Using Fuzzy AHP to Determine the Marketing Strategy for the Private Hotels in Iran


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Abstract

To determine marketing strategy as a decision process is the most critical issue of all management decisions. The purpose of this current study is to provide an analytical tool to determine the appropriate marketing strategy for the private hotels so as to capture sustainable competitive advantage. Based on the resource-based view (RBV) of the firm to competitive advantage, the current study attempts to identify specific resources and capabilities by focusing on the private hotels and by doing so develops an evaluation framework of marketing strategy in a service industry within its unique conditions. The complexity and difficulty of allocated specific and limited resources of marketing strategy toward competitive advantage for private hotels, hence, the current study is to employ the fuzzy analytic hierarchy process (Fuzzy AHP) method to determine competitive marketing strategy for private hotels. After reviewing theory and research on competitive advantage in general and in service industries in particular, the resources and capabilities identified as managerial capabilities, customer linking capabilities, market innovation capabilities, human resource assets, and reputational assets. Due to a set of criteria for comparisons, the fuzzy analytic hierarchy process method is undertaken to accommodate the inherent uncertainty.

INTRODUCTION

Today, corporations mired in a predicament of complicated competitive environment. Underlying the aim for maximizing executive benefits, generating revenue simultaneously, it is necessary to deliberate critical resources and expenses of firm. Evaluating competitive advantage of a particular firm is always problematic given the difficulty in deciding marketing strategy. And what is more, marketing resource has been conceptualized as an antecedent to marketing strategy [28].

Pursuing increases in revenue and profits, ventures should select one from a great diversity of marketing strategies. Since the last 20 years, greater emphasis had been placed on the role of marketing considerations in the managerial process. It would be widely recognized that the marketing function should enter the managerial process at its early stages. Implicit in various strategic choices is the need for reasonable implementation and control actions in a diverse set of functional units. Especially in marketing strategy, grounded in the resource-based view (RBV) of the firm [60], more researchers tend to emphasize the value of firm’s resource possession by focusing on those resources that create and sustain competitive advantage [52, 3, 22].

Recently, there has been much interest in the role of marketing resources in contributing to the creation of competitive advantage and subsequently firm performance [28]. By leveraging marketing resources, it is argued that firms will be in a stronger position to succeed in the marketplace [28, 54]. Therefore, on the strength of resource-based view, it is suggested that competitive advantage originated for property and deployment of resources which were outstanding to other competitors in some way [28, 3]. That is, so, to say that it should allocate the resources which were specific and limited appropriately to generate reasonable benefits, farther to enhance competitive advantage. Such an emphasis, moreover, is understandable for

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marketing strategies in the current era where market forces predominantly drive strategic decision making [11].

Multi-criteria decision-making (MCDM) methods are pointed to be helpful in reaching important decisions that cannot be determined straightforwardly. The underlying principle of MCDM is that decisions should be made by use of multiple criteria [8]. Since the problems associated with strategic marketing system are becoming more complex, it seemed to be difficult to handle the problems with a single set of guidelines or decision model comprehensively. Professor Thomas [46] created the Analytic Hierarchy Process (AHP) by deduction and induction to decompose the complicated problems into a hierarchy of simple factors and sub factors, and then to make the corresponding measurement according to comparisons. Then, [62] stated that the AHP is a mathematically based, objective, decision-making tool. The AHP addresses how to solve decision-making problems, which are having uncertainty and multiple-criteria characteristics [65]. However, the fuzzy AHP approach is adopted to deal with the possible uncertainty in the subjective judgments. So, by assigning triangular fuzzy numbers, the fuzzy AHP is employed to identify the relative importance of criteria and alternatives’ weights among criteria.

Hence, the purpose of the current study is to employ the fuzzy AHP method to select competitive marketing strategy for private hotels. Specifically, the study seeks to add to the comprehension of marketing issues of private hotel by attempting to allocate the resources of small hospitality ventures in Iran given the particular industry conditions and the capricious environment. Offer private hotel practitioners and marketing strategy makers a set of guidelines for designing and implementing competitive marketing strategies and allocating appropriate resources, respectively. Marketers and marketing strategy makers would find the fuzzy AHP useful aids to allocate firm’s resources for strategies. This study expanded the application of the fuzzy AHP by focusing on the service industry, and provided controls for market-level influences by being restricted to the private hotel sector.

