The second factor, market analysis, consists of three sub-factors where, awareness on other products offered on market is number one priority followed by competitive advantage of firm and firm position on the market comes last in priority. The third factor, past perception strategy, consists of four sub-factors, where understanding consumer's preferences is number one priority in this factor followed by learning more about consumer behavior, market segmentation based on consumer's needs and consumer perception from previous product is the last priority in our survey. The fourth factor, product presentation, consists of two sub-factors where product packaging is number one priority followed by market diversity and paying more attention on product life cycle. In this part, design perspective comes at last in terms of priority. The fifth factor, brand loyalty, consists of three sub-factors, where customer satisfaction from brand is the most important items followed by brand name and customer loyalty to products. Finally, the last factor, dynamic organizational structure, consists of three sub-factors where new market achievement is number one priority in this group followed by inside organization coordination as well as taking advantage of economic change.

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