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DOES POTENTIAL AND REALIZED ABSORPTIVE CAPACITY MATTER FOR COST ADVANTAGE?

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ABSTRACT

The aim of this study is to investigate the relationship between potential and realized absorptive capacity and cost advantage. This research was questioned by the quality department managers of the five star green star certificated hotels operating in Antalya through surveys and supporting interview forms. The reason for the selection of hotels with a green star certificate within the scope of the research is the positive results of the increasing in the environment-friendly business practices observed in the hospitality sector on the competitive advantage in recent years. The motivating factor in the present study is that in the literature, a limited number of studies were found that reveal the relationship of the cost-leadership strategy with the absorptive capacity that is described as acquisition, assimilation, transformation and exploitation of the knowledge on the environmental-friendly activities of hotels. With an empirical study of 9 semi-structured interviews with quality managers and 74 surveys of five star environmental friendly hotels in Antalya, both quantitative and qualitative findings provide evidence that potential and realized absorptive capacity reduce operational costs in environmental-friendly activities at hotels. In addition, the findings have shown that realized absorptive capacity has a mediating effect on the relationship between potential absorptive capacity and cost advantage.

Keywords: Potential absorptive capacity, realized absorptive capacity, cost advantage, hotel businesses.

INTRODUCTION

With today's new global economic order, knowledge-based business practices have become one of the most important tools of competition, and knowledge, that is rather abstract, has become a concrete entity that creates a competitive advantage. According to knowledge-based theory which claims that knowledge-based practices are the source of competitive power for businesses, firms can achieve over-average performance in the sector with acquisition and transformation capabilities (Grant, 1996a, 1996b; Kogut and Zander, 1996; Nonaka, 1994; Zander and Kogut, 1995). Likewise, according to the resource-based approach, which emphasizes that knowledge is a unique source and ability in sustaining the firms' competitiveness, firms can achieve high performance with the ability to define, adopt and use the knowledge gained from the environment (Tsai, 2001; Fosfuri and Tribó, 2008). The dynamic resource-based approach, developed in response to the critique of static approach to resource evaluation, draws attention to the fact that the firm's ability to integrate, create and reconfigure internal and external capabilities and organizational learning ability for knowledge can be improved in order to respond to rapidly changing environments. The dynamic resource-based approach, developed in response to the critique of static approach to resource evaluation, draws attention to the fact that the firm's ability to integrate, create and reconfigure internal and external capabilities and organizational learning ability for knowledge can be improved in order to respond to rapidly changing environments. According to Garvin (1993), in the process of organizational learning, each company has its capacity in the emergence, acquisition, transfer and exploitation of knowledge. This capacity is called absorptive capacity. As a function of the knowledge level, knowledge absorptive capacity is defined as the ability to create a commercial benefit by evaluating the value of new knowledge together with the current knowledge pool. Thus, firms can gain superiority in the competitiveness with their ability to acquire and adopt knowledge from outside of the organization and to use it by integrating this knowledge with the knowledge they already have their own systems. Cohen and Levinthal (1990: 128) stated that knowledge absorptive capacity is *"the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends is critical to its innovative capabilities"*.

Research on the subject considers the knowledge absorptive capacity as a basic organizational entity necessary for sustainable competitive advantage, and acknowledges that innovative technologies with absorptive capacity will have an effect on lowering operational costs (Christman, 2000; Adams and Lamont, 2003; Xie, Zou & Qi, 2018; Albort-Morant, Henseler, Cepeda-Carrión & Leal-Rodríguez, 2018). The analyzes, which test the effect of knowledge absorptive capacity on business performance that cannot be questioned in terms of service quality and customer satisfaction in the human labor-based service sector, reveal the relationship between absorptive capacity dimensions and cost advantage in accordance with the dynamic resource-based approach (Gebauer, Worch & Truffer, 2012; Nieves and Haller, 2014; Pace, 2016). In this study, the impact of the knowledge absorptive capacity on operational costs of hotel businesses operating in the service sector is considered an interesting research question, as in recent years there were several research findings about the fact that hotels have achieved competitive advantage by getting cost savings through environmental-friendly

activities (Pereira-Moliner, Font, Tarí, Molina-Azorin, Lopez-Gamero & Pertusa-Ortega, 2015; Walsh and Dodds, 2017; Kularatnea, Wilson, Månsson, Hoang & Leea, 2019). In these studies it is stated that hotel business provides ecological efficiency with diverse ecological activities as well as over-average performance advantages. In recent years eco-efficiency, as a strategy that is based on the prevention of waste generation from the source by minimizing the ecological impacts caused by production and that has benefits not only to the ecology but also to the economy, has attracted attention as a firms' competitive strategy (Kabongo and Boiral, 2017). The main factor that determines firms to adopt the eco-efficiency strategy or try to adopt it as if it is adopted, is that environmental friendly firms have a great competitive advantage due to the increased awareness of consumers. The coordination and integration of functional capabilities for efficiency derived from resource optimization lead organizations to learn new and more efficient routines necessary to improve their cost advantages. Hotels involved in environmental activities maintain higher operational efficiency, as well as greater customer-driven resource efficiency (Zhang, Joglekar, Heineke & Verma, 2014).

