

## IDENTIFYING THE BEST ALTERNATIVE TOURISM PRODUCT FOR A DESTINATION: THE CASE OF CAPPADOCIA

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### Abstract

The key to success in management activities is the ability to make the best decision on the path to achieve the set goals. Decision makers can make scientific and more successful decisions by using Multi-criteria decision making techniques to overcome such problems. However, decision making becomes more difficult especially in the industry which has a very complex structure like tourism and hospitality. The main purpose this paper is to identify an alternative type of tourism that will serve the optimal advantages of the tourist destinations' stakeholders. Cappadocia destination is considered within the scope of the study. Decision making at destination level is risky to decide for a tourism destination for many reasons such as high investment costs, long term results, high diversity of stakeholders, and diversity of decision makers and conflicts of interests. In this study, qualitative and quantitative methods were used as mixed via QFD and AHP. As a result of examining different criteria and alternatives in line with the opinions of different stakeholders, congress tourism option has emerged as the most suitable tourism product alternative. As a result, different alternatives sorted by importance and the question of where to start the work in accordance with the possibilities has been tried to be answered. In this context, it has been a guiding study for the practitioners who have decision-making difficulties. Since no similar study has been found, it is an inspiration for future studies.

**Keywords:** Tourism Product. Alternative Tourism. Quality Function Deployment (QFD). Analytic Hierarchy Process (AHP). Decision Making in Tourism.

## IDENTIFICANDO O MELHOR PRODUTO TURÍSTICO ALTERNATIVO PARA UM DESTINO: O CASO DA CAPADÓCIA

### Resumo

A chave do sucesso nas actividades de gestão é a capacidade de tomar a melhor decisão no caminho para alcançar os objectivos estabelecidos. Os tomadores de decisão podem tomar decisões científicas e mais bem sucedidas usando técnicas de tomada de decisão com múltiplos critérios para superar tais problemas. No entanto, a tomada de decisões torna-se mais difícil, especialmente na indústria que tem uma estrutura muito complexa como o turismo e a hospitalidade. O principal objetivo deste trabalho é identificar um tipo alternativo de turismo que sirva as vantagens ótimas dos interessados dos destinos turísticos. O destino da Capadócia é considerado no âmbito do estudo. A tomada de decisão a nível de destino é arriscada para decidir por um destino turístico por muitas razões, tais como elevados custos de investimento, resultados a longo prazo, grande diversidade de intervenientes e diversidade de decisores e conflitos de interesses. Neste estudo, os métodos qualitativos e quantitativos foram utilizados como métodos mistos via QFD e AHP. Como resultado do exame de diferentes critérios e alternativas de acordo com as opiniões dos diferentes stakeholders, a opção de turismo do congresso surgiu como a alternativa de produto turístico mais adequada. Como resultado, diferentes alternativas ordenadas por importância e a questão de onde começar o trabalho de acordo com as possibilidades foi tentada para ser respondida. Neste contexto, tem sido um estudo orientador para os profissionais que têm dificuldades para tomar decisões. Como não foi encontrado um estudo semelhante, é uma inspiração para estudos futuros.

**Palavras chave:** Produto Turístico. Turismo Alternativo. Implementação da Função de Qualidade. Hierarquia Analítica de Processos. Tomada de Decisão no Turismo.

## IDENTIFICAR EL MEJOR PRODUCTO DE TURISMO ALTERNATIVO PARA UN DESTINO: EL CASO DE CAPPADOCIA

### Resumen

La clave del éxito en las actividades de gestión es la capacidad de tomar la mejor decisión en el camino hacia el logro de los objetivos fijados. Los responsables de la toma de decisiones pueden tomar decisiones científicas y más exitosas utilizando las técnicas de toma de decisiones multicriterio para superar tales problemas. Sin embargo, la toma de decisiones se hace más difícil, especialmente en la industria que tiene una estructura muy compleja como el turismo y la hospitalidad. El objetivo principal de este trabajo es identificar un tipo de turismo alternativo que sirva a las ventajas óptimas de las partes interesadas de los destinos turísticos. El destino de Capadocia se considera dentro del ámbito del estudio. La toma de decisiones a nivel de destino es arriesgada para decidir por un destino turístico por muchas razones, tales como los altos costos de inversión, los resultados a largo plazo, la alta diversidad de las partes interesadas, y la diversidad de los responsables de la toma de decisiones y los conflictos de intereses. En este estudio se utilizaron métodos cualitativos y cuantitativos mezclados a través de QFD y AHP. Como resultado del examen de diferentes criterios y alternativas en línea con las opiniones de los diferentes grupos de interés, la opción del turismo de congresos ha surgido como la alternativa de producto turístico más adecuada. Como resultado, se ha intentado responder a las diferentes alternativas clasificadas por importancia y a la pregunta de dónde empezar el trabajo de acuerdo con las posibilidades. En este contexto, ha sido un estudio orientador para los profesionales que tienen dificultades para tomar decisiones. Dado que no se ha encontrado ningún estudio similar, es una inspiración para futuros estudios.

**Palabras clave:** Producto Turístico. Turismo Alternativo. Implementação da Função de Qualidade. Hierarquia Analítica de Processos. Toma de decisiones en turismo.



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## 1 INTRODUCTION

The tourism sector is the largest service sector, employing more than 108 million people and comprising more than ten percent of the world GDP (WTTC, 2018). Because the contribution of the tourism sector to the country's economy is so important (DURBARRY, 2004; Kunz; Hogleve, 2011; Oh, 2005), the interest in the tourism sector has increased in less developed and developing countries that have not yet fully achieved industrialization (Ozturk, 2017).

