Optimal marketing strategy: A decision-making with ANP and TOPSIS

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ABSTRACT

The purpose of the current study is to model the marketing strategy decision-making problem as a multi-criteria decision-making (MCDM) problem and provide a five-step decision support framework to make and carefully assess the marketing strategies. A marketing strategy decision-making framework is essential for marketing strategists to determine the most appropriate marketing strategy in an efficient manner. The contribution of the current study lies in the practical implementation of the integration of the analytic network process (ANP) and technique for order preference by similarity to an ideal solution (TOPSIS), which can be utilized by marketing strategists in a real industry to determine the appropriate marketing strategy. In addition, the results provide guidance to private hotel managers on marketing strategies that can help them to obtain a competitive advantage by evaluating their specific and limited marketing resources. The proposed framework can be easily understood and followed by marketing strategists to determine the appropriate marketing strategy.

1. Introduction

Marketing is a critical function that helps corporations in surviving crises. For the past 20 years, greater emphasis has been placed on the role of marketing considerations in the managerial process, underscoring the important role that marketing plays in contributing to a firm's competitive success (Brooksbank et al., 2003). It is widely accepted that the marketing function should enter the managerial process in the early stages (Wind, 1987). To simultaneously pursue increased revenues and profits, decision makers should select one of the diverse range of marketing strategies. Various strategic choices imply the need for reasonable implementation and control actions in a diverse set of functional units. In addition, utilizing technology to alter the competitive paradigm suggests that combining computerization with marketing activities offers critical advantages (Stone and Good, 2001).

A marketing strategy decision can be classified as a multi-criteria decision-making (MCDM) problem. Marketing strategists should consider a large number of complex factors while evaluating and selecting marketing strategies. MCDM methods are recommended as being helpful in reaching important decisions that cannot be determined in a straightforward manner.

The underlying principle of MCDM is that decisions should be made based on multiple criteria (Cheng et al., 2005). Hence, it is better to employ MCDM methods for solving certain problems effectively.

Given the complexity of the problems associated with a marketing strategy system, it seems difficult to comprehensively manage such a system through the use of a single set of guidelines or one decision model comprehensively. The analytic network process (ANP) is a general theory in the ratio scale that measures influence, based on a methodology that deals with dependence and feedback (Saaty, 1996). Many traditional MCDM methods are based on the independence assumption. However, in many situations, the relationships between individual criteria are not completely independent (Shee et al., 2003). The ANP has been successfully applied in many fields, such as process decisions (Partovi, 2007), total quality management (TQM) (Bayazit and Karpak, 2007), information technology (IT) (Kengpol and Tuominen, 2006), enterprise resource planning (ERP) implementation (Hallikainen et al., (2009)), strategic alliance partner selection (Chen et al., 2008; Büyüközkan et al., 2008), new product development (NPD) (Lee et al., 2008), product mix planning (Chung et al., (2003)), reverse logistics project (Ravi et al., 2008) and so on.

Furthermore, the technique for order preference by similarity to an ideal solution (TOPSIS) developed by Hwang and Yoon (1981) is a distance-based MCDM method that is used for determining alternatives. The TOPSIS is based on positive-ideal and negative-ideal solutions that are determined by the distance of each alternative from the best and the worst performing

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alternatives. The concept of TOPSIS is rational and understandable, and the computation involved is uncomplicated. Moreover, the inherent difficulty of assigning reliable subjective preferences to the criteria is worth noting (Shyur, 2006). In the current study, hence, we utilize a multi-criteria decision-making method to determine the importance weights of evaluation criteria, and TOPSIS method to obtain the performance ratings of the feasible alternatives. Therefore, this approach is employed for four reasons: (i) the logic is rational and comprehensible; (ii) the computation processes are straightforward; (iii) the concept permits the pursuit of best alternatives for each criterion described in a simple mathematical form, and (iv) the importance weights are incorporated into the comparison procedures (Wang and Chang, 2007; Olson, 2004).

The purpose of the current study is to model the marketing strategy decision-making problem as a MCDM problem and provide a five-step decision support framework to carefully assess marketing strategies. Hence, this study utilizes the MCDM method to obtain the relative weight of each criterion – based on the subjective judgments of experts on private hotel management – through the ANP. Given the advantages of the ANP, the current study employs it to offer firm managers and marketing strategists a set of guidelines for designing and implementing competitive marketing strategies through the efficient allocation of resources. In order to rate each marketing strategy, the TOPSIS method was used to rank the marketing strategies in terms of their performances with respect to the marketing resources. Therefore, the five-step model can provide marketing strategists with framework to determine the appropriate marketing strategy more easily.

The remainder of this study is structured as follows. Section 2 presents the marketing strategy evaluation framework and reviews the techniques used in the model. Section 3 presents an empirical illustration of private hotels in Taiwan. Finally, the conclusions and findings of the results of the marketing strategies are presented in Section 4.

2. Marketing strategy decision-making framework

In general, MCDM is a powerful decision-making tool that structures the problem clearly and systematically. Few studies have been conducted on determining the criteria for selecting a marketing strategy based on MCDM. As illustrated in Fig. 1, the integration of the ANP and TOPSIS has been used to propose a
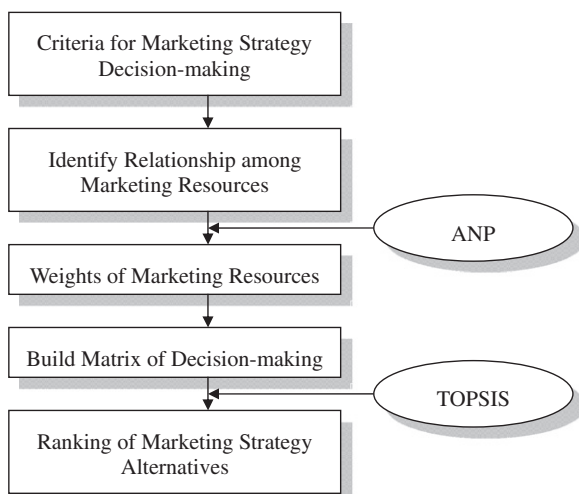

Fig. 1. The marketing strategy decision-making framework.

five-step framework for marketing strategy decision-making. For obtaining the final results, the first step is to identify the determination criteria that are most important for marketing strategists in terms of their marketing strategies. The second step is to construct the interdependence relationship among the marketing resources, and to obtain their criteria weights through the ANP approach. Next, based on the interdependent weights of the marketing resources, the fourth step is to build a decision-making matrix. The final step is to apply the TOPSIS method to achieve the final ranking results. A detailed description of each step is provided in each of the following sub-section.

2.1. Determining the criteria and interdependence relationships

Resources, strategy, and performance inter-relationships are central to strategic marketing theory (Hughes and Morgan, 2008). Based on marketing resource combinations as drivers of advantage, the previous studies as Barney (1991) and Campbell-Hunt, 2000 suggest there are approaches for maximizing advantage above a focus on specific marketing resources and capabilities. For superior performance, enterprises cannot depend upon one element merely. Rather, practitioners need to allocate bundles of marketing resource and capabilities that best fit the unique demands placed on them by their marketing strategy. Therefore, the successful conformation of specific marketing resources and capabilities through marketing strategy develops a complexity that is hard to imitate. And, strategic marketing resources and capabilities matching the requirements of the marketing strategy create fit for enabling superior performance. The ideal profiles of marketing resources and capabilities for marketing strategies are posited and the superior performance for enterprises always results from marketing resources and capabilities that are in fit with the marketing strategy.

For marketing strategy alternatives, Porter (1980) introduced a typology of three generic strategies—including overall cost leadership, differentiation, and focus strategies for creating a sustainable position and outperforming competitors in a given industry (Panayides, 2004). With regard to cost strategy, firms might be in a superior position to achieve cost decrement, if they acquire and develop the necessary resources immediately after deciding on a strategy. In the differentiation strategy, the resource-based theory of the firm suggests that similarities in resource requirements among rival companies may increase competition (Barney 1991). In addition, Boyt and Harvey (1997) stated that pursuing differentiation through offering superior customer service would be particularly important, while Grant (1998) pointed out that successful product/service differentiation could be achieved through innovations and improvements across different parts of the value chain. On the basis of Porter's focus strategy, Panayides (2004) investigated the impact of the major beliefs about marketing and suggested that market segmentation is a fundamental precursor to a focused strategy and thus, an important product-market strategy. The benefits of market segmentation could be widespread, ranging from understanding customer needs and delivering customer value to achieving a competitive advantage and improving the organizational performance.

According to Porter (1980), Hooley et al. (1992) developed the generic marketing strategy (GMS), including positive growth strategy with high valuable position, growth strategy with alternative objective position, stable growth strategy with general objective position, stable growth strategy with high quality differentiation, and objective defense strategy with low cost. Nevertheless, Kotler (1998) based on the marketing concept proposed; mass marketing strategy, product-variety marketing strategy and target

marketing, and developed the market leader strategy, market challenger strategy, marketing follower strategy, and market niche strategy basing on the perspectives of competitive position. And, McDaniel and Kolari (1987) quoted organization strategy (Miles and Snow, 1978) to demonstrate marketing implementation of defenders, prospectors, analyzers, and reactors. Due to outside and inside surroundings of each corporate, the practitioners would adopt different marketing strategies in the same industry. In respect to marketing strategy, some studies conduct the category and application of marketing mix (Pitt and Kannemeyer, 2000), and some studies apply Porter's generic marketing strategies (Knight, 2000). In addition, the generic marketing strategies could be identified to treat as competitive marketing strategies (Campbell-Hunt, 2000). Hence, the current study adopts Porter's generic strategies of differentiation strategy, cost leadership strategy, and segmentation strategy as marketing strategies for determining the appropriate marketing strategy, based on organization's specific marketing resources and capabilities.

Valuable, rare, inimitable and irreplaceable resources, and capabilities make development and maintenance of competitive business advantage possible, when they are used to generate a superior performance (Kaleka, 2002; Srivastava et al., 2001; Barney, 1991; Grant, 1991). Many resources developed for and underpinning marketing activities would be potentially significant advantage-generating resources. A comprehensive surveys of Kaleka (2002), Srivastava et al. (2001), and Stewart (1997) reveal that in spite of various marketing resources and firm performance capabilities, not all resources and capabilities can be owned or fully controlled by an organization. Day (1994) divided marketing capabilities into outside-in capabilities, inside-out capabilities, and spanning capabilities. Hooley et al. (1998) proposed four types of marketing assets, including customer based assets, supply chain assets, alliance-based assets, and internal assets. Srivastava et al. (1998) distinguished marketing resources into relational assets and intellectual assets. The typical marketing assets include corporate name and reputation, customer relationship, distribution network, relationship with critical supplier, market knowledge, information system, customer database, legal patent, innovation skills, and optional managerial resources (Olavarietta and Friedmann, 1999).

In addition, Luo et al. (2005) also demonstrate the relationship between marketing resources and firm performance; marketing resources include market orientation, entrepreneurial orientation, and innovative orientation. Spillan and Parnell (2006) pointed that marketing resources are: interaction with customer, speed capabilities, systemic analysis, customer-orientation action, coordination, and speedy responsive. And, Ngo and O'Cass (2009) considered that marketing resources and capabilities included marketing basic capabilities, production basic capabilities, and innovation basic capabilities.

The most interesting criteria for determining marketing strategies are provided by Hooley et al. (2005) who encapsulated the resources that can gain value in the market place, including market-based resources and marketing support resources, within the term "marketing resources." Thus, marketing resources are those resources that can be immediately deployed in the marketplace to create or maintain a competitive advantage, including customer linking capabilities, market innovation capabilities, human resource assets, and reputational assets. On the other hand, the marketing support resources, including managerial capabilities and market orientation, primarily serve primarily to support marketing activities and have an indirect impact on the competitive advantage. The performance-orientated marketing strategy has been driven by marketing resources and capabilities such as human resources and the organization's resources (Edelman et al., 2005). The large number of criteria that should

typically be considered in the marketing strategy evaluation process make it very difficult for marketing strategists. Using the structure of the five aspects as the base and synthesizing the other literature as well as the practical considerations, this study as Lin and Wu (2008) and Lin et al. (2009) incorporate the marketing resources proposed by Hooley et al. (2005), including managerial capabilities (MC), customer linking capabilities (CLC), market innovation capabilities (MIC), human resource assets (HRA), and reputational assets (RA).

Hotels belong to a typical service industry, offering individual services for travelers (Tsaur et al., 2005). In hotel, managerial capabilities refer to financial conditions, the effectiveness of the human resources, operation management technology, and service management within the organization. The managerial capabilities are determined based on the organization's market innovation capabilities and human resource assets. For pursuing customers' satisfaction, practitioners attempt to promote the specific capabilities for product/market innovation. In order to improve the innovation capabilities, practitioners should strengthen the employees' creative abilities for product and service, and cooperate with novel managerial process and implementation. And, customer linking capabilities include the level of customer service, relationships with key target customers, understanding of customers' needs and requirements, creating relationships with new customers, and maintaining and enhancing relationships with existing customers. The customer linking capabilities are concerned with managerial capabilities, market innovation capabilities, human resource assets, and reputation assets.