Although current studies in the literature show that hotels have achieved eco-efficiency with environmental friendly strategies (Fraj, Matute & Melero, 2015; Pereira-Moliner et al., 2015; Durmuş-Özdemir, 2018), discussions on the various dynamic capabilities in the background of environmental friendly strategies remain limited. Okumuş, (2013); Nieves, Quintana & Osorio, (2015); Leonidou, Leonidou, Fotiadis, & Aykol, (2015); Çetintürk, Adıgüzel & Demir, (2016); Marco-Lajara, Zaragoza-Sáez, Claver-Cortés & Úbeda-García, (2018); Martinez-Martinez, Cegarra-Navarro, Garcia-Perez & Wensley, (2019) have found that knowledge absorptive capabilities related to environmental friendly activities increase hotels' competitive advantage. In the national literature, there are various findings about the fact that hotels reduce their operational costs (Coşar, 2008; Yıldırım-Saçılık and Çevik, 2014) and, improve the quality of service and image (Erkuş-Öztürk and Eraydın, 2010; Aykan, 2013) with environmental friendly activities. However, no study has found that hotels to integrate these activities with knowledge absorptive capabilities and reflect them on the competitive strategies. This study aims to determine the potential impacts of knowledge absorptive capacity of hotels, which are engaged in the environmental-friendly activities that have been contributing to ecological and economic sustainability in recent years, on the cost advantage.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

The dynamic resource-based approach, developed in response to the critique of static approach to the assessment of resources, emphasizes the importance of the firm's ability to integrate, create and reconfigure its internal and external capabilities in order to respond to the rapidly changing environment. The advocates of the approach Teece, Pisano & Shuen (1997:516) emphasized the evolution of organizational capabilities, and proposed the dynamic capabilities approach to fill the gap arising from the static structure of the resource-based approach and the inadequacy of firms to explain their competitive advantage in changing environments. On the basis of the assumptions of the approach, resources are based on the organizational structures and/or development of the capabilities of firms. The capability-based perspective that constitutes the dynamic

perspective of the resource-based perspective sees knowledge as the main source of its competitive advantage (Eisenhardt and Martin, 2000: 1107). Especially in the new economy, the increasing importance of knowledge in competition forces firms to develop new organizational structures and strategies that will expand the scope of their knowledge by benefiting from knowledge opportunities around them. At this point, there may be differences between the firms' capacity to understand and benefit from their competitors' knowledge. Because the ability to recognize new knowledge, to exploit it and to transform it into a commercial product and service gives firms a basic ability, which is called absorptive capacity. With the basic ability to develop absorptive capacity, firms can obtain competitive advantage by obtaining and absorbing knowledge from outside the boundaries of the organization and then making the most accurate use of this knowledge.

The concept of absorptive capacity was first used by Cohen and Levinthal (1989) in the "*Innovation and learning: the two faces of R & D*" article. The authors described absorptive capacity as "*the firm's ability to identify, assimilate, and exploit knowledge from the environment*", and then they expanded this definition to "*the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends*" in the articles of "*Absorptive Capacity: A New Perspective on Learning and Innovation*" in 1990. After these studies pioneered by Cohen and Levinthal, several studies were conducted to expand the scope of absorptive capacity (Dyer and Singh 1998; Van den Bosch, Volberda & de Boer, 1999; Zahra and George 2002; Jansen, 2005; Todorova and Burisin, 2007; Lichtenthaler, 2009; Lewin, Massini & Peeters, 2010; Camisón and Foré, 2010; Patterson and Ambrossini, 2015; Zobel, 2017). Some of these studies discussed the social aspect of absorptive capacity, some of them cognitive aspect and some of them the aspect reflected on the general performance of firms. For example, Zahra and George (2002) define absorptive capacity as a set of strategies to increase firm value. For, it will not be enough to obtain knowledge as a valuable resource, it will also be necessary to adopt, transform and use the knowledge in a manner compatible with business activities in order to achieve performance above average. This process, which will be provided by organizational learning, can strengthen the knowledge bases of the firms and will enable them differentiate from their competitors and/or reduce their operational costs with different innovative applications. Among these studies, Zahra and George's model, which explains the relationship between competitive advantage and absorptive capacity for different factors, was one of the works frequently used in the field of business. According to the authors, since the basic learning ability of the company is developed with absorptive capacity, they define the knowledge management process as a dynamic ability related to acquisition, assimilation, transformation and exploitation of knowledge. Zahra and George (2002) explain the reasons that drive firms to diversify their abilities with potential and realized capacity. According to the authors, the potential absorptive capacity consists in acquiring and assimilation of knowledge, and realized absorptive capacity - the transformation and exploitation of knowledge. Knowledge acquisition is the formation of new knowledge by including the explicit and implicit knowledge in the organization and analyzing them with internal knowledge and experiences, with formal and non-formal knowledge that is related to the organization and developing in the external environment of the organization. Knowledge assimilation refers to programs and processes that enable the knowledge the firms has obtained from external sources to be analyzed, interpreted and understood.

