

Knowledge Management Processes in Thermal Hotels: An Application in Afyonkarahisar Province, Turkey

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Abstract: *This study aims to analyze knowledge management (KM) processes in thermal hotels in Afyonkarahisar province in Turkey. Within the scope of this research, the KM processes applied in thermal hotels have been determined through conducting questionnaire surveys. Descriptive analyses of hotel managers' views on KM processes were presented. Also, discriminant analysis was used to determine differences between participants' views based on their demographic characteristics. As a result of the study, it was found that thermal hotels highly apply KM processes. Knowledge creation is the most applied KM process among others. In addition, it was found that informal communication should be encouraged*

Keywords:

Knowledge Management, Thermal Hotels, Afyonkarahisar.

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Knowledge is the main determinant of transforming business techniques and technologies into a competitive tool. Since competitors cannot benchmark or copy possessed unique knowledge, this fact makes the knowledge significant (Tiwana, 2003: 72). Thus, knowledge and knowledge management (KM) is one of the most important asset in business, and one of the most researched subjects in academic literature.

KM is seen as an essential and important tool for companies in sustaining their existence and gaining competitive advantage (Martensson, 2000: 204; Schönström, 2005: 17; Sandhawalia and Dalcher, 2010: 313, Stapleton, 2003: 97) has been firstly coined by Dr. Karl Wiig in academic literature. It is described by American Productivity and Quality Center (APQC) as a systematic approach (integrating people, processes, technology, and content) to enable information and knowledge to be created and flow to the right people at the right time so that their work and decisions can add value to the mission of the organization (Leawitt, 2003). KM has also engendered many new concepts and categories in using knowledge to create value (Dalkir, 2005: xiii).

Nowadays, all companies gather information by interacting with their business environment; transform this information to the knowledge and run using this knowledge consonantly with their know-how, values, beliefs and internal rules (Davenport and Prusak, 2000: 52). This process, which is also named as KM processes naturally exists in organization (Shi, 2010: 12), expresses a structured coordination to effective management of knowledge (Gold, Malhotra, Segars, 2001:187) and is mainly related to how knowledge is created and used in organization (Nonaka and Takeuchi, 1995: 59). When the KM literature is reviewed, it is seen that KM processes have been categorized differently by many researchers (Alavi and Leidner, 1999; Liebowitz, 2001; Bouncken, 2002; Bryant, 2003; Holsapple, Jones and Singh, 2007; Fink and Ploder, 2011). As these categorizations are considered, KM processes can be classified as knowledge acquisition, knowledge creation, knowledge sharing, knowledge storage and documentation, knowledge use. These processes will be explained in detail in next section.

Contrary to its popularity in business management literature, it is seen that the number of studies on KM processes in hospitality industry is very limited. Thus, KM is a relatively new concept for hospitality management literature and much more detailed studies need to be conducted in order to understand the KM and KM processes in hospitality industry.

In this context, this study aims to draw attention to KM in hotels by evaluating KM processes in thermal hotels. Within the scope of this research, the KM processes applied in thermal hotels have been determined through conducting questionnaires. Percentage and frequency tables are used to show participants' demographic characteristics and see participants' views about KM processes. Finally, discriminant analyses refer differences between participants' views based on their demographic characteristics.

KM Processes in Hospitality Enterprises

Tourism as a knowledge intensive industry consists of complex and dynamic network structures (Baggio, 2006). Intangible, inseparable, perishable and heterogeneous characteristics of tourism product and its compound nature make knowledge important for tourism industry. Acquiring knowledge instantly and using it in production, consumption and operational activities are rarely important in other sectors as much as tourism industry (Poon, 1993). Knowledge plays vital role in tourism industry and industry cannot fulfill its functions completely without knowledge (O'Connor, 1999). Increasing and diversifying needs and expectations of tourism demand, increased competition and efficient use of resources make knowledge important in tourism, and knowledge sharing becomes core of tourism business (Pollack, 1995).

Hospitality enterprises are mainly service producers. For the achievement of final products, hospitality companies collaborate with a variety of service industries like travel agencies, tour operators, transporters, entertainment, shopping. Thus hospitality industry have knowledge-based or knowledge intensive service processes (Kahle, 2002). Moreover, the industry is knowledge-intensive as a result of the nature of service product, where the service delivery occurs as a result of interaction between customers and employees, and where it is required that employees are acknowledged about customers' needs in order to achieve customer satisfaction (Kahle, 2002; Kotler, Bowen and Makens, 1999; cited by Hallin and Marnburg, 2007:3). In addition, knowledge management is important for hotel chains which have to deliver an overall quality standard in geographically distributed hotels (Medlik, 1990: 153; cited by Bouncken, 2002: 27).

Possible application areas of knowledge management systems in hospitality and tourism are business planning (process of planning capacities, quality standards and prices of additional services), service operations (hotel facilities planning, