Developing an Integrated Marketing Strategy Decision Making Framework Based on Corporate-Specific Criteria

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Abstract

The main purpose of this paper is to propose a suitable model for determining the appropriate marketing strategy based on corporate resources and capabilities. In this regard, a three-step multiple criteria decision making framework is developed to determine the most appropriate marketing strategy in an efficient manner. In this framework, first the corporate criteria for marketing strategy selection are determined through a comprehensive survey of the related literature and corporate's expert judgments. Then fuzzy AHP method is applied to calculate the relative importance of these criteria. Finally VIKOR method is used for the purpose of ranking strategies based on the selection criteria. The feasibility of the proposed model is demonstrated by applying the framework in an Iranian company which is working in the field of food industry. Moreover, this framework can be easily understood and applied by marketing strategists in other fields of industry.

Keywords: Marketing strategy, multiple criteria decision making, Fuzzy AHP, VIKOR.
1. Introduction

Strategic orientation refers to how companies use strategy to adapt aspects of their environment for a more favorable alignment. This orientation has been described as a strategic choice (Manu & Sriram, 1996). Many researches show the relationship between applied strategies and company performance, suggested that performance is influenced by adopted strategies (Cavusgil & Zou, 1994). Thus selecting an appropriate strategy can enhance corporate performance and provide a sustainable competitive advantage for the company. On the other hand, various strategic choices imply the need for a reasonable decision making framework (Wu, Lin, & Lee, 2010). Similarly in the marketing field, top managers are constantly faced with the problem of how to trade off competing strategic marketing decisions. For example should the company invest on advertising or loyalty programs, improve service quality or none of them? Such high-level decisions need something other than decision makers' own experience and intuition (Rust, Lemon, & Zeithaml, 2004). A marketing strategy decision can be classified as a multi-criteria decision-making (MCDM) problem. MCDM problem is a problem in which the decision maker intends to choose one out of several alternatives on the basis of a set of criteria. It can help users understand the results of integrated assessments, including tradeoffs among policy objectives, and use these results in a systematic and defensible way to develop policy recommendations (Safari & Ebrahimi, 2014). In this regard, the purpose of the current study is to model the marketing strategy decision-making problem as an MCDM problem and provide a three-step decision support framework to carefully assess marketing strategies. About using Fuzzy AHP and VIKOR method the following studies are cited: Chaghooshi et al (2014) applied fuzzy AHP and fuzzy VIKOR for supplier selection. In their paper, the weights of each criterion are calculated using Fuzzy AHP method. After that, Fuzzy VIKOR is utilized to rank the alternatives. Safari et al (2011) used fuzzy AHP and fuzzy TOPSIS for machine selection. Moradzadehfard et al (2011) applied GTMA and fuzzy AHP for ranking of automobile companies in Tehran Stock Exchange. Safari et al (2011) applied fuzzy AHP for formulation and ranking of Human Resource Management Strategies in Tehran Province gas Company. Avazpour et al (2013) used TOPSIS method for performance appraisal. Chaghooshi et al (2012) used fuzzy AHP and fuzzy GTMA for location selection of gas pressure reducing stations. This paper is organized as follows. Section 2 reviews the literature related to marketing strategy. In Section 3 the proposed framework for evaluating and comparing generic marketing strategies (GMS) is described. The fuzzy AHP and VIKOR methods are also presented. The empirical case study is described in Section 4. Section 5 discusses the application results and finally, the conclusion is presented in Section 6.

2. Literature review

2.1. Marketing strategy

Proper and strong marketing strategy is essential for the survival and success of any business in the increasing complex, competitive environment of organizations. There are many definitions for marketing strategy in the related literature reflecting various points of view. However, it is clear that marketing strategy help organizations to achieve their marketing objectives (Li, Kinman, Duan, & Edwards, 2000).
Marketing strategy is defined as the total sum of the integration of segmentation, targeting, differentiation, and positioning strategies designed to create, communicate, and deliver an offer to a target market. It is important considering that marketing strategy is not a standalone endeavor and should be an integral component of functional area strategies of the firm, e.g. marketing, finance, and human resources, of the firm, i.e. corporate, growth, competitive, global, and e-business strategies (El-ansary, 2006). It is the consequence of the interplay of four major strategic inputs- customers, competition, resources, and environmental forces, and the processes which act on these inputs (Jain & Punj, 1987). Marketing strategy focuses on ways in which can differentiate itself from its competitors, investing on its distinctive strengths to deliver better value to customers. A good marketing strategy is characterized by:

a) A clear market definition;

b) A proper match between corporate strengths and market needs; and

c) A superior performance relative to the competition, in the key success factors of the business (Jain, 2000).