One of the most important tools for achieving superiority in competition is product development (Saranga et al., 2018). The tourism product has a very complex structure due to its nature. As Middleton (1989) stated in his study, there are two levels of tourism products. The first level is the evaluation of an individual product. For example, a sightseeing tour, business accommodation, or an airplane seat is a stand-alone tourism product.

On the other hand, when the approach is integrated, we recognize another level of the tourism product. This level of the tourism product is an integrated coverage of all the services, experiences, consumed goods, etc. Lewis & Chambers (1989) examined the tourism product at three levels.

The first level of the tourism product is the "real product". This level of the product expresses the main benefit to the consumer. The second level of the tourism product refers to the product that the consumer actually buys. The third level of the tourism product is the "augmented product", which contains all extra benefits added to the real product.

According to Smith (1994), the tourism product has a structure that encompasses five components together with their combinations. The components of the tourism product are a physical plant, service, hospitality, freedom of choice, and involvement. The tourism product should include all these components, and these components should interact in a synergistic way. From whatever perspective you look at it, the product of tourism has a very complex structure.

Creating successful tourism activities and achieving competitive superiority are related to the extent to which the tourism product meets the wants and needs of the tourists. Therefore, efforts to develop the tourism product are very important.

Cappadocia destination is considered within the scope of the study. In total, 1,513,160 tourists visited the Cappadocia region in 2018 (Ministry Of Culture And Tourism, 2019). Cappadocia is a privileged tourism center with its natural and cultural attractions and geographical location. Cappadocia is a very important destination for both Turkey and also for world tourism activities. Cappadocia is a place where history and

nature are intertwined and exhibit holistic beauty and it has the cultural accumulation enriched by the civilizations that reigned in the region.

Although Cappadocia is a well-known destination in terms of tourism, it can be said that tourism statistics are not deserved when compared to its current potential. The main problems of Cappadocia in terms of tourism can be listed as follows (Karamustafa; Tosun; Çalhan, 2015; Şahbaz; Keskin, 2012; Şamiloğlu; Karacaer, 2011): (1) the average duration of visitor overnights are short, (2) tourism activities are affected by seasonal demand fluctuations, (3) average per capita expenditures are low when considering destination characteristics.

As a destination, visitors who visit Cappadocia region, where cultural tourism is being done intensively, have a tourism demand with similar characteristics. In the case of cultural tourism, the demographic structure of the visitors; it is normal to have a market section where the education level, income level and average age is relatively high.

Therefore, Cappadocia is a destination that should not be affected by the seasonality problem in terms of the characteristics of the target market segment. However, despite its potential, the region faces problems such as being affected by the seasonality problem, being unable to meet expectations in terms of average duration of stay or per capita expenditures.

In this study, tourist destinations are considered to be tourism products, and a knowledge-based study has been carried out on the decision-making mechanism for the development (diversification or improvement) of the tourism product. It is a recommended activity in these cases (Duman, Kozak, & Uysal, 2007; Ersun & Arslan, 2015). In other words, it is recommended to develop alternative tourism types in Cappadocia in order to reduce the impact of issues mentioned above.

Regarding the destinations, many factors such as the excess of the stakeholders, the magnitude of the impact of the decisions, the long-term effects, the high uncertainties, the high investment costs, and the high number of alternatives mean that the decision-making mechanism is difficult. Therefore, it may not be sufficient to manage a product development process in the classical sense.

The absence of a Destination Management Organization as a decision-making mechanism in Cappadocia is another issue that makes it difficult to make effective decisions. If an alternative type of tourism is to be decided at a destination level, a model that takes into account the specific characteristics of that place and the expectations of all the stakeholders and tourists involved in tourism should be put forward.

In this study, a new product decision mechanism has been formed by taking into consideration the touristic product destinations and considering the opinions of all stakeholders.

In this study, it is aimed to provide a process that can contribute to decision making process for destinations which are very complex structures. The main purpose is to identify an alternative type of tourism that will serve the optimal advantages of the tourist destinations' stakeholders. In doing so, it was realized by the Quality Function Deployment (QFD), which is a method that can integrate the wants of all stakeholders into the product design.

When the literature was examined, no studies were found using "decision making techniques for tourism products at destination level". This study is important both for tourism researchers and practitioners in terms of the advantages of QFD technique in product design and Analytic Hierarchy Process (AHP) in terms of multi-criteria decision making processes.

## 2 CONCEPTUAL FRAMEWORK

The travel of a large number of people is a risk for the tourism product when it is considered in terms of resource use. As associate extension of the sustainable development approach that emerged within the late Eighties, researchers have begun to concentrate on sustainable tourism activities (Hunter, 1997).

Observing that tourism activities use resources and that overuse in the long term will damage tourism products, decision-makers and academics realized that the tourism product had a carrying capacity (O'reilly, 1986) and that it had to be managed.

Therefore, the practical application of the concept of alternative tourism in order to overcome the negative consequences of mass tourism is one of the recommended methods for solution.

Product diversification in tourism is a concept that refers additions or exclusions to the number or variety of tourism products offered for sale (Sarkim, 2007: 157). As a result of product diversification activities in tourism, in fact, a new tourism product is revealed. In other words, the concept of a new product in tourism actually coincides with the concept of product diversification (Benur; Bramwell, 2015).