In service industry, organization should constantly innovate and create new styles of products and new processes of service delivery for achieving customer needs. Therefore, market innovation capabilities are measured by the organization's ability to launch new products and services and to effectively promote its new product and service development processes. The market innovation capabilities are influenced by the effectiveness of the managerial capabilities, customer linking capabilities, and human resource assets. By improving organization's managerial implementation, customer relationship skills, and employees' service ability, practitioners could promote the organization's abilities for innovating new products/services. The hotel industry is labor-intensive, and requires numerous employees to provide and deliver tailored service to travelers, and thus the human resource management needed is concerned with developing the human potential of hotel employees to achieve customer satisfaction and organizational goals (Patterson et al., (1997)). Human resource assets refer to employees' job satisfaction and employee retention. The human resource assets are mediated by managerial capabilities, customer linking capabilities, market innovation capabilities, and reputational assets. Finally, reputational assets denote the organization's brand name or reputation, and its credibility with customers. The reputational assets are in consequence of the managerial capabilities, customer linking capabilities, market innovation capabilities, and human resource assets. Reputation and brand take time to develop, are intrinsically complex, have difficulty in adding value for customers, help create defensible competitive positions with difficulty of duplication by competitors (Hooley et al., 2005). As illustrated in Fig. 2, an interdependence relationship exists among marketing resources and capabilities. Additionally, all the marketing resources and capabilities are assumed to be self-influenced in the network.

2.2. Evaluating the weights of the criteria using the ANP

Saaty (1996) stated that the feedback approach, a generalization of the idea of a hierarchy, is used to derive priorities in a
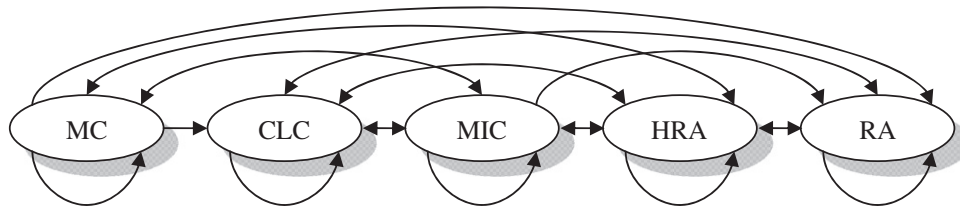
Fig. 2. The interdependence relationship among evaluation criteria.

system with interdependent influences. Saaty also pointed out that an ANP model is implemented by following three steps. All the interactions among the elements should be evaluated by pairwise comparisons in order to construct the framework of the problem. In addition, a supermatrix – a matrix of the influences among the elements – should be obtained based on these priority vectors. The supermatrix is derived from the limiting powers of the priorities to calculate the overall priorities, and thus, the cumulative influence of each element on every other element with which it interacts is obtained (Saaty and Vargas, 1998). The generalized supermatrix of a hierarchy with three levels – which is used in this paper – is as follows:

$$W = \begin{array}{c} \\ C_1 \\ C_2 \\ C_3 \end{array} \begin{array}{c} C_1 \quad C_2 \quad C_3 \\ \begin{bmatrix} w_{11} & w_{12} & w_{13} \\ w_{21} & w_{22} & w_{23} \\ w_{31} & w_{32} & w_{33} \end{bmatrix} \end{array}. \tag{1}$$

$\boldsymbol{W}$ is a partitioned matrix because its entries are composed of the vectors obtained from the pairwise comparisons. Since $\boldsymbol{W}$ is a column stochastic matrix, its limiting priorities depend on the reducibility and cyclicity of that matrix. If the matrix is irreducible and primitive, the limiting value is obtained by raising $\boldsymbol{W}$ to powers such as in Eq. (2) in order to obtain the global priority vectors (Saaty and Vargas, 1998).

$$\lim_{k \to \infty} W^k \tag{2}$$

Finally, after the supermatrix is assured of being column stochastic, it is raised to a sufficiently large power until convergence occurs (Saaty, 1996). In other words, the supermatrix is then raised to limiting powers to becomes $\boldsymbol{W}^{2k+1}$, where k is an arbitrarily large number to capture all the interactions and to obtain a steady-state outcome.