2.2. Generic Marketing strategies

On stand of research in the field of identification and evaluation of business strategies, has been the concept of strategic types or groups. Various approaches to grouping strategies have been employed in practice with wide variations in the variables used to define strategy and methodologies used for data gathering (Hooley, Lynch, & Jobber, 1992). We introduce five prominent marketing strategy typologies namely generic marketing strategies (GMS) in table 1.

**Table 1. Dominant Generic Marketing Strategies**

<table>
<thead>
<tr>
<th>Marketing Strategy typologies</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Industry-wide cost leadership</td>
<td>Porter, 1980</td>
</tr>
<tr>
<td>- Industry-wide differentiation</td>
<td></td>
</tr>
<tr>
<td>- Focused cost leadership</td>
<td></td>
</tr>
<tr>
<td>- Focused differentiation</td>
<td></td>
</tr>
<tr>
<td>- Defenders</td>
<td></td>
</tr>
<tr>
<td>- Prospectors</td>
<td>Miles &amp; Snow, 1978</td>
</tr>
<tr>
<td>- Analyzers</td>
<td></td>
</tr>
<tr>
<td>- Reactors</td>
<td></td>
</tr>
</tbody>
</table>
The current study adopts Hooley et al. (1992) GMS for determining the appropriate marketing strategy, based on organization’s specific criteria. The related five GMS are described as following.

GMS1 involves aggressive or market domination goals often through market share gain or total market expansion. The targeting approach is to aim at the whole market, although targeting selected segments and individual customers is also practiced. Its positioning involves the marketing of high quality products at similar prices. This marketing strategy resembles the Porter's differentiation strategy and Kotler's high value price/quality strategy.

In GMS2, companies seek steady sales growth either through market share gain or market expansion. Selected segments are targeted through higher quality products at higher prices than competitors. This strategy resembles the focused differentiation strategy of Porter.
In GMS3 steady sales growth goals are pursued through a focus on market share by concentrating on selected segments of the market or individual customers. The positioning adopted is average quality at average prices. This strategy most closely resembles stuck in the middle as no advantage either through quality differentiation or low costs is created.

GMS4 has a clear objective of steady growth with a focus on total market expansion or winning market share by targeting selected segments or individuals. Its positioning is like the focused differentiation strategy of Porter, but not charging the premium price that would normally be associated with the strategy as a value signal.

GMS5 is defensive in nature, and focuses on cost reduction and productivity improvement. Most often this strategy is very selective in targeting of individual customers with similar or higher quality at similar prices. It is similar to Porter's focused cost leadership strategy (Hooley et al., 1992).

2.3. Criteria for marketing strategy selection

Few studies consider determining the criteria for market strategy selection. The criteria which are chosen in this study are adopted through a comprehensive survey of the related literature and the corporate's expert judgments. The criteria are shown in table 2.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial capabilities (C&lt;sub&gt;1&lt;/sub&gt;)</td>
<td>Wu et. al, 2010</td>
</tr>
<tr>
<td>Customer linking (C&lt;sub&gt;2&lt;/sub&gt;)</td>
<td>Wu et. al, 2010</td>
</tr>
<tr>
<td>Market innovation (C&lt;sub&gt;3&lt;/sub&gt;)</td>
<td>Wu et. al, 2010; Manu &amp; Sriram, 1996</td>
</tr>
<tr>
<td>Human resource assets (C&lt;sub&gt;4&lt;/sub&gt;)</td>
<td>Wu et. al, 2010</td>
</tr>
<tr>
<td>Reputational assets (C&lt;sub&gt;5&lt;/sub&gt;)</td>
<td>Hooley et al., 1992</td>
</tr>
<tr>
<td>Corporate attitudes (C&lt;sub&gt;7&lt;/sub&gt;)</td>
<td>Hooley et al., 1992</td>
</tr>
<tr>
<td>Performance measures (C&lt;sub&gt;8&lt;/sub&gt;)</td>
<td>Hooley et al., 1992</td>
</tr>
<tr>
<td>Marketing channels (C&lt;sub&gt;9&lt;/sub&gt;)</td>
<td>Paswan, Blankson, &amp; Guzman, 2011</td>
</tr>
<tr>
<td>Marketing mix elements (C&lt;sub&gt;10&lt;/sub&gt;)</td>
<td>Siraliowa &amp; Angelis, 2006</td>
</tr>
</tbody>
</table>
3. Research methodology

3.1. Process and framework

The main purpose of this study is developing a suitable model for determining the appropriate marketing strategy based on corporate resources and capabilities. According to this, first by studying the related literature criteria were recognized. Then the weights of each criterion were analyzed by the fuzzy AHP method. Finally, according to these weights, the VIKOR method was applied for the purpose of ranking marketing strategies. The overall framework of the study is shown in figure 1.