Knowledge transformation is the capacity to develop and renew day-to-day work to absorb knowledge that is completely different from the previous knowledge of the firms. Finally, knowledge exploitation is the way in which the firm develops and changes its existing capabilities and creates new knowledge by including the knowledge it has transformed in its own processes.

According to the model (Figure 1) developed by Zahra and George (2002), firms should adopt the knowledge after the acquiring them and then transform and use this knowledge. The dimensions are presented in the model as a possible successor and predecessor with the activation triggers, social integration mechanisms and regimes of appropriability. Activation triggers are defined as events that encourage or challenge the business against internal and external stimuli (e.g. radical innovations, legal obligations, etc.). Social integration mechanisms are defined as practices such as work rotation, quality circles and problem solving techniques that increase knowledge exchange within the organization. In other words, it is the dissemination of knowledge within the organization and at the same time the process of integrating this knowledge into existing experiences. Finally, regimes of appropriability are the legal protection to take measures against copying knowledge. Thus, the original resources that will provide competitive advantage can be protected.

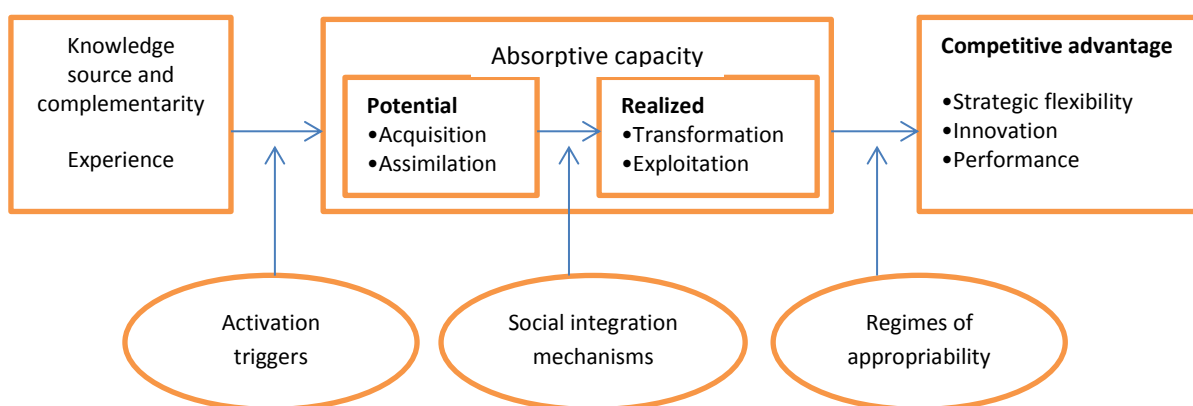


Figure 1. The model by Zahra and George.

Resource: Zahra, S.A. and George, G. (2002). "Absorptive capacity: A review, reconceptualization, and extension". *Acad. Manag. Rev.*, 27, p.192.

Zahra and George (2002) claim that activation triggers increase the potential absorptive capacity, while social integration mechanisms reinforce recognized absorptive capacity and implies that potential absorptive capacity is an important tool in ensuring competitive advantage; however, she foresees that this process can be successful when the action is completed realized absorptive capacity. Zahra and George (2002) state that these factors have the power to influence both the components of the potential and realized capacity, which are the sub-dimensions of the absorptive capacity, and the competitive superiority. Thus, firms can have strategic flexibility even in complex and uncertain industrial environment due to their absorptive capacity.

In summary, in the new economic order where knowledge is an important place, not only the acquisition of knowledge but also its assimilation, transformation and exploitation in accordance with the activities are required in order for firms to achieve the performance above average. As a matter of fact, it is claimed that dynamic based approach, such as knowledge absorptive capacity, lead to differences in heterogeneous company-specific capabilities within the competition; therefore, as the firms increase their absorptive capacities, they can gain advantage over their competitors (Camison and Fores, 2010; Diez-Vial and Fernandez-Olmos, 2015). Ng (2011) stated in his article that potential absorptive capacity is an essential tool in providing competitive advantage, but success is achieved when this process is completed with realized absorptive capacity. Bergh & Lim (2008) demonstrated that the experience gained with absorptive capacity has a positive impact on the financial performance of the firms. Firms can reduce operational costs with innovative activities against environmental uncertainties, by developing environmental strategies with their absorptive capacity. The potential capacities allow firms to innovate and create unique products for sensing and seizing important, unique and creative external knowledge. By realized capacities firms can also process their external knowledge and then make them into low-cost products or services. Even if these capacities are complementary, knowledge acquisition and assimilation does not guarantee the effectiveness of company strategies, on the other hand firms can be more creative in transforming and exploiting knowledge while they are habitual to the process of acquisition and assimilation of knowledge (Leal-Rodríguez, Roldán, Ariza-Montes & Leal-Millán, 2014). According to Fosfuri and Tribo (2008) potential absorptive capacity facilitates business to implement successful cost advantage strategies by integrating the knowledge they acquire from outside with creative ideas. Accumulated knowledge if transformed and used in accordance with company strategies, they can gain cost advantages (Fraj et al., 2015). The differences between potential and realized absorptive capacities are the determinant of business to gain competitive cost advantage and to differentiate from each other.

In recent years, there was an increase in the number of studies in the literature on the role of dynamic capabilities in ensuring the competitive advantage of tourism organizations. These studies emphasize the importance of dynamic capabilities in increasing the performance of firms (Okumuş, 2013; Nieves et al., 2015; Çetintürk, Adıgüzel & Demir, 2016: 38; Marco-Lajara, Zaragoza-Sáez, Claver-Cortés & Úbeda-García, 2018; Martinez-Martinez, Cegarra-Navarro, Garcia-Perez & Wensley, 2019). Studies have provided clues about how processes based on absorptive capacity in the development of dynamic capabilities of hotels are effective in reducing innovation and hence operational costs. In particular, in the last decade, studies on the fact that hotels integrate knowledge on environmental friendly activities into their organizational structures and thus achieve cost savings in their operational activities create impressions that these activities are maintained with knowledge absorptive capacity (Leonidou et al., 2015; Fraj et al., 2015). According to Leonidou et al., (2015), organizational capabilities are effective in providing competitive advantage based on the ecology, and according to Fraj et al. (2015) proactive environmental strategies may increase the competitiveness. In connection with this, the aim of this study is to investigate the effect of absorptive capacity dimensions on operational costs that are reflected in the environmental friendly activities of hotels. The hypotheses and model of the research are shown below (Figure 2).

- H1. Potential absorptive capacity is positively related to realized absorptive capacity.
- H2. Realized absorptive capacity is positively related to a firm's cost advantage
- H3. Potential absorptive capacity positively related to a firm's cost advantage
- H4. Realized absorptive capacity mediates the link between potential absorptive capacity and cost advantage.

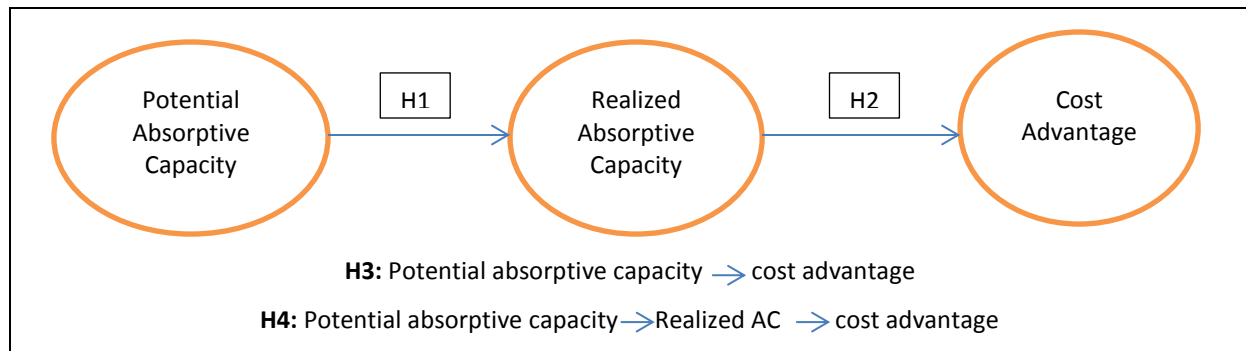


Figure 2. Research model and hypotheses.

The research model was tested for quantitative data collection process. In addition, data on the absorptive capacity process and cost-saving practices reflected in the environmental friendly activities of hotels were collected by qualitative research methods.