Teare et al. (1994) described new tourism products under six headings, and one of them is the diversification of the product. In other words, the concept of product development in tourism is a concept that includes product diversification. The classification by Teare et al. (1994) is very similar to the classification of goods in general (Von, 2008). In terms of tourism, new product categories are diversification of products,

new products for the world, new products for the current market, new products for different segments, improvement in existing products, and cost reduction. Understanding the concept of the new tourism product is very important for the success of product development activities. When it comes to product development in tourism, the products that are added to each new product category can be considered as new product development activities (Teare et al., 1994).

Another issue that needs to be addressed in terms of the new product concept is by whom the development activities will be carried out. In the tourism product from the point of view of Middleton (1989), the product has two levels.

Therefore, there is a difference between the persons that will undertake the new product development process and the individual product itself. When we look at the tourism product from the point of view of the total product, it is hard to answer who will do the new product development.

Tourism is an open system, and the uncertainties resulting from influences of the micro and macro environment (Crouch; Ritchie, 1999) explain why it is so difficult to answer this question. The total tourism product covers everything that a tourist consumes, experiences, buys, etc. during his or her trip. This variety increases the uncertainties about how to handle the new product development activities and who will do them.

Product development in tourism is very risky. Although successful product development is a satisfying achievement, the failure to accomplish this is very costly and undesirable. Failures of investment decisions are costly because of the high fixed costs and the slow return on investments. Teare, Mazanec, Crawford-Welch, Calver (1994) stated in their study that only one out of ten product trials reach the consumer testing phase; only 10 percent of the products can be launched, and up to 10% of the products can survive. Therefore, product development activities are extremely important.

Teare et al. (1994) examined tourism product development activities in five stages: idea production stage, separation of ideas, product development stage, market testing, and commercialization. Benur & Bramwell (2015) presented the concept of tourism product development as five ideal options: concentrated niche tourism, concentrated mass tourism, diversified parallel/integrative niche tourism, diversified parallel/integrative mass tourism, and diversified parallel/integrative mass and niche tourism.

One of the issues that should be considered in tourism product development in any destination is whether the destination is already involved in developing tourism activities. Considering the expectations of all the stakeholders in tourism, it will make a difference

whether a tourism product is developed in a destination with tourism activities or in a place that is not seen as a tourist destination. For this reason, a product development model in which all stakeholders' views are included will be useful.

However, whether tourism activities are carried out or not, taking account of the current situation of the destination to be developed and focusing on areas for product development are important in terms of both cost and time savings. Therefore, in this study, a method is proposed in which the views of all the relevant stakeholders are included and in which the decision-making mechanism operates in accordance with the current situation of the destination.

Integration AHP into a QFD has been applied in many disciplines (Bayraktaroğlu & Özgen, 2008a; Iqbal, Saleem, & Ahmad, 2015; Li, Tang, Luo, & Xu, 2009; Pakizehkar, Sadrabadi, Mehrjardi, & Eshaghieh, 2016). It is possible to see some examples of similar methodologies in the field of tourism (Chang & Chen, 2011a; Das & Mukherjee, 2008; Karakuş & Çoban, 2018). Palumbo (2015) applied a similar methodology for product development in a tourism context. However, no product development studies were conducted with the total tourism approach at the destination level, which has applied AHP and QFD integrated method.

### 3 METHOD

In this study, a decision process has been formed by integrating the AHP into the QFD method. QFD is defined as "a method that converts qualitative user demands into quantitative parameters, distributes quality-forming functions, and distributes methods to deliver design quality to subsystems or components and, ultimately, to specific aspects of the production process" (Akao, 1990).

Nowadays, although enterprises employ experts who have sufficient technical knowledge in terms of product development, these experts tend to close themselves in their fields (Franceschini, 2002). Hence, it is necessary to create models that help to integrate and optimize multiple variables.

QFD is a powerful tool that can serve this purpose. QFD is "a process, a method, a system, or even a philosophy, it ensures that customer requirements all stakeholders' requirements in this study) are integrated into new products as early as the design stage" (Zairi & Youssef, 1995: 11).

The main advantage of QFD is to break down the product into parameters that will be viewed by potential customers as most beneficial, influencing them to purchase. From this point of view, QFD is a customer-oriented tool that allows consumers' expectations to be

optimally reflected in product design processes (Temponi; Yen; Amos Tiao, 1999).

Useful results of the QFD application can be listed as follows (King, 1987):

- Simplifies determination of design quality,
- Facilitates determination of product planning quality,
- Quality problems are reduced from the beginning,
- Comparison and analysis with competitive products,
- Communication between departments is better.

In this study, QFD, through different matrices, makes it possible to establish the optimum relationship between different stakeholders' expectations and existing opportunities. In other words, it is the process of reflecting the views of the affected stakeholders and other technical possibilities to the final design in matrices.

The matrices with which this relationship is established are called the quality of house (HOQ). Each HOQ used AHP for weighting the matrices they contained. AHP is used for weighting the each matrices HOQ contains (Doğan; Karakuş, 2014).

The data for the implementation of the AHP method developed by Saaty (2003) are obtained by binary comparisons. Considering the relevant criteria, all statements are subject to bilateral comparisons. Each variable's bilateral comparisons contribute to consistency and reliability of the responses. For the comparisons, the 9-point scale developed by Saaty (1977: 246) is utilized, and bilateral comparison matrices are obtained as a result of the digitization of argument values via quantitative weighting on this scale (from Berritella, La Franca, Zito, 2009).

Contrary to the common belief, the outcomes ought to be deciphered as a diagram of inclination and options dependent on the dimension of significance acquired for the diverse criteria thinking about our similar decisions.