![Fig. 1. Research framework](image)

3.2. Fuzzy Set and Numbers

Fuzzy set theory, which was introduced by Zadeh (1965) to deal with problems in which a source of vagueness is involved, has been utilized for incorporating imprecise data into the decision framework. A fuzzy set \( \tilde{A} \) can be defined mathematically by a membership function \( \mu_{\tilde{A}}(x) \), which assigns each element \( x \) in the universe of discourse \( X \) a real number in the interval \([0,1]\). A triangular fuzzy number \( \tilde{A} \) can be defined by a triplet \((a, b, c)\) as illustrated in Figure 2.

![Fig. 2. A triangular fuzzy number \( \tilde{A} \)](image)
The membership function $\mu_{A}(X)$ is defined as
\[
\mu_{A}(X) = \begin{cases} 
\frac{x-a}{b-a} & a \leq x \leq b \\
\frac{x-c}{b-c} & b \leq x \leq c \\
0 & \text{otherwise}
\end{cases}
\] (1)

Basic arithmetic operations on triangular fuzzy numbers $A_1 = (a_1, b_1, c_1)$, where $a_1 \leq b_1 \leq c_1$, and $A_2 = (a_2, b_2, c_2)$, where $a_2 \leq b_2 \leq c_2$, can be shown as follows:

Addition: $A_1 \oplus A_2 = (a_1 + a_2, b_1 + b_2, c_1 + c_2)$  \hspace{1cm} (2)

Subtraction: $A_1 \ominus A_2 = (a_1 - c_2, b_1 - b_2, c_1 - a_2)$  \hspace{1cm} (3)

Multiplication: if $k$ is a scalar
\[
K \otimes A_1 = \begin{cases} 
(ka_1, kb_1, kc_1), & k > 0 \\
(kc_1, kb_1, ka_1), & k < 0
\end{cases}
\]

$A_1 \oslash A_2 \approx (a_1 a_2 , b_1 b_2 , c_1 c_2)$ , if $a_1 \geq 0 , a_2 \geq 0$  \hspace{1cm} (4)

Division: $A_1 \oslash A_2 \approx \left( \frac{a_1}{a_2} , \frac{b_1}{b_2} , \frac{c_1}{c_2} \right)$ ,

if $a_1 \geq 0 , a_2 \geq 0$  \hspace{1cm} (5)

Although multiplication and division operations on triangular fuzzy numbers do not necessarily yield a triangular fuzzy number, triangular fuzzy number approximations can be used for many practical applications (Kaufmann et al. 1988). Triangular fuzzy numbers are appropriate for quantifying the vague information about most decision problems including personnel selection (e.g. rating for creativity, personality, leadership, etc.). The primary reason for using triangular fuzzy numbers can be stated as their intuitive and computational-efficient representation (Karsak, 2002). A linguistic variable is defined as a variable whose values are not numbers, but words or sentences in natural or artificial language. The
concept of a linguistic variable appears as a useful means for providing approximate characterization of phenomena that are too complex or ill-defined to be described in conventional quantitative terms (Zadeh, 1975).