2. Literature Review:
2.1 Competitive Advantage and Marketing strategy:
“Resource-based view” (RBV) emerged as arguments as challengers against the excessive determinism of [43] view of competition [63], and the RBV emphasized the importance of key resources in achieving competitive advantage [39]. [44] also stressed that core capabilities or the resources of intangible assets could create exhilarating competitive for organization. Both within and across the marketing and RBV domains, [55] pointed that the common emphasis on leveraging resources to create and sustain value for the organization’s stakeholders should not be surprising, given the considerable goodness of fit between marketing realities and the assumption.

[1] pointed out five common routes to sustainable competitive advantage, included quality, value, innovation, focus and global. In the boundaries of RBV, sustainability of competitive advantage would be accomplished heavily with the bundle of resources and capabilities possessed by the particular organization [30]. Some researches had been attempted to explore this association by empirical examination of specific competitive strategies and their implications in terms of company performance [39, 51, 15]. Also, [34] pointed that resource-based and product-market strategies had been associated with improved performance. Therefore, the importance of the relationships among competitive advantage and marketing strategy and performance had also been recognized in the context of hotel marketing practices.

Then, Kaleka (2002) [30] pointed out that different combinations of resources and capabilities would be identified as drivers of cost, service, and product advantage; nonetheless, the capability to build and endure relationships with customers emerged as essential in achieving all three types of competitive advantage for industrial exports. The cost advantage would be associated with cost of goods sold, product cost per unit, and selling price to customers; service advantage covered technical support and after-sales service, product accessibility, delivery speed and reliability; and product advantage would be designated by superior quality, packaging, and design and style of the product [30, 23, 31]. In consonance with views of [41, 36], [57] placing the emphasis upon the effective utilization of firm-controlled distinctive capabilities and resources, ventures could take to create defensible positions against competitive forces.

In terms of competitive strategy, [43] introduced a typology of three generic strategies for creating a defensible position and outperforming competitor in a given industry, included overall cost leadership, differentiation and focus [39]. [15] stated that enterprise units had to seek either a low-cost or a differentiation strategy for marketing practicing. The aspect of cost strategy, venture smell the superior position to achieve cost decrement, whereas they could find the acquisition and development of the necessary resources forthwith. In differentiation strategy, [6] stated that differentiation through offerings superior customer service would be important especially, and [22] also pointed out that successful product/service differentiation could be achieved through [39] investigated the impact of the major thoughts of marketing, market segmentation, which itself is a fundamental precursor to a focus strategy and an important product-market strategy. Besides, [64] pointed out that market segmentation should be esteemed as an essential to business success. The benefits of market segmentation could be widespread and range from understanding customer needs and delivering
customer value to achieving competitive advantage and improved organizational performance [39, 16].

From the above discussions about competitive advantages, it would be difficult to comprehend what the role of the marketing uniqueness and specific resources and capabilities of firms placed and why they gained and sustained competitive advantage for organizations. Undoubtedly, ventures should have to bring resources and capabilities into full play further, and transform them into utility by marketing strategies. Despite the importance of competitive advantage to the hospitality industry, there were few empirical support regarding its effectiveness and attractiveness. According to the findings of a research, it indicated that hotel managers would not use a strategic-choice model when pursuing a particular competitive strategy. Therefore, the current study is based on the view of RBV to investigate the competitive advantage of the hospitality industry.

2.2 Marketing Resources and Capabilities and Marketing Strategy:

In competitive strategy research, it stated that strategic capacity defined as enduring resources and capabilities. Potential resources could be valuable, rare, inimitable, and nonsubstitutable and possible for business to develop and maintain competitive advantage to utilize the resources and competitive advantages for superior performance [53, 22, 63]. In addition, the resources for competitive advantage would be viewed as those that possessed the combined resources of nonsubstitutability enabling the provision of competitively superior value to customers [3]; being difficult to duplicate by competitors [17], and those value could be appropriated by their organizations [10].

As well, Kaleka (2002) [30] emphasized that resources which would influence the competitive advantage could be on both the input and output types: resources and capabilities. The resources could represent assets controlled by the firm that were used as inputs to organizational processes, including operational resources, scale of operation, financial resources, and physical resources. Furthermore, capabilities could concern the organizational ability to combine, develop, and use assets resources and capabilities to achieve competitive advantage, including information, customer relationship building, product development, and supplier relationship building.

Srivastava et al. (1998) [54] stated that the market-based assets and market-based assets should be both criteria of marketing. Scandia AFS (Intellektial mode and divided into three types) of intellectual capabilities, including human capital which referred to the employees’ knowledge, technology, and experience of the whole organization, structural capital, which referred to technology, invention data, publication, and process of the whole organization, and customer capital, which referred to the relationship between the organization and customer [33]. From the above discussions of [55] and [63], it revealed that not all resources and capabilities could be owned and controlled by the organization.