As such, the AHP methodology enables us to figure out which elective is the most reliable with our criteria and the dimension of significance that we give them (MU; Pereyra-Rojas, 2017). The AHP consists of the following seven steps (MU; Pereyra-Rojas, 2017; Papathanasiou; Ploskas, 2018):

1. *Form the Binary Comparison Matrix of the Criteria:* The decision maker communicates how two criteria or alternatives contrast with one another. The formula of necessary comparisons for this binary comparison matrix  $\frac{n^2-n}{2}$ . The number of comparisons required for this binary comparison matrix is  $n \times n$ .

2. *Consistency Check on the Binary Comparison Matrix of the Criteria:* We can calculate the consistency index (CI) by formula:  $CI = \frac{\lambda_{\max} - n}{n - 1}$  (Saaty, 1977). In any case, the results demonstrated that the normal estimation of CI or a random matrix of size  $n + 1$  is by and large more noteworthy than the normal estimation of CI a random matrix of size  $n$ . Hence, CI isn't reasonable in contrasting networks of various request and should be rescaled. Given a binary comparison matrix of size  $n$ , the consistency ratio (CR) is calculated by dividing CI by the random index (RI):  $CR = \frac{CI}{RI}$ . CR is checked to see whether the bilateral comparisons are consistent. If the rate is equal to or lower than 0.1, the bilateral comparisons are consistent.

3. *Compute the Priority Vector of Criteria:* Various methods are available to reveal the priority vector criteria. The following methods can be used (Papathanasiou ve Ploskas, 2018: 109): (1) eigenvector method, (2) the normalized column sum method and (3) geometric mean method.

4. *Form the Binary Comparison Matrices of the Alternatives for Each Criterion:* The decision maker informs how the alternatives compare to each other for each criterion again. In this way, it makes a binary examination framework of the choices for every criterion. The correlations are gathered in  $n$  binary examination networks of size  $m \times m$ .

5. *Consistency Check on the Binary Comparison Matrices of the Alternatives:* At this stage, similar to the second step, a consistency check is performed. But unlike the following is done  $n$  (number of criteria) is replaced by  $m$  (number of alternatives) in equations.

6. *Compute the Local Priority Vectors of the Alternatives:* Local alternative priorities are calculated for each binary comparison matrix of alternatives as done in the third stage. The main distinction is that  $n$  is supplanted by  $m$ , and  $w$  by  $s_j$  in conditions, where  $j$  is the measure to which the pairwise correlation grid of the choices is related.

7. *Aggregate the Local Priorities and Calculate Weights of Alternatives:* In the last advance, the priority criteria and local alternative priorities are combined to obtain the final alternative priorities.

Combined use of QFD and AHP techniques is quite common due to their superiority (Bayraktaroğlu; Özgen, 2008; Chang; Chen, 2011; Doğan; Karakuş, 2014; Iqbal; Saleem; Ahmad, 2015; Tan; Pawitra, 2001). In particular, in the process of product development or service design, the benefits of integrating the views of different stakeholders and allowing the optimal use of a number of conflicting variables highlight the methodology of this study.

## 4 RESEARCH DESIGN AND FINDINGS

In this study, a set of processes has been put forward by helping to make the most appropriate new product decision considering different criteria, different alternatives and expectations of various stakeholder groups. At the same time, it is aimed to increase the sensitivity of the process by including the suitability of the decision mechanism according to the feasibility and destination characteristics. This multivariate decision-making process is the establishment of a HOQ with a QFD method.

In general, a HOQ can be constructed by following these phases (Franceschini, 2002: 35):

- Identifying customer requirements (stakeholders in this study).
- Identifying product and engineering design requirements (feasibilities in terms of production factors and applicability to destinations).
- Drawing up a relationship matrix.
- Planning and deploying expected quality (by listing stakeholders' requirements in order of importance).
- Comparing technical characteristics (Comparing the selected alternative tourism types).
- Analyzing the correlations existing between the various characteristics (correlation matrix).

The creation of HOQ consists of 5 stages. These stages are listed as follows.

*Step 1:* Within the scope of the study, face-to-face interviews were conducted with 44 people consisting of tourism academicians, tourism business managers, professional tourist guides, and local government and non-governmental organizations related to tourism.

These 32 people are the people who accepts more than one interviews during the research process. Since interviews are quite time consuming, these repeating processes are not accepted many people. The success of the model depends on the gathering opinions of more stakeholders than possible. From this point of view, the fact that the stakeholders are hesitant to express their opinions is one of the limitations of this study.

Through face-to-face interviews with all the participants, the question "Considering the features of the Cappadocia region, what could be a new tourism product for his destination?" was asked. As a result of the content analysis of the interviews, five possible products emerged. These alternatives were thermal tourism, gastronomy tourism, convention tourism, film tourism, and festival tourism.

Step 2: The tourism product alternatives obtained in the first step of the research are weighted in general by using the AHP method. In order to achieve this weighting, the same 44 participants were asked to evaluate the statements as binary comparisons. The gathered comparisons were analyzed using the AHP method, and according to the consistency ratio, 28 of the comparisons were found to be usable.

**Table 1: Weighting of tourism product alternatives.**

Alternatives	Weighting	Ranking
Thermal tourism	0,171242	5
Gastronomy tourism	0,251574	1
Convention tourism	0,209267	2
Film tourism	0,188869	4
Festival tourism	0,179048	3

Source: data from the empirical research.