METHOD

Data Collection Process

In the tourism sector, there is intense competition, hotel companies operating in various formats (such as five-star, all-inclusive system, ultra-all-inclusive system, and boutique hotel management) and they are looking for formulas to survive and to compete. Especially in recent years, the importance of ecological sustainability for consumers and the increase of ecological awareness have caused hotels to move towards different environmental friendly activities. Also the ecological certification programs can create added value for both ecological sustainability of hotels and economic sustainability. The green star certificate given by the Ministry of Culture and Tourism of Turkey is given within the scope of the mentioned certification programs and the aim is to protect the ecology, to develop ecological awareness and to encourage ecological management in the tourism sector. With the green star certification, the hotel receives the “*Environmentally Friendly Accommodation Establishment*” certificate (<http://yigm.kulturturizm.gov.tr/TR-11596/cevreye-duyarlilik-kampanyasi-yesil-yildiz.html>). For this reason, green star certificated 5-star hotels operating in Antalya were examined.

The scope of the research necessitated the use of multi-step qualitative and quantitative methods in the data collection process. In the scope of qualitative research, interviews, observations and documents were used, and questionnaires were used in the scope of quantitative research. In the first part of the data collection

stage, through the official website of the Ministry of Culture and Tourism of Turkey 5-star 160 hotels were identified with a green star certificate in Antalya, and 74 of them agreed to participate in the research. This represents a response rate of %46 that is satisfactory for this analyze. Surveys were sent online to quality managers responsible for environmental friendly activities. In the qualitative data collection process, semi-structured interviews were conducted with the quality manager of 9 hotels selected by random sampling. The data collection process of the research consisted of two stages. In the first stage, 6 quality managers were interviewed between October 2018 and December 2018, and in the second one 3 quality managers were interviewed between January 2019 and February 2019. In the first stage of the data collection process was used data from Mihaela Podubnii's (2019) master's thesis "*Analysis of Environmental Competitive Strategies and Dynamic Capabilities of Hotel Businesses in Creating Competitive Advantage*". In the second stage of the research process, the authors of the current study included 3 more hotels. In the analysis of quantitative data, SPSS21 program was used, and NVIVO12 program was used in the analysis of qualitative data.

Data Collection Tools

The survey, which served as a quantitative data collection tool, was developed by using the absorptive capacity of Delmas, Hoffmann & Kuss (2011). The statements in this study were adapted accordingly to the sector, a total of 20 items of absorptive capacity, consisting of 4-5 items for each of the dimensions of knowledge acquisition, knowledge assimilation, knowledge transformation and knowledge use were developed, and the answers were evaluated on the 5-point Likert scale. The point to be done emphasized here is that 9 items for potential absorptive ability and 11 items for realized absorptive ability were included in the survey. The survey for the competitive cost advantage was developed using Pereira-Moliner et al., (2015) and Walsh and Dodds (2017) studies and included 11 items. Answers were evaluated as well on 5-point Likert scale, ranging from high disagreement to high agreement. Appendix A lists the questionnaire items. Our research model and hypotheses have been tested using multiple regression method.

In the face-to-face interviews during the qualitative data collection, a semi-structured interview form was used to address the company managers. The content of these interviews included 6 questions about the relationship between starting and sustaining environmental friendly activities of the hotels, sharing knowledge about ecology with internal and external stakeholders, utilizing technology for ecology and their relationship with corporate strategies. The questions are listed in the Appendix B.

Reliabilities

Table 1 shows one factor loadings of the mediating variable that is represented by realized absorptive capacity (knowledge transformation and exploitation), which together explained 69.73% of the total variance. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value was 0.88, which is acceptable and significant. One factor of independent variable potential absorptive capacity was achieved, which are labelled 'Knowledge Acquisition' and 'Knowledge Assimilation', which together explained 62.351% of the total variance; The KMO

value was 0.86, which is acceptable and significant. Finally, two factors solutions of dependent variable in the shape of Cost Advantage explained 75.40% of the total variance. The respective KMO value for this measure was 0.85, which is acceptable and significant. All the results of factor analysis are in the acceptable range (Lewis-Beck, 1994).

From Table 1 it can be noticed that measurement model was completely satisfactory, the Cronbach Alpha value is higher than 0.70. The Cronbach Alpha coefficients of the potential absorptive capacity and realized absorptive capacity with a high reliability were recorded as 0.91 and 0.95 respectively. Cost advantage 0.96 has a satisfactory Cronbach Alpha coefficient.

Table1. The Results of Factor and Reliability Analysis

Factor	Number of items	Factor loading	Cronbach's Alpha
Potential Absorptive Capacity	9		0.918
Knowledge Acquisition	4	0.574-0.786	
Knowledge Assimilation	5	0.536-0.802	
Realized Absorptive Capacity	11		0.953
Knowledge Transformation	5	0.688-0.777	
Knowledge Exploitation	6	0.534-0.760	
Cost Advantage	11	0.544-0.883	0.964

The reliability of the questions was ensured with 2 pilot studies conducted in the preparation stage of the interview form used in the qualitative research. At the same time, in order to test how consistent the coding was made in relation to the themes that emerged in this study, a faculty member who was expert in the relevant field and a hotel manager was subject to the coding at different times. Kappa Analysis was performed to measure the reliability of the comparative agreement between the two values. In the analysis, the value obtained was 0.75 and "a significant conformity" was obtained.

FINDINGS

As the research question of the study necessitated the use of multi-step qualitative and quantitative methods together, the findings were evaluated together. In quantitative research, the links between the variables were tested and regression models were developed and content analysis was employed in qualitative research. As the managers who were interviewed in qualitative research demanded that their personal knowledge be kept confidential, the names and surnames of the relevant persons were coded (e.g. M1, M2...). The results of the regression analysis for quantitative research are presented in Table 2.

Table 2. Model Results

Direct Effects on Endogenous Constructs	Beta	S.E.	p-Value	Support
Potential Capacity → Realized Capacity (R ² = 0.866)	0.954***	0.076	0.000	Yes
Realized Capacity → Cost Advantage (R ² = 0.721)	0.865***	0.114	0.000	Yes
Potential Capacity → Cost Advantage (R ² = 0.714)	0.943***	0.124	0.000	Yes
Indirect Effects on Endogenous Constructs	Beta	S.E.	p-Value	Support
Potential Capacity → Cost Advantage (R ² = 0.743)	0.495*	0.223	0.031	Yes

* p < 0.05. *** p < 0.001.

Concerning the H1 hypothesis, the results indicate that potential absorptive capacity has a strong and significantly positive effect on realized absorptive capacity ($\beta = 0.954$, $p < 0.001$). The findings of the test fully support the H1 hypothesis. The content analysis findings also showed that there was a link between potential absorptive capacity and realized absorptive capacity of the 92% of the examined hotels regarding the environmentally friendly activities. Depending on the content analysis, hotels are conducting various practices to collect all kinds of knowledge about ecology and develop routines that will benefit by analyzing this knowledge. On the subject, M2 and M4 said: *“We are making surveys about the environment, we get the opinions from the guests, for example, the customer wrote that there should be a garbage sorting tool, we were not aware of this, we are evaluating the suggestions from them”*. *“We always listen to the demands of the guests, if there is something we can implement and will be useful, we always apply. We are preparing surveys and our Guest Relation department is receiving suggestions from the guests”*. 89% of the interviewed managers stated that realized absorptive capacity is a critical resource for hotels. They stated that especially the environmental knowledge is submitted to all departments, staff and guests in the hotel and they make improvements in their organizational structures with these shares. On this subject, some managers said: *“Employees should consciously absorb an ecological application newly to this hotel. So much so that they must realize that the application is implemented under the policies of the hotel. For example, frying oils are very harmful, both carcinogenic and very harmful to the environment. Our staffs that wash the boilers need to be conscious about this issue. For this purpose, we provide in-service training in our hotel”*. *“If you do not raise our employees' awareness of ecological issues, the investment will be wasted even though you get organizational knowledge about ecological applications. At this point, our corporate policies and trainings are very important”*.

In terms of H2 and H3 hypothesis, the study results indicate that both potential and realized absorptive capacity dimension have a positive effect on cost advantage. Thus, the findings of the test fully support the H2 and H3 hypotheses. The content analysis findings also showed that the cost advantage is provided by the potential absorptive capacity and realized absorptive capacity of 88% of the examined hotels related to environmentally friendly activities. Regarding the fact that the realized absorptive capacity provides cost savings, M1 says: *“From the golf course we are seriously identifying grass wastes and sending them to the*

analysis. They can be used as fertilizers. It could be invoked as compost. This will reduce our transaction costs. What is important is to protect the environment while minimizing the costs reflected in the activities". Another manager stated: "We provide different knowledge about nature protection in the rooms (such as leaving the batteries to the reception, reserving garbage, and saving water). This knowledge directly reduces our costs. For example, we raise the awareness of the customers on the environment in the TV in the rooms without disturbing them. For example, we include recycling applications for all kinds of consumption within the facility or in the rooms. We also provide knowledge on what these practices do to the nature. For, the consumer is now conscious. They want to have a holiday in the ecology-friendly facilities. In this way, we both save cost and increase customer satisfaction". As well M1 stated: "We have a hotel knowledge catalog in the guest rooms. This includes everything about the hotel. For example, on the energy savings, or the waste sorting, there is knowledge on protecting natural life, knowledge about *Caretta Carettas* and other animals in the facility. For example, last year we encountered an endemic plant species. They must be genetically protected. We raised awareness to our customers and staff within the scope of immediate protection practice".