2.3. Ranking marketing strategy alternatives using TOPSIS

The TOPSIS method is proposed in Chen and Hwang (1992), with reference to Hwang and Yoon (1981). The basic principle is that the chosen alternative should have the shortest distance from the ideal solution that maximizes the benefit and also minimizes the total cost, and the farthest distance from the negative-ideal solution that minimizes the benefit and also maximizes the total cost (Opricovic and Tzeng, 2003).

The TOPSIS method consists of the following steps:

Step 1: Calculate the normalized decision matrix. The normalized value r_{ij} is calculated as

$$r_{ij} = X_{ij} \Big/ \sqrt{\sum_{i=1}^{n} X_{ij}^2}, \forall i, j \tag{3}$$

Step 2: Calculate the weighted normalized decision matrix. The weighted normalized value v_{ij} is calculated as

$$v_{ij} = w_j r_{ij}, \forall i, j. \tag{4}$$

where w_j is the weight of the jth criterion, and $\sum_{j=1}^{m} w_j = 1$.

Step 3: Determine the ideal and negative-ideal solution.

$$A^* = \{v_1^*, \ldots, v_m^*\} = \left\{ \left(\max_i v_{ij} | j \in C_b \right), \left(\min_i v_{ij} | j \in C_c \right) \right\}. \tag{5}$$

$$A^- = \{v_1^-, \ldots, v_m^-\} = \left\{ \left(\min_i v_{ij} | j \in C_b \right), \left(\max_i v_{ij} | j \in C_c \right) \right\}. \tag{6}$$

where C_b is associated with benefit criteria and C_c is associated with cost criteria.

Step 4: Calculate the separation measures, using the m-dimensional Euclidean distance. The separation of each alternative from the ideal solution is given as

$$S_i^* = \sqrt{\sum_{j=1}^{m} \left(v_{ij} - v_j^* \right)^2}, \forall i \tag{7}$$

Similarity, the separation from the negative-ideal solution is given as

$$S_i^- = \sqrt{\sum_{j=1}^{m} \left(v_{ij} - v_j^- \right)^2}, \forall i \tag{8}$$

Step 5: Calculate the relative closeness to the ideal solution. The relative closeness of the alternative A_i with respect to A^* is defined as

$$RC_i^* = \frac{S_i^-}{S_i^* + S_i^-}, \forall i \tag{9}$$

Step 6: Rank the preference order.

The index values of RC_i^* lie between 0 and 1. The larger index value means the closer to ideal solution for alternatives.

3. Illustrative example

The aim of marketing strategists is to determine the appropriate marketing strategy to capture a sustained competitive advantage. To illustrate the proposed determination process for a marketing strategy determination process, the study presents an application that is based on practical experience and that has been implemented at a private hotel. The proposed method is then applied to solve the problem. The application is presented in a stepwise format, which is summarized as follows:

Step 1: After reviewing the literatures and interviewing the practitioners of private hotels, three marketing strategies remained for further evaluation. A committee of eight evaluators, including hotel managers and experts was formed to determine the most appropriate marketing strategy. Next, the evaluation criteria were included, namely, the managerial capabilities, customer linking capabilities, market innovation capabilities, human resource assets, and reputational assets.

Step 2: Fig. 2 presents the interdependence relationship among the marketing resources, which was determined by the committee in a thorough manner. The interdependence relationship among the marketing resources was determined by analyzing the impact of each marketing resource on others by conducting pairwise comparisons.

Step 3: Each evaluator carried out pairwise comparisons for a single decision maker with each node of the evaluation framework. Further, each rated score in the questionnaire corresponded to a matrix of criteria. The rating of each pairwise comparison was based on Saaty's nine-point priority scale. A total of five pairwise matrices were constructed for the interdependence relationship among the marketing resources. Evaluators were asked to rate the questionnaire again for situations involving matrices with unacceptable CR values. To improve the consistency of the pairwise comparisons, the concept of the comparison framework mentioned above was carefully explained to each evaluator, and they were asked to quantify the comparison values for all the criteria and alternatives accordingly.

Table 1
The interdependence matrix of marketing resources.