Step 3: Tourism product alternatives are re-weighted in terms of conformation to the Cappadocia destination after step 2. In this way, conformity levels were determined in terms of destination characteristics. To find these weights, the same 44 participants were asked to compare alternative tourism products in terms of Cappadocia destination properties. A compliance matrix for the Cappadocia destination was created in accordance with the information obtained from 31 participants whose consistency levels were adequate.

Step 4: One important element that should be taken into account when making decisions in new product development activities in a specific destination is to what extent it is feasible. To develop a product with a high probability of success alone does not make sense. Simultaneously considering the feasibility of these alternatives can lead to much healthier results.

Although different from industrial goods, tourism products can be discussed in terms of production activity. Production activity means “a process of bringing together the production factors (land, capital, labor, and entrepreneurship) of a business and producing goods and services through a certain technology with specific inputs” (Bilge Eğitim Kurumları, 2016: 53; Hebert & Link, 1989).

Therefore, when a product idea is considered in terms of production factors, each product will differ in feasibility. For these reasons, the most suitable alternative was chosen among the alternatives and the feasibility matrix for production factors was created by considering the feasibility of the alternatives. For example, while some types of tourism may be highly profitable in many respects, it may be impossible to combine production factors to implement them.

In this matrix, feasibility levels in terms of production factors were weighted using the AHP method. In order to carry out this process, the same participants were asked to make binary comparisons.

Consistency rates revealed that the evaluations of 32 participants could be used.

**Table 2: Weighting of production factors in terms of tourism product.**

Factors of Production	Weighting	Ranking
Land	0,2606061	2
Capital	0,269697	1
Labor	0,2424242	3
Entrepreneurship	0,2272727	4

Source: data from the empirical research.

Step 5: The next stage is the establishment of the HOQ by evaluating of the feasibility of the new tourism product alternatives proposed for the mentioned destination and its feasibility in terms of production factors.

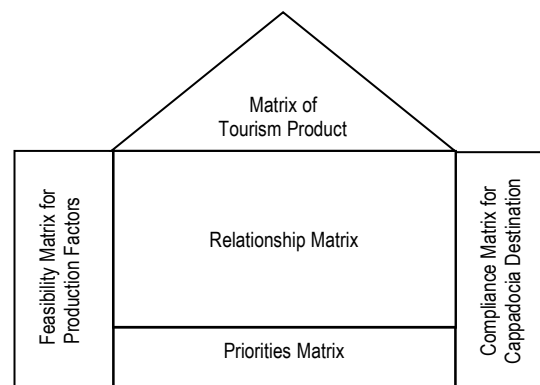
At this stage, the first relationship matrix is formed. It is basically used for showing the relationship among the created matrices. Traditionally, the relationship matrix employs a scale of “1-3-9” to represent the strength of association or relation between matrices (Akao, 1990). However, in this study, this process was carried out with AHP and options are weighted and mathematical relationships are determined. Finally, a matrix of final priorities is created.

**Table 3: Priorities Matrix.**

Ranking	Averages	Type
5	0,145467	Thermal tourism
2	0,23284	Gastronomy tourism
1	0,234181	Convention tourism
4	0,182947	Film tourism
3	0,204564	Festival tourism

Source: data from the empirical research.

**Figure 1: HOQ.**



Source: data from the empirical research.

In interpreting the alternatives obtained at the end of the HOQ, it is not needed to take into account only one of the weighted alternatives when we want to determine the most suitable new tourism product for the Cappadocia destination. In other words, decision-makers may choose to evaluate all alternatives in line

with their possibilities, or they can select the most weighted alternative and concentrate on this one.

This method should not be considered as meaningless in a decision-making mechanism in which all alternatives are available to be evaluated. Because these weightings constitute the input to the decision mechanism about which alternative should be implemented, this method can facilitate the decision-makers' work and can help to maximize the value added to the activities.

## 5 DISCUSSION AND CONCLUSIONS

The main purpose of this study is to determine the most appropriate tourism product (or products) for tourist destinations. To achieve this goal, a research design was established using QFD and AHP. A HOQ, consisting of five stages, were constructed and data from decision-makers at destination level were used.

With the HOQ created, we can determine the most suitable tourism alternative for the destination. In this context, qualitative research methods are used to determine the alternatives that may be appropriate for the region. These are thermal tourism, gastronomy tourism, convention tourism, film tourism, and festival tourism. These alternatives were weighted by the AHP method according to their suitability for the region.

In another stage, the production factors for the tourism activities in the region are weighted. The alternatives were then subjected to another weighting for feasibility in terms of production factors. A HOQ was created in which all these weightings are reflected in order to determine the ideal tourism product alternative.

Thus, the most suitable tourism product for the region was found to be convention tourism. This is also supported by many studies in the literature (Arslan; Şikoğlu, 2017; Ersun; Arslan, 2015; Karakuş; Çoban, 2018; Master Plan, 2013; Özer, 2010). Although convention tourism has already been suggested for the region, it is an important finding to determine its suitability by taking the opinions of different stakeholders and examining the effects of many variables.

Considering that the conference and meetings industry is growing rapidly (Robinson; Callan, 2002), it should be expected that convention tourism can be an effective product for Cappadocia. Note that convention tourism is not the only acceptable alternative.

All identified alternatives are recommended tourism products for the destination. However, due to many limited resources such as money, time, and labor, priority products are listed. The most appropriate tourism product knowledge is to ensure successful decisions and activities with minimum mistake. It is possible to realize more than one alternative according

to the importance level. In the case where more than one alternative can be realized, this method can answer to the question of where to start the work.