Many resources developed and underpinning marketing activities would be potentially significant advantages in generating resources [28], and Hooley et al. (2005) [28] encapsulated those resources which could win the marketplace or maintain competitive advantage, included customer linking capabilities, market innovation capabilities, human resource assets and reputation assets; simultaneously, the marketing support resources would serve primarily to support marketing activities and contribute directly to competitive advantage, included managerial capabilities and market orientation [28]. What most worth noting would be that market orientation should affect the market-based resources of managerial capabilities for firms’ performance; notwithstanding, market orientation would be treated as a deeply embedded cultural facet of firms’ formed a distinctive resource [14, 29].

The hotel industry, offering individual services for travelers [8, 61, 33], As regards, private hotel competitive resources and capabilities, specifically, they can be classified as managerial capabilities, customer linking capabilities, market innovation, human resource assets, reputation assets. Inspect of managerial capabilities, it can be identified as inside-out capabilities [12], and it is usually treated as one traditional business function for operation management included the production and delivery of goods and services that would be concerned with the transformation of raw inputs into outputs that customers valued [26]. Inspect of customer linking capabilities, [12] pointed out the most important market-based resources of any organization would be outside-in customer linking capabilities. Hooley et al.
(2005)[28]statedthat itincludethedabilitiesto identify customerwantsand requirements togetherwiththecapabilitiestocreate and build appropriate relationships with their customers. In terms of marketing innovation,[27] discoveredit would bethe ability to innovate productservice in the marketplace. These capabilities should need to linkage through functions, relied on the firm’s tacit knowledge, and the innovation in the firm would benefit essentially duplicated in competitors[28].

The private hotel belongsto intensive industries, and here have more employee to provide and delivery customer tailorservice for a variety of travelers, so that human resource management would be concerned with the development of human potential of individuals within the hotel toward the achievement of customersatisfaction and organization goals [40]. In addition, Bonaccorsi[1922] [5] fingered out that organizations with large scale could allocate more human resource to customer service-related functions. Finally, in the part of reputational assets, it based on the reliability and reputation of hotel among customers, suppliers and distributors. As well as intangible resources and capabilities, reputational assets also would be critical assetstocreatessustainable competitive advantage. Reputation and brand had to taketimetodevelop and build, and it would be complex intrinsically, note as to add value to customers, help create defensible competitive positions, and duplicated competitors (Hooley et al.2005;[13]).

This current study takes an anthropological perspective on resources-based view (RBV) and argues that practitioners should inspect their own resources and allocate the limit to competitive resourcesin control of managerial implementation, included managerial capabilities, customer linking capabilities, market innovation capabilities, human resource assets and reputational assets. Not all resources, however, would be equally important in creating competitive advantage[3]. The practitioners would have to re-check their organizational growth internally and toface the critical problem of inferior competitive which would bedue to the neglect of the internal core resources and capabilities, really the change of environment. According to the above discussion in this area, the purpose of the present study is to employ the fuzzy AHP to allocate the private hotel's own and specific resources and capabilities appropriately to make the practicable decision of marketing strategy for accomplishing the private hotel's final goals of sustainable competitive advantage.

MATERIALS AND METHODS

3.1 The Analytic Hierarchy Process (AHP):
The Analytic Hierarchy Process (AHP) was first proposed by Thomas L. [46]. The AHP is an extensively used multi-criteria, decision-making method, which has been applied to a wide variety of decisions and applications [25, 37, 65, 66].

Moreover, Ngai[2003] [37] also stated that the AHP was aimed at integrating different measures into a single overall score for ranking decision alternatives, and its main characteristic was that it is based on pairwise comparison judgments. That is, the AHP integrates opinion and evaluation of experts and devises the complex decision-making system into a simple element hierarchy system. Then, evaluation methods are employed to proceed with relative importance of pairwise comparison on every criterion. The pairwise comparison matrix is established based on the importance is quantified. Afterwards, the eigenvector, denoting the priority of the hierarchical element, is resolved from the matrix, and the greatest eigenvalue is evaluated to evaluate the degree of the consistency of the pairwise comparison matrix. The consistency index will indicate if the decision-making material is reasonable.

Benefit of the AHP is that it is easy operation and it can integrate opinions of many experts and decision-makers. Whether the consensus is reached by every evaluation expert is biased can be further substantiated by partitioning theoretical foundations of quantification. However, the method is limited by the number of experts as well as the consistent decision-making criteria among evaluators, resulting in a minor bias of the subjective view. Instead of this, the AHP with prevailing advantages has been widely applied to the fields of behavioral science, resource allocation, and marketing management.