3.3. Fuzzy AHP

First proposed by Thomas L. Saaty (1980), the analytic hierarchy process (AHP) is a widely used multiple criteria decision-making tool. The analytic hierarchy process, since its invention, has been a tool at the hands of decision makers and researchers, becoming one of the most widely used multiple criteria decision-making tools (Vaidya et al. 2006). Although the purpose of AHP is to capture the expert’s knowledge, the traditional AHP still cannot really reflect the human thinking style (Kahraman et al. 2003). The traditional AHP method is problematic in that it uses an exact value to express the decision maker’s opinion in a comparison of alternatives (Wang et al. 2007). And AHP method is often criticized, due to its use of unbalanced scale of judgments and its inability to adequately handle the inherent uncertainty and imprecision in the pairwise comparison process. To overcome all these shortcomings, fuzzy analytical hierarchy process was developed for solving the hierarchical problems. Decision-makers usually find that it is more accurate to give interval judgments than fixed value judgments. This is because usually he/she is unable to make his/her preference explicitly about the fuzzy nature of the comparison process (Kahraman et al. 2003). The first study of fuzzy AHP is proposed by Van Laarhoven and Pedrycz (1983), which compared fuzzy ratios described by triangular fuzzy numbers. Buckley (1985) initiated trapezoidal fuzzy numbers to express the decision maker’s evaluation on alternatives with respect to each criterion Chang (1996) introduced a new approach for handling fuzzy AHP, with the use of triangular fuzzy numbers for pair-wise comparison scale of fuzzy AHP, and the use of the extent analysis method for the synthetic extent values of the pair-wise comparisons. Fuzzy AHP method is a popular approach for multiple criteria decision-making. In this study the extent fuzzy AHP is utilized, which was originally introduced by Chang (1996). Let \( X = \{x_1, x_2, x_3, \ldots, x_n\} \) be an object set, and \( G = \{g_1, g_2, g_3, \ldots, g_m\} \) be a goal set. Then, each object is taken and extent analysis for each goal is performed, respectively. Therefore, \( m \) extent analysis values for each object can be obtained, with the following signs:

\[ \tilde{M}^1_{g_1}, \tilde{M}^2_{g_1}, \ldots, \tilde{M}^m_{g_1}, \quad i = 1, 2, \ldots, n \]

Where \( \tilde{M}^j_{g_i} \) (\( j=1,2,3,\ldots, m \)) are all triangular fuzzy numbers. The steps of the Chang’s (1996) extent analysis can be summarized as follows:

Step 1: The value of fuzzy synthetic extent with respect to the \( i \)th object is defined as:

\[ S_i = \sum_{j=1}^{m} \tilde{M}^j_{g_i} \otimes \left[ \sum_{i=1}^{n} \sum_{j=1}^{m} \tilde{M}^j_{g_i} \right]^{-1} \]
Where \( \otimes \) denotes the extended multiplication of two fuzzy numbers. In order to obtain \( \sum_{j=1}^{m} \tilde{M}_{ji} \), we perform the addition of \( m \) extent analysis values for a particular matrix such that,

\[
\sum_{j=1}^{m} \tilde{M}_{ji} = (\sum_{j=1}^{m} l_j, \sum_{j=1}^{m} m_j, \sum_{j=1}^{m} u_j)
\]  

\( (7) \)

And to obtain \( [\sum_{i=1}^{n} \sum_{j=1}^{m} \tilde{M}_{ji}]^{-1} \), we perform the fuzzy addition operation of \( \tilde{M}_{ji} \) (\( j = 1, 2, \ldots, m \)) values such that,

\[
\sum_{i=1}^{n} \sum_{j=1}^{m} \tilde{M}_{ji} = (\sum_{i=1}^{n} l_i, \sum_{i=1}^{n} m_i, \sum_{i=1}^{n} u_i)
\]  

\( (8) \)

Then, the inverse of the vector is computed as,

\[
[\sum_{i=1}^{n} \sum_{j=1}^{m} \tilde{M}_{ji}]^{-1} = \left( \frac{1}{\sum_{i=1}^{n} l_i}, \frac{1}{\sum_{i=1}^{n} m_i}, \frac{1}{\sum_{i=1}^{n} u_i} \right)
\]  

\( (9) \)

Where \( u_i , m_i , l_i > 0 \)

Finally, to obtain the \( S_i \), we perform the following multiplication:

\[
S_i = \sum_{j=1}^{m} \tilde{M}_{ji} \otimes [\sum_{i=1}^{n} \sum_{j=1}^{m} \tilde{M}_{ji}]^{-1}
\]

\[
= (\sum_{j=1}^{m} l_j \otimes \sum_{i=1}^{n} l_i, \sum_{j=1}^{m} m_j \otimes \sum_{i=1}^{n} m_i, \sum_{j=1}^{m} u_j \otimes \sum_{i=1}^{n} u_i)
\]  

\( (10) \)

Step 2: The degree of possibility of \( \tilde{M}_2 = (l_2 , m_2 , u_2) \geq \tilde{M}_1 = (l_1 , m_1 , u_1) \) is defined as

\[
V(\tilde{M}_2 \geq \tilde{M}_1) = \sup \{ \min (\tilde{M}_1(x) , \tilde{M}_2(y)) \}
\]  

\( (11) \)

This can be equivalently expressed as,
Figure 3 illustrates $V(\overline{M}_2 \geq \overline{M}_1)$ for the case $d$ for the case $m_1 < l_1 < u_2 < m_1$, where $d$ is the abscissa value corresponding to the highest crossover point $D$ between $\overline{M}_1$ and $\overline{M}_2$. To compare $\overline{M}_1$ and $\overline{M}_2$, we need both of the values $V(\overline{M}_1 \geq \overline{M}_2)$ and $V(\overline{M}_2 \geq \overline{M}_1)$.