The second most important alternative in terms of weight level is gastronomy tourism. As it is known, there is the desire to try new foods and beverages among the reasons that push people to travel (Çalışkan, Sabbağ, & Dedeoğlu, 2019; Derin Alp & Birdir, 2018).

The development of gastronomy tourism is also an important option for the diversification of the existing product of Cappadocia (Genç; Şengül, 2016). The development of gastronomy tourism will be an important development in the sense that it is involved in more tourism activities in the local population. In the region where mass tourism is done intensively, it is also known that local people cannot benefit from tourism as much as they need (Karameşe, 2014).

Another important new tourism product alternative for Cappadocia is festival tourism. Festivals are also important attractions that can push people to travel. As Tayfun ve Arslan (2013) stated, it is a known fact that such activities can cause serious tourism mobility. Especially in view of Cappadocia, where seasonality is a problem, such a tourism product will be able to provide more stable activities.

It is both very difficult and important to make the right decision in the tourism and hospitality industry, where there are many stakeholders with whom conflicts of interest may occur. In particular, there is a need for systematic processes for decisioning in tourist destinations that do not have a DMO like Cappadocia region.

As in every study, this study also has some limitations. The fact that the data collection process of the research is long, laborious and costly causes the data to be collected from a limited participant. In the study, only Cappadocia destination was discussed. The method for the determination of new tourism product alternatives for different tourism destinations is recommended.

## REFERENCES

- Akao, Y. (1990). *Quality Function Deployment : Integrating Customer Requirements into Product Design*. Portland: Productivity Press.
- Arslan, H., & Şikoğlu, E. (2017). Nevşehir Kentinin Potansiyel Turizm Mekanları. *Akademik Sosyal Araştırmalar Dergisi*, 5(43), 471. <https://doi.org/10.16992/ASOS.12097>
- Bayraktaroğlu, G., & Özgen, Ö. (2008a). Integrating the Kano model, AHP and planning matrix. *Library Management*, 29(4/5), 327–351. <https://doi.org/10.1108/01435120810869110>
- Bayraktaroğlu, G., & Özgen, Ö. (2008b). Integrating the Kano model, AHP and planning matrix. *Library*