Development of the Hierarchy Model:
Prior to conducting data collection, it is to develop a conceptual model for decision problem at the very start. A hierarchy is a particular type of system, based on the assumption that the entities can be grouped into disjoint sets, with the entities of one group influencing the entities of other groups[46, 24]. In order to pursue sustainable competitive advantage, we have attempted to build a hierarchy structure to evaluate the firm's capabilities and assets for selecting the appropriate marketing strategy by AHP. This is the most important part of the qualitative component of AHPs. Figure 1 drives all criteria to the overall goal. We used relevant literatures as reference to identify the key criteria for the hotel to pursue sustainable competitive advantage. As mentioned earlier, the first level of evaluation framework is that the ultimate goal of strategic decision is to pursue sustainable competitive advantage. The existing themarketing strategies for our selection model, included cost leadership strategy, differentiation strategy, and segmentation strategy. Which one is the best has
todependonmeasurablecriteriaiain theseconlevelof evaluationframework, includedmanagerialcapabilities, cu reputationallassets. By determining the relative importance of each measurable criterion, we will be able to create an evaluation indicators essential for achieving the overall goal. Finally, each marketing strategy in the third level of the evaluation framework will be prioritized based on their importance for each measurable criterion.

Fig. 1: The Evaluation Framework for Pursuing Sustainable Competitive Advantage.

**Pairwise Comparison Matrix:**

The major objective of AHP methodology is to conduct a comparison to present the importance of a certain criterion with respect to each other. The AHP is mainly based on the comparison values instead of assessing scores and weights directly. [32] pointed that numerical techniques would be used to drive quantitative values from verbal comparisons. The numerical scale used is nine-point scale, where “1” is the equivalent importance, “3” is a “slightly” superior importance, “5” is “some” superiority, “7” is a “considerable” superiority and “9” is “outright” superiority, with the even numbers in between applied if necessary.

In making the comparisons, it is a question of which of the two criteria is more important and how much more important. The options are expressed in decision makers’ intensity of ascertainment on a nine-point scale for criteria. After fulfilling the pairwise comparison, reciprocal matrices of pairwise comparisons are constructed. It is assumed that there are criteria, and their corresponding weight values, $W_1, W_2, \ldots, W_n$. That is, the $a_{ij}$ present the comparative importance between $a_i$ and $a_j$. And, the comparison matrix of criteria is shown as Eq. 1.

$$
W_1 | W_1 W_1 \cdots W_1 | W_n \\
W_2 | W_1 W_2 \cdots W_2 | W_n \\
\vdots \\
W_n | W_1 W_n \cdots W_2 W_n | W_n
$$

Where $a_{ij} = W_i | W_j a_{ij} = 1 / a_{ji}, i, j = 1, 2, \ldots, n$

**The Priority Weights within the Hierarchy:**

[47] emphasized the averaging method developed such inconsistency and bias [53]. So, to calculate the priority weights associated with each criterion from the comparison matrix $A$. In the first step, divide each entry of the $A$'s columns by the sum of entries of the corresponding column. Then, it normalizes the comparison matrix $A$, so that the normalized matrix $A$ norm with the sum of each column vectors is 1. Then, in order to gain the value for the vector of the priority weights, $W$ shown as Eq. 2, it sums up the average value of all cells in the row of the matrix $A$ norm:

$$
W_1 \\
W_2 \\
\vdots \\
W = \begin{cases} 
W_1, & i = 1, 2, \ldots, n 
\end{cases}
$$

\[ W = A_{\text{norm}} \]
By calculating the eigenvectors in the comparison matrix $A$, it obtains the priority weights between criteria. The comparison matrix $A$ multiplied by the priority weight vector $W$ is equal to $nW$, shown as Eq. 3.

$$A \times W = n \times W$$  
(3)

Thus

$$(A-n) \times W = 0$$  
(4)

Where $n$ is the number of criteria involved, and $W$ is the eigenvector of the comparison matrix $A$. For the perfect condition of consistency, the vector of weights would be one of the eigenvectors of $A$ and is one of the eigenvalues [53].

4. Application:

In Iran, it revealed keen competition in the hospitality industry for several years. To accompany with improvement of recognition of leisure life, people spent more and more disposable time for leisure travel on their willingness. Consequently, the supply of hotel accommodation increased to fall short of demand for its predication. So many hotel accommodation ventures penetrated theoretical points of time for investment, and they operated the private hotel over the attractions. The private hotel venture showed considerable expenses for their lodging equipment which could be comparable favorably with hotel resorts or leisure hotels. In the beginning of 2003, the governance allocated venture to operate the private hotels. The private hotel venture should be made use of surplus rooms for leisure travelers, and offer the lodging experience which would be linked with local characteristic of natural, cultural and ecotourism activities.