![Fig. 3. The intersection between $M_1$ and $M_2$ (Chang 1996)](image)

Step 3: The degree of possibility for a convex fuzzy number to be greater than $k$ convex fuzzy numbers $M_i$ ($i=1, 2… k$) is defined as

$$V(\overline{M} \geq \overline{M}_1, \overline{M}_2, ……, \overline{M}_k) = \min V(\overline{M} \geq \overline{M}_i), \ i=1,2,…,k$$

Step 4: Finally, $W=(\min V( s_1 \geq s_k), \min V( s_2 \geq s_k), ……, \min V( s_n \geq s_k))^T$, is the weight vector for $k = 1,…,n$. 

$$3.4. \text{The VIKOR}$

3.4.1. Introduction to VIKOR

The VIKOR method is a compromise MADM method, developed by Opricovic .S and Tzeng (Opricovic, 1998; Opricovic, S. and Tzeng, G. H., 2002) started from the form of Lp-metric:
The VIKOR method can provide a maximum “group utility” for the “majority” and a minimum of an individual regret for the “opponent” (Opricovic, 1998; Opricovic, S; Tzeng, G. H., 2002).

3.4.2. Working Steps of VIKOR Method

1) Calculate the normalized value
Assuming that there are m alternatives, and n attributes. The various i alternatives are denoted as x_i. For alternative x_j, the rating of the jth aspect is denoted as x_{ij}, i.e. x_{ij} is the value of jth attribute. For the process of normalized value, when x_{ij} is the original value of the ith option and the jth dimension, the formula is as follows:

\[
L_{pi} = \left\{ \sum_{j=1}^{n} w_j (f_j^* - f_{ij}) / (f_j^* - f_j^-) \right\}^{1/p} \quad 1 \leq p \leq +\infty \quad i = 1,2, ... I.
\]

2) Determine the best and worst values
For all the attribute functions the best value was \( f_j^+ \) and the worst value was \( f_j^- \), that is, for attribute \( j = 1 - n \), we get formulas (15) and (16)

\[
f_j^+ = \max f_{ij}, i = 1,2, ..., m \quad (15)
\]

\[
f_j^- = \min f_{ij}, i = 1,2, ..., m \quad (16)
\]

Where \( f_j^+ \) the positive ideal solution for the jth criteria is, \( f_j^- \) is the negative ideal solution for the jth criteria. If one associates all \( f_j^+ \), one will have the optimal combination, which gets the highest scores, the same as \( f_j^- \).

3) Determine the weights of attributes
The weights of attribute should be calculated to express their relative importance.

4) Compute the distance of alternatives to ideal solution
This step is to calculate the distance from each alternative to the positive ideal solution and then get the sum to obtain the final value according to formula (17) and (18).
Where $S_i$ represents the distance rate of the $i$th alternative to the positive ideal solution (best combination), $R_i$ represents the distance rate of the $i$th alternative to the negative ideal solution (worst combination). The excellence ranking will be based on $S_i$ values and the worst rankings will be based on $R_i$ values. In other words, $S_i$, $R_i$ indicate $L_{li}$ and $L_{mi}$ of $L_p$-metric respectively.

5) Calculate the VIKOR values $Q_i$ for $i=1, 2, ..., m$, which are defined as

$$Q_i = v \left[ \frac{S_i - S^-}{S^+ - S^-} \right] + (1 - v) \left[ \frac{R_i - R^-}{R^+ - R^-} \right]$$

Where $S^- = \max_i S_i$, $S^+ = \min_i S_i$, $R^- = \max_i R_i$, $R^+ = \min_i R_i$, and $v$ is the weight of the strategy of “the majority of criteria” (or “the maximum group utility”). $[(S - S^+)/S^+ - S^-]$ represents the distance rate from the positive ideal solution of the $i$th alternative’s achievements. In other words, the majority agrees to use the rate of the $i$th. $[(R - R^+)/R^+ - R^-]$ represents the distance rate from the negative ideal solution of the $i$th alternative; this means the majority disagree with the rate of the $i$th alternative. Thus, when the $v$ is larger ($> 0.5$), the index of $Q_i$ will tend to majority agreement; when $v$ is less ($< 0.5$), the index $Q_i$ will indicate majority negative attitude; in general, $v = 0.5$, i.e. compromise attitude of evaluation experts.