- Management*, 29(4/5), 327–351.  
<https://doi.org/10.1108/01435120810869110>
- Benur, A. M., & Bramwell, B. (2015). Tourism product development and product diversification in destinations. *Tourism Management*, 50, 213–224.  
<https://doi.org/10.1016/j.tourman.2015.02.005>
- Berrittella, M., La Franca, L., & Zito, P. (2009). An analytic hierarchy process for ranking operating costs of low cost and full service airlines. *Journal of Air Transport Management*, 15(5), 249–255.  
<https://doi.org/10.1016/j.jairtraman.2008.11.006>
- Bilge Eğitim Kurumları. (2016). *Ekonomi ve maliye*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=1520483&lang=tr&site=ehost-live>
- Çalışkan, C., Sabbağ, Ç., & Dedeoğlu, B. B. (2019). The Importance of the Occupational Factors in Local Food Consumption Behavior. *Revista Anais Brasileiros de Estudos Turísticos - ABET*, 9(1, 2 e 3).  
<https://doi.org/10.34019/2238-2925.2019.v9.13874>
- Chang, K.-C., & Chen, M.-C. (2011a). Applying the Kano model and QFD to explore customers' brand contacts in the hotel business: A study of a hot spring hotel. *Total Quality Management & Business Excellence*, 22(1), 1–27.  
<https://doi.org/10.1080/14783363.2010.529358>
- Chang, K.-C., & Chen, M.-C. (2011b). Applying the Kano model and QFD to explore customers' brand contacts in the hotel business: A study of a hot spring hotel. *Total Quality Management & Business Excellence*, 22(1), 1–27.  
<https://doi.org/10.1080/14783363.2010.529358>
- Crouch, G. I., & Ritchie, J. R. B. (1999). Tourism, Competitiveness, and Societal Prosperity. *Journal of Business Research*, 44(3), 137–152.  
[https://doi.org/10.1016/S0148-2963\(97\)00196-3](https://doi.org/10.1016/S0148-2963(97)00196-3)
- Das, D., & Mukherjee, K. (2008). Development of an AHP-QFD framework for designing a tourism product Confirmatory Factor Analysis View project Performance Management View project Development of an AHP-QFD framework for designing a tourism product. *International Journal of Services and Operations Management*, 4(3), 321–344.  
<https://doi.org/10.1504/IJSOM.2008.017297>
- Derin Alp, S., & Birdir, K. (2018). Kapadokya'yı Ziyaret Eden Yabancı Turistlerin Yiyeceklere Karşı Çeşitlilik Arayışlarının İncelenmesi. *Seyahat ve Otel İşletmeciliği Dergisi*, 15(1), 227–240.  
<https://doi.org/10.24010/soid.415357>
- Doğan, N. Ö., & Karakuş, Y. (2014). Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi dergisi. In *Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi* (Vol. 19). Retrieved from <http://dergipark.ulakbim.gov.tr/sduiibfd/article/view/5000122023>
- Duman, T., Kozak, M., & Uysal, M. S. (2007). Turizmde Ürün Çeşitliliği Yoluyla Ürün Değeri Oluşturma: Türkiye'deki Arz Kaynakları Üzerine Bir İnceleme. *Anatolia: Turizm Araştırmaları Dergisi*, 18(2), 206–214. Retrieved from <https://dergipark.org.tr/tr/pub/atad/issue/16792/174451>
- Durberry, R. (2004). Tourism and Economic Growth: The Case of Mauritius. *Tourism Economics*, 10(4), 389–401.  
<https://doi.org/10.5367/0000000042430962>
- Ersun, N., & Arslan, K. (2015). Alternatif turizm çeşidi olarak kapadokya bölgesi'nde kongre turizmini geliştirme olanakları. *Erciyes Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, (34), 139–164. Retrieved from <http://dergipark.gov.tr/erciyesiibd/issue/5891/77964>
- Franceschini, F. (2002). *Advanced quality function deployment*. St. Lucie Press.
- Genç, K., & Şengül, S. (2016). Güzel Atlar Diyarına Yolculuk: Kapadokya Bölgesine Yüksek Gelirli Turist Çekimine Yönelik Bir Değerlendirme. II. *Uluslararası Nevşehir Tarih Ve Kültür Sempozyumu*, 878–891. Nevşehir.
- Hebert, R. F., & Link, A. N. (1989). In search of the meaning of entrepreneurship. *Small Business Economics*, 1(1), 39–49.  
<https://doi.org/10.1007/BF00389915>
- Hunter, C. (1997). Sustainable tourism as an adaptive paradigm. *Annals of Tourism Research*, 24(4), 850–867.  
[https://doi.org/10.1016/S0160-7383\(97\)00036-4](https://doi.org/10.1016/S0160-7383(97)00036-4)
- Iqbal, F., Saleem, M. Q., & Ahmad, M. (2015). A Critical Multi-model Comparative Study of QFD, Kano & AHP Hybrids for Product Development. *Technical Journal, University of Engineering and Technology (UET) Taxila, Pakistan*, 20(2), 1–11.
- Karakuş, Y., & Çoban, S. (2018). Evaluation Of Stakeholders' Expectations Towards Congress Tourism By Kano Model: Case Of Nevşehir. *Revista Anais Brasileiros de Estudos Turísticos - ABET*, 8(2), 8–20. Retrieved from <https://abet.uff.emnuvens.com.br/abet/article/view/3027>
- Karameşe, B. (2014). *Kapadokya jeopark önerisinin yerel halk açısından değerlendirilmesi*. Yayınlanmamış Yüksek Lisans Tezi. Balıkesir Üniversitesi Sosyal Bilimler Enstitüsü, Balıkesir.
- Karamustafa, K., Tosun, C., & Çalhan, H. (2015). Tüketici Odaklı Yaklaşımla Destinasyon Performansının Değerlendirilmesi: Kapadokya Bölgesi Örneği. *Tüketici ve Tüketim Araştırmaları Dergisi*, 7(2), 117–148. Retrieved from <http://www.betadergi.com/ttad/yonetim/icerik/makaleler/74-published.pdf>
- King, R. (1987). Listening to the voice of the customer: Using the quality function deployment system. *National Productivity Review*, 6(3), 277–281.  
<https://doi.org/10.1002/npr.4040060312>
- Kunz, W. H., & Hogreve, J. (2011). Toward a deeper understanding of service marketing: The past, the present, and the future. *International Journal of Research in Marketing*, 28(3), 231–247.  
<https://doi.org/10.1016/J.IJRESMAR.2011.03.002>
- Lewis, R. C., & Chambers, R. E. (1989). *Marketing leadership in hospitality: foundations and practices*. Lewis, R. C. ve Chambers, R. E. (Richard E. (1989). *Marketing leadership in hospitality: foundations and practices*. Van Nostrand Reinhold. Van Nostrand Reinhold.
- Li, Y., Tang, J., Luo, X., & Xu, J. (2009). An integrated method of rough set, Kano's model and AHP for rating customer requirements' final importance. *Expert Systems with Applications*, 36(3), 7045–7053.  
<https://doi.org/10.1016/J.ESWA.2008.08.036>
- Master Plan. (2013). *Nevşehir Turizminin Çeşitlendirilmesine Yönelik Eko Turizm Eylem Planı*