In order to find out if realized absorptive capacity is a mediator between potential absorptive capacity and cost advantage the multiple regressions was used. First it was observed the significant relation between potential absorptive capacity and cost advantage. When added the realized capacity and potential capacity as independent variables and cost advantage as dependent variable the potential capacity - cost advantage became insignificant and realized capacity - cost advantage relationship became significant, that means that realized absorptive capacity is a mediator between potential absorptive capacity and cost advantage. From Table 2, it can be noticed that the mediator have a significant but not very strong effect. In this context, the H4 hypothesis is supported. This finding is consistent with the findings of the content analysis. Emphasizing the importance of some certificates in the mediation, M8 stated: "Since we work with Green Star, we collect all kinds of knowledge about ecology inevitably. This knowledge is necessarily reflected in our hotel in the form of various activities. In the early years, we could not realize that these practices reduced our operational costs. When we integrated some of the applications forced by the document with our current operational processes, we started to save more. For example, one of the criteria of the green star certificate is to reduce the chemical wastes used in washing the laundry. While we were doing this through legal obligations, we were also saving a bit of resources with less detergent consumption. When we learned that we could treat chemical wastewater with the technology we used in our drinking water wastes and then use it in garden irrigation, both our irrigation and chemical product usage cost fell. 'We killed two birds with one stone'. And it was supposed to be so. A number of teams provide knowledge about the environment and our strategy is part of this direction.

CONCLUSION and DISCUSSION

The qualitative and quantitative results of this study showed that there is a relationship between the potential and realized absorptive capacities and cost savings of hotels that implement environmentally friendly activities, assumed to contribute to ecological and economic sustainability. Knowledge acquisition, knowledge

assimilation, knowledge transformation and knowledge exploitation, categorized as potential and realized absorptive capacities of the investigated hotels within the scope of the research, were in a relationship with one another, and this relationship was found to reduce operational costs. In other words, after collecting new environmentally friendly knowledge, the hotel can integrate it with the existing knowledge and turn it into routines for their business. Thus, with the absorptive capacities, hotel business implements eco-efficiency strategy and achieve cost advantage over their competitors. For example, by assimilating the environmental knowledge to guests, the hotel can save on water, energy and detergents simply by not changing daily the sheets or towels in the guests' room. Also the assimilation of information from all the departments of the hotel, with the staff and the guests can be usefully for the waste management. In fact, Orasato (2006) draws attention to ecological efficiency in achieving cost advantage and emphasizes its importance in the ecological sustainability and savings in operational costs. This result is consistent with several studies (Delmas et al., 2011; Tajedinni, 2010; Shrivastava, 1995) that determined that absorptive capacity has a positive effect on environmental friendly cost benefit. Thus, absorptive capacity could be seen as playing a crucial role in inducing a hotel's intention to save energy, resources and efficiently waste management. Another remarkable result of the research is the mediator role of realized absorptive capacity in reducing costs. Although the managers within the scope of the research stated that they use their knowledge about environmental friendly activities in order to increase competitiveness in their hotels, they specified that they provide significant savings in operational costs when they integrate the mandatory applications of some certification programs, especially Green Star, Travelife, or Green Key, with the existing organizational structure. When evaluated by hotel business, it can be said that if the potential absorptive capacity is supported by the realized absorptive capacity, superiority can be achieved in competition. This result is consistent with the findings of Delmas et al., (2011) that emphasizes the importance of absorptive capacity to deal with environmental changes.

Numerous researches have argued the existence of a direct link between absorptive capacity and firm's competitive advantage or performance. However, the links between absorptive capacity and cost advantage have been less explored. Also, there are no studies that have analyzed the relationships between the two dimensions of absorptive capacity and cost advantage. Therefore, it is hoped that this exploratory study will contribute to the gap in the literature. Moreover, these results are limited by the generalizability of the tourism sector due to its specific sectorial and structural conditions. The application of the research questions to the whole population or the repetition of it at a different tourism point of the country is important both for testing the validity of measurement tools and for increasing generalizability.

MALİYET ÜSTÜNLÜĞÜNDE POTANSİYEL VE GERÇEKLEŞEN ÖZÜMSEME KAPASİTESİ ETKİLİ Mİ?

ÖZET

Bu çalışmanın amacı potansiyel ve gerçekleşen özümseme kapasiteleri ile maliyet üstünlüğü arasındaki ilişkinin incelenmesi olarak belirlenmiştir. Araştırma soruları Antalya'da faaliyet gösteren yeşil yıldız sertifikasına sahip beş yıldızlı otellerin kalite departman yöneticileri ile soru formları ve destekleyici görüşme formları aracılığıyla sorgulanmıştır. Araştırma kapsamında yeşil yıldız belgesine sahip otellerin seçilmesindeki gerekçe, son yıllarda konaklama sektöründe gözlemlenen çevreye duyarlı işletmecilik uygulamalarındaki artışın rekabet üstünlüğüne yansıyan olumlu sonuçlarıdır. Mevcut çalışmayı motive eden faktör literatürde otellerin çevreye duyarlı faaliyetleri ile ilgili bilginin edinilmesi, benimsemesi, dönüştürülmesi ve uygulanması olarak açıklanan özümseme kapasitesinin maliyet liderliği stratejisi üzerindeki etkilerini ortaya koyan sınırlı sayıda araştırmaya rastlanmış olmasıdır. Antalya'daki beş yıldızlı çevre dostu otel ile yapılan 74 anket ve kalite yöneticileriyle yapılan 9 yarı-yapılandırılmış görüşmenin (nicel ve nitel) bulguları otellerin çevreye duyarlı faaliyetlerinde potansiyel ve gerçekleşen özümseme kapasitelerinin operasyonel maliyetleri düşürdüğüne dair kanıtlar sunmuştur. Ayrıca bulgular gerçekleşen özümseme kapasitesinin, potansiyel özümseme kapasitesi ve maliyet üstünlüğü ilişkisinde aracı etkiye sahip olduğunu göstermiştir.

Anahtar Kelimeler: Potansiyel Özümseme Kapasitesi, Gerçekleşen Özümseme Kapasitesi, Maliyet Üstünlüğü, Otel İşletmeleri.

Appendix A. Surveys Measurement Items**A. Potential Capability****A.1. Knowledge Acquisition**

We attach importance to collect all kinds of information about ecology in our company

There is an interaction related to environmental activities between all departments in our company

The opinions and suggestions of the employees regarding environmental activities are taken into consideration

Recommendations regarding environmental activities of external stakeholders (such as customers, travel agencies, suppliers, NGOs) are taken into consideration

A.2. Knowledge Assimilation

In our company, meetings on environmental activities are held with our external stakeholders (customers, travel agents, suppliers, NGOs) at certain intervals

The relevant national legislation on environmental activities is meticulously analyzed in our company

All knowledge about environmental activities is shared between departments

In our company changing customer demands and competitive conditions regarding environmental activities are meticulously analyzed

We inform guests about the environmental activities and the measures taken in our company

B. Realized Capability**B.1. Knowledge Transformation**

In our company new knowledge on the existing knowledge of the ecology is built quickly

In our company new knowledge regarding ecology is aligned with strategic objectives

In our company the theoretical knowledge regarding ecology is updated frequently

In our company new knowledge regarding ecology is reported for use when necessary

In our company current knowledge regarding ecology is reviewed in the implementation phase of the strategies

B.2. Knowledge Exploitation

Knowledge about environmental activities is used in determining our strategic direction

In our company the pool knowledge is used to overcome the environmental problems

We have environmental policies and action plans currently in place

In our company new knowledge regarding ecology is implemented within our activities

Ecology based joint activities and collaborations are organized with the local government or other facilities in the region

We regularly participate in environmental protection organizations (associations, foundations, etc.)

C. Cost Advantage

Lower costs obtained by the use of recycled products

The use of green products (such as non-polluting, no harmful substances, products not harmful to human health) allows us cutting costs

Renewable energy use (solar panel) allows us cutting costs

Low costs of energy saving equipment in rooms

Low costs resulting from energy-efficient equipment in our offices (such as bulbs, automatic sensors, etc.)

Low costs resulting from water saving technologies (eg low flow toilet and shower heads, environmental labeled laundry and dishwashers)

Low costs obtainable by rainwater collection and use

The reuse of textile products (eg. towels, pillow cases, sheets) allows us cutting costs

The re-use of printed papers in our offices allows us cutting costs

Reducing costs by recycling wastes

Waste separation programs (batteries, paper, glass, plastics, oils) allows us cutting costs

Appendix B. The Interview Questions

1. Can you tell us about your environmental-friendly? How did you start these activities and for what reasons? Do you plan to continue your environmental-friendly activities? Why?

2. Are your internal and external stakeholders' proposals considered in your environmental activities? How do you manage this process?
3. Sharing information about environmental activities with internal and external stakeholders does it provide cost advantages? If so, how does it affect company' performance?
4. Do you cooperate and organize activities on environmental awareness by the local government? If so, how does it affect your performance?
5. What technologies do you benefit from in the last five years in your business? Do you think you have a cost advantage with the use of these technologies? Could you summarize?
6. Can you tell us about your institutional level strategies that you integrate with your environmental-friendly practices?

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