According to the monthly report from the Tourism of the [22] since the beginning of 2003, 65 private hotels had been approved to offer 280 rooms for leisure travelers. Uptown of 2005, over 1194 private hotels offered over 4800 rooms in the recreation and hospitality market. Therefore, facing competition and current difficulties, competition, venture should examine or investigate with intensive special attention for thwarted competitive advantage. Moreover, ventureshado speculated about managerial implementation exhaustively. It should be more important to make the critical marketing strategies by allocating specific limited resources of certain private hotel venture appropriately.

In this section, we present an illustrative example of how the best marketing strategy is chosen from three strategies for competitive advantage in the private hotels. The study was conducted in Iran. All of the private hotel ventures were all located in the under 20 rooms. The hotels were limited resources. Simultaneously, there was a significant growth for hotel tourism sectors such as attractions, recreations, and restaurants. To provide tourism services in the certain geographic area, according to the annual report on tourism of the Tourism Bureau, there exceeded 1100 private hotel ventures in the attractions respectively in Iran. In Iran, the private hotel venture was not been studied mainly yet. The private hotel ventures have limited less resource for operating based on the scale of the hotel. So, it would become important to decide where to allocate resources appropriately for formulating strategies. To show the practical implications of resources allocation of private hotel ventures for marketing strategy, a comprehensive study was conducted in Iran.

Fichtner [1986] [18] stated that an “expert poll” would be the best source for the sample data used in AHP, because AHP would be a method mainly in organizations for decision-making. The troubling problem of AHP is to provide impartial and consistent comparison values for pairwise comparisons. In addition, there is still no method that can make the same decision by pairwise comparison. So, in order to assign weights to evaluation criteria, we set up a broad expert poll, and ask them to approach common consensus for the evaluation framework. We conducted a questionnaire for 16 private hotel practitioners, who are owners and managers of private hotels. The questionnaire was created in accordance with the associated criteria of the evaluation framework. Pairwise comparisons were carried out by one of the experts for a single decision maker. The node of the evaluation framework. Each scored the questionnaire corresponds to each matrix of criteria. Rattating of each pairwise comparison was based on Saaty’s 9-point priority scale. Then, due to six criteria and three alternatives, for overall goal, a total of 6 pairwise matrices totaling 25 pairwise comparisons were made. If there is any matrix with an unacceptable CR value, we would ask the expert to re-evaluate it. Again, in order to improve the consistency in pairwise comparisons, the
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5. Discussion:

We propose that the success of marketing strategy decision-making depends on firm's resources and capabilities. A fuzzy AHP analysis was used to evaluating the marketing strategies for competitive advantage. Adopting the owner-managers' point of view was reflected by the goal approach. The emphasis has been on comparing the competitive advantage of private hotels in terms of managerial capabilities, customer linking capabilities, market innovation capabilities, human resource assets, and reputational assets.

Then noteworthy fact is the reputation of the private hotel. With a perspective of reputational assets, practitioners of the private hotel should put forward a constructive managerial effort for company or brand name and reputation, even though credibility with customers through being well-established in the market. In the short term, the private hotel does not have famous familiarities and images yet, and the possession of a large variety of resources and capabilities like chain resorts is also an important aspect.

Practitioners in the private hotel are offered a comprehensive framework that can help them identify critical resources and capabilities of competitive advantage within their hotels. Identical to expectations, the differentiation strategy is the key strategy for the private hotel. Mired, in a predicament of complicated competitive environment, practitioners should recognize their distinguishing characteristics of specific resources and capabilities in the private hotel. Furthermore, practitioners should employ and combine the characteristic of specific resources and capabilities with the characteristics of local environmental resources so as to emphasize the uniqueness of the private hotel. Specifically, it is important to increase the awareness of specific and limited resources and capabilities and their specific use in the private hotel. It might increase the attractiveness of the hotel to concentrate on different aspects in their decision-making process, such as improving service and generating customers satisfaction and reputation within customer relationship management.

Accordingly, the current study contributes to the research on small-venture competitive advantage in service industries. With a focus on the hospitality industry, the previous evidence has accumulated showings that the importance of mapping the venture's achievement, allocating resources, and developing managerial skills to improve performance and competitiveness is increasing in the long term. The importance of the current study is also emphasized, as it portrays the practitioners' recognition of the critical resources and capabilities and their suitability for allocation in the private hotels. It will improve practitioners' abilities to synergize their decision-making processes from a great diversity of administration.

REFERENCES