- 2013-2023. Nevşehir.
- Middleton, V. T. . (1989). Tourism Marketing and Management Handbook. In S. F. Witt & L. Moutinho (Eds.), *Tourist Product*. Hempel Hempstead: Prentice Hall.
- Ministry Of Culture And Tourism. (2019). Tourism Statistics. Retrieved from <http://www.kultur.gov.tr>
- Mu, E., & Pereyra-Rojas, M. (2017). *Practical Decision Making*. <https://doi.org/10.1007/978-3-319-33861-3>
- O'Reilly, A. M. (1986). Tourism carrying capacity. *Tourism Management*, 7(4), 254–258. [https://doi.org/10.1016/0261-5177\(86\)90035-X](https://doi.org/10.1016/0261-5177(86)90035-X)
- Oh, C.-O. (2005). The contribution of tourism development to economic growth in the Korean economy. *Tourism Management*, 26(1), 39–44. <https://doi.org/10.1016/J.TOURMAN.2003.09.014>
- Özer, Ş. (2010). *Kongre Turizmi Ve Kapadokya Bölgesindeki Otel İşletmelerinin Kongre Hizmetleri Yönetiminin İncelenmesi: Kayseri Ve Nevşehir İli Örneği*. Nevşehir Üniversitesi Sosyal Bilimler Enstitüsü, Nevşehir.
- Ozturk, I. (2017). The relationships among tourism development, energy demand, and growth factors in developed and developing countries. *International Journal of Sustainable Development & World EcologyOnline) Journal, ISSN homepage*, 1350–4509. <https://doi.org/10.1080/13504509.2015.1092000>
- Pakizehkar, H., Sadrabadi, M. M., Mehrjardi, R. Z., & Eshaghieh, A. E. (2016). The Application of Integration of Kano's Model, AHP Technique and QFD Matrix in Prioritizing the Bank's Substractions. *Procedia - Social and Behavioral Sciences*, 230, 159–166. <https://doi.org/10.1016/J.SBSPRO.2016.09.020>
- Palumbo, F. (2015). Developing a new service for the digital traveler satisfaction: The Smart Tourist App. *The International Journal of Digital Accounting Research*, 15, 33–67. [https://doi.org/doi.org/10.4192/1577-8517-v15\\_2](https://doi.org/doi.org/10.4192/1577-8517-v15_2)
- Papathanasiou, J., & Ploskas, N. (2018). *Multiple Criteria Decision Aid*. <https://doi.org/10.1007/978-3-319-91648-4>
- Robinson, L. S., & Callan, R. J. (2002). Professional U.K. Conference Organizers' Perceptions of Important Selection and Quality Attributes of the Meetings Product. *Journal of Convention & Exhibition Management*, 4(1), 1–17. [https://doi.org/10.1300/J143v04n01\\_01](https://doi.org/10.1300/J143v04n01_01)
- Saaty, T. L. (1977). A scaling method for priorities in hierarchical structures. *Journal of Mathematical Psychology*, 15(3), 234–281. [https://doi.org/10.1016/0022-2496\(77\)90033-5](https://doi.org/10.1016/0022-2496(77)90033-5)
- Saaty, T. L. (2003). Decision-making with the AHP: Why is the principal eigenvector necessary. *European Journal of Operational Research*, 145(1), 85–91. [https://doi.org/10.1016/S0377-2217\(02\)00227-8](https://doi.org/10.1016/S0377-2217(02)00227-8)
- Şahbaz, R. P., & Keskin, E. (2012). The Effect of Promotion Activities on Touristic Region Selection: Cappadocia. *İşletme Araştırmaları Dergisi*, 4(3), 97–117. Retrieved from [http://isarder.org/tr/2012cilt4no3/Vol.4\\_Issue3\\_07\\_full\\_text.pdf](http://isarder.org/tr/2012cilt4no3/Vol.4_Issue3_07_full_text.pdf)
- Şamiloğlu, F., & Karacaer, S. S. (2011). I. Nevşehir Tarih ve Kültür Sempozyumu. *Tourism Potential of the Cappadocia Region of Turkey and Its Place in the Economy.*, 129. Retrieved from [https://dosyalar.nevsehir.edu.tr/70e597e957c5751c0907dbe4b53cc67711\\_uluslararası\\_nevşehir\\_tarih\\_ve\\_kultur\\_sempozyumu-3.pdf#page=129](https://dosyalar.nevsehir.edu.tr/70e597e957c5751c0907dbe4b53cc67711_uluslararası_nevşehir_tarih_ve_kultur_sempozyumu-3.pdf#page=129)
- Saranga, H., George, R., Beine, J., & Arnold, U. (2018). Resource configurations, product development capability, and competitive advantage: An empirical analysis of their evolution. *Journal of Business Research*, 85, 32–50. <https://doi.org/10.1016/J.JBUSRES.2017.11.045>
- Sarkım, M. (2007). *Sürdürülebilir Turizm Kapsamında Turistik Ürün Çeşitlendirme Politikaları Ve Antalya Örneği*. Dokuz Eylül Üniversite, Sosyal Bilimler Enstitüsü, İzmir.
- Smith, S. L. J. (1994). The tourism product. *Annals of Tourism Research*, 21(3), 582–595. [https://doi.org/10.1016/0160-7383\(94\)90121-X](https://doi.org/10.1016/0160-7383(94)90121-X)
- Tan, K. C., & Pawitra, T. A. (2001). Integrating SERVQUAL and Kano's model into QFD for service excellence development. *Managing Service Quality: An International Journal*, 11(6), 418–430. <https://doi.org/10.1108/EUM00000000006520>
- Tayfun, A., & Arslan, E. (2013). Festival Turizmi Kapsamında Yerli Turistlerin Ankara Alışveriş Festivali'nden Memnuniyetleri Üzerine Bir Araştırma. *İşletme Araştırmaları Dergisi*, 5(2), 191–206.
- Teare, R., Mazanec, J. A., Crawford-Welch, S., & Calver, S. (1994). *Marketing in hospitality and tourism: a consumer focus*. Retrieved from [https://catalyst.library.jhu.edu/catalog/bib\\_1713563](https://catalyst.library.jhu.edu/catalog/bib_1713563)
- Temponi, C., Yen, J., & Amos Tiao, W. (1999). House of quality: A fuzzy logic-based requirements analysis. *European Journal of Operational Research*, 117(2), 340–354. [https://doi.org/10.1016/S0377-2217\(98\)00275-6](https://doi.org/10.1016/S0377-2217(98)00275-6)
- Von, S. B. (2008). *Managing Innovation, Design and Creativity* (2nd Editio). Hoboken: John Wiley & Sons.
- WTTTC. (2018). *Travel and Tourism Economic Impact 2018: World*. Retrieved from <https://www.wttc.org/-/media/files/reports/economic-impact-research/regions-2017/world2017.pdf>
- Zairi, M., & Youssef, M. A. (1995). Quality function deployment. *International Journal of Quality & Reliability Management*, 12(6), 9–23. <https://doi.org/10.1108/02656719510089894>

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