Matrix 1. The interdependence matrix of marketing resources with respect to MC

	MC	MIC	HRA	w
MC	1	1.403	2.457	0.478
MIC	0.712	1	1.022	0.287
HRA	0.407	0.978	1	0.235
				CR=0.028

Matrix 2. The interdependence matrix of marketing resources with respect to CLC

	MC	CLC	MIC	HRA	RA	w
MC	1	2.633	2.115	4.369	0.739	0.307
CLC	0.478	1	1.213	2.728	0.380	0.157
MIC	0.595	0.824	1	2.040	0.514	0.131
HRA	0.229	0.366	0.490	1	0.240	0.069
RA	1.353	2.632	1.944	4.161	1	0.337
						CR=0.072

Matrix 3. The interdependence matrix of marketing resources with respect to MIC

	MC	CLC	MIC	HRA	w
MC	1	1.037	0.473	2.162	0.249
CLC	0.824	1	0.461	2.358	0.239
MIC	1.680	2.168	1	3.934	0.395
HRA	0.463	0.424	0.254	1	0.116
					CR=0.025

Matrix 4. The interdependence matrix of marketing resources with respect to HRA

	MC	CLC	MIC	HRA	RA	w
MC	1	0.418	0.376	0.647	0.434	0.102
CLC	2.393	1	0.580	0.929	0.478	0.173
MIC	2.274	1.723	1	1.853	0.886	0.261
HRA	1.743	1.075	0.540	1	0.572	0.168
RA	2.3025	2.091	1.128	1.749	1	0.295
						CR=0.022

Matrix 5. The interdependence matrix of marketing resources with respect to RA

	MC	CLC	MIC	HRA	RA	w
MC	1	2.249	1.944	2.060	3.966	0.369
CLC	0.380	1	0.679	0.939	2.536	0.165
MIC	0.440	1.472	1	1.335	2.191	0.210
HRA	0.485	1.065	0.749	1	1.944	0.170
RA	0.252	0.394	0.456	0.514	1	0.086
						CR=0.013

Note: MC: managerial capabilities, CLC: customer linking capabilities, MIC: market innovation capabilities, HRA: human resource assets, RA: reputational assets, w: relative importance weights and CR: consistency ratio.

The following question was in the questionnaire: "what is the relative importance of market innovation capabilities when compared to human resources assets with respect to controlling managerial capabilities?" Generating a geometric mean of the evaluators' values of the pairwise comparisons, the result obtained was 1.022 as denoted in Table 1. The normalized eigenvectors for the interdependence matrices were calculated in a similar manner and presented in Table 2, where zero was assigned to the eigenvector weights of the evaluation criteria that are independent. The data presented in Table 2 indicate the degree of relative impact for each evaluation criteria.

Based on the limit matrix, the relative importance of marketing resources with interdependence could be obtained. In the current study, convergence is stable at W^6 with cyclical ratios, and the limit matrix represents the long-term stable values. According to the results presented in Table 3, the weight of each of the marketing resources is as follows: managerial capabilities (0.261), customer linking capabilities (0.221), market innovation capabilities (0.208), reputational assets (0.179), and human resource assets (0.129).

Step 4: In this step of the decision framework, evaluators were asked to build the decision matrix by comparing the alternatives under each individual marketing resources. In addition, the evaluators were asked to provide a set of crisp values within a range from 1 to 10 that represents the performance of each marketing strategy with respect to each marketing resource. By using Eqs. (3) and (4), the weighted normalized decision matrix of the marketing strategy alternatives – calculated by multiplying the normalized decision matrix and the weights – is obtained, as presented in Table 4.

Step 5: After developing the weighted normalized decision matrix, the final ranking procedure should determine the ideal solution and negative-ideal solutions by using Eqs. (5) and (6). In particular, the ideal solution and negative-ideal solution are determined as follows:

$A^* = \{0.205, 0.087, 0.169, 0.096, 0.066\}$ and
$A^- = \{0.154, 0.060, 0.125, 0.088, 0.045\}$

By using Eqs. (7) and (8), the computed distances of each marketing strategy from ideal solution (S_i^*) and negative-ideal

Table 2
The interdependence matrix of evaluation criteria.

	MC	CLC	MIC	HRA	RA
MC	0.478	0.307	0.249	0.102	0.369
CLC	0	0.157	0.239	0.173	0.165
MIC	0.287	0.131	0.395	0.261	0.210
HRA	0.235	0.069	0.116	0.168	0.170
RA	0	0.337	0	0.295	0.086

Table 3
The weights of the evaluation criteria using ANP.