6) Rank the alternatives by $Q_i$ values

According to the $Q_i$ values calculated by step (4), we can rank the alternatives and to make-decision.

4. Empirical Analysis

The case of this study is an Iranian company which is active in the food industry. The case study company intends to evaluate marketing strategy alternatives based on its specific criteria.

In Fuzzy AHP method, we determine the weights of each criteria by utilizing pair-wise comparison matrices. We compare each criteria with respect to other criteria. You can see the pair-wise comparison matrix for ranking of these criteria in Table 3.
Table 3. Fuzzy pair-wise comparison matrix

<table>
<thead>
<tr>
<th></th>
<th>C₁</th>
<th>C₂</th>
<th>C₃</th>
<th>...</th>
<th>C₁₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>C₁</td>
<td>(1.00,1.00,1.00)</td>
<td>(0.33,0.50,1.00)</td>
<td>(2.00,3.00,4.00)</td>
<td>(2.00,3.00,4.00)</td>
<td></td>
</tr>
<tr>
<td>C₂</td>
<td>(1.00,2.00,3.00)</td>
<td>(1.00,1.00,1.00)</td>
<td>(2.00,3.00,4.00)</td>
<td>(1.00,2.00,3.00)</td>
<td></td>
</tr>
<tr>
<td>C₃</td>
<td>(0.25,0.33,0.50)</td>
<td>(0.25,0.33,0.50)</td>
<td>(1.00,1.00,1.00)</td>
<td>(0.33,0.50,1.00)</td>
<td></td>
</tr>
<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C₁₀</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1.00,1.00,1.00)</td>
</tr>
</tbody>
</table>

After forming fuzzy pair-wise comparison matrix, we calculate the weight of criteria. The weight vector from Table 3 is calculated and normalized as:

\[ W_t = (0.081, 0.185, 0.076, 0.128, 0.074, 0.241, 0.110, 0.043, 0.047, 0.011) \]

The weights of criteria are calculated by fuzzy AHP up to now, and then these values can be used in VIKOR. So, the VIKOR methodology must be started at the second step. Thus, weighted normalized decision matrix can be prepared. This matrix can be seen from Table 4.

Table 4. Weighted normalized decision matrix

<table>
<thead>
<tr>
<th></th>
<th>C₁</th>
<th>C₂</th>
<th>...</th>
<th>C₇</th>
<th>C₈</th>
<th>C₁₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>A₁</td>
<td>0.069</td>
<td>0.082</td>
<td>...</td>
<td>0.822</td>
<td>0.262</td>
<td>0.114</td>
</tr>
<tr>
<td>A₂</td>
<td>0.046</td>
<td>0.123</td>
<td>...</td>
<td>0.743</td>
<td>0.112</td>
<td>0.205</td>
</tr>
<tr>
<td>A₃</td>
<td>0.051</td>
<td>0.073</td>
<td>...</td>
<td>0.694</td>
<td>0.199</td>
<td>0.325</td>
</tr>
<tr>
<td>A₄</td>
<td>0.063</td>
<td>0.107</td>
<td>...</td>
<td>0.759</td>
<td>0.315</td>
<td>0.278</td>
</tr>
</tbody>
</table>

By following VIKOR procedure steps and calculations, the ranking of marketing strategy alternatives are gained. The results and final ranking are shown in Table 5.
According to Table 5, $A_1$ is the best alternative among other alternatives and other alternatives ranked as follow: $A_1 > A_4 > A_3 > A_2$.

5. Conclusions

Proper and strong marketing strategy is essential for the survival and success of any business in the increasing complex, competitive environment of organizations. The purpose of this paper is to propose a suitable model for determining the appropriate marketing strategy based on corporate resources and capabilities. In this regard, a framework is developed to determine the most appropriate marketing strategy in an efficient manner. In this framework, first the corporate criteria for marketing strategy selection are determined through a comprehensive survey of the related literature and corporate's expert judgments. Then fuzzy AHP method is applied to calculate the relative importance of these criteria. Finally VIKOR method is used for the purpose of ranking strategies based on the selection criteria. According to result, $A_1$ is the best alternative among other alternatives.

References