	MC	CLC	MIC	HRA	RA
W^T	0.318	0.134	0.285	0.162	0.101

Table 4
The weighted normalized decision matrix.

	MC	CLC	MIC	HRA	RA
DS	0.205	0.087	0.169	0.096	0.062
SS	0.188	0.083	0.193	0.096	0.066
CLS	0.154	0.060	0.125	0.088	0.045

Table 5
Final ranking of marketing strategy.

Rank	Marketing strategy	S_i^*	S_i^-	RC_i^*
1	DS	0.0034	0.0754	0.957
2	SS	0.0295	0.0826	0.737
3	CLS	0.0763	0	0

solution (S_i^-) are presented in Table 5. Based on their relative closeness to the ideal solution obtained by using Eq. (9), the final step of the TOPSIS method consists of ranking the marketing strategy alternatives. In this case, the results show that differentiation strategy is the best choice among the marketing strategy alternatives, with a performance value of 0.957; the segmentation strategy and cost leadership strategies have been ranked second and third, with 0.737 and 0 as the performance values, respectively.

4. Conclusion

The purpose of the current study is to propose a framework for marketing strategy for marketing strategists to determine the best marketing strategy. The contribution of the current study lies in the practical implementation of the integration of the ANP and TOPSIS methods that will enable the proposed framework to be utilized by marketing strategists in a real industry for determining the appropriate marketing strategy. The ANP is presented in this study as a valuable and efficient method to support the selection of a marketing strategy by marketing strategists. For integrating the ANP and TOPSIS methods, the owner–manager perspective has been adopted as reflected by the goal approach. And, the current study is focused on selecting the competitive marketing strategy in terms of marketing resources and capabilities.

Based on the review of relative literature and a study of its practical aspects, the evaluation framework consists of the following steps: (1) identify the marketing resources for the appropriate marketing strategies; (2) identify the relationship among the marketing resources; (3) calculate the relative weights of the interdependence of the marketing resources through the ANP; (4) aggregate the individual assessments as an overall assessment of each marketing strategy under each marketing resource in order to build the decision-making matrix; and (5) use the TOPSIS to rank the marketing strategy priorities. The results of the current study indicate that the managerial capabilities, customer linking capabilities, and market innovation capabilities in private hotels are the most important marketing resources and capabilities for selecting the competitive marketing strategy. In order to formally achieve its competitive advantage, an organization can deploy resources and capabilities to perfect customer-value activities and services that competitors cannot match. Though few firms can successfully meet the needs of every potential customer or market segment, they can identify areas where to try and compete based on the fit between company strengths and customer needs.

By offering a comprehensive framework, private hotels' practitioners identify critical resources and capabilities of competitive advantage for their hotels. Identical to expectations, the differentiation strategy is the best marketing strategy for private hotels. Confronting a difficult competitive environment, strategy decision makers should recognize their specific advantages as operators of private hotels. Furthermore, decision makers should employ and combine the characteristics of their specific resources and capabilities with 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 uses in private hotels. Such an increased awareness may increase their ability to focus on specific aspects in their decision-making process, such as promoting managerial implementation and improving service to generate customer satisfaction and achieve reputation in managing customer relationships.

For optimal marketing strategy, the current study proposes a marketing strategy decision making process that should also be more operable and practical. An appropriate and simple prioritization method for determining the best marketing strategy would be helpful to firms and marketing strategists. Realizing the effectiveness of business operation is important for practitioners and academics, and this study integrates the ANP method and the TOPSIS method to select an appropriate marketing strategy. Practitioners in service industry can conduct it by themselves. Another avenue for extending this study would be considering the internal and external marketing resources and capabilities of business ventures comprehensively. Moreover, although more research is necessary before drawing firm conclusions about competitive marketing strategy, practitioners can determine the specific criteria of marketing resources and capabilities for industrial specification in the face of a diverse competitive environment. This study provides only a general picture of the private hotels in service industry. There is a need for more researches to be conducted in various industries for promoting the generalizability of the marketing strategy decision making process. The practical implementation of a systematic framework for the determination of a marketing strategy could easily be extended to the decision-making process for other managerial problems. Furthermore, in the practical and complex managerial environment, developing a decision-making support framework could be considered as a critical issue for marketing strategies in the future.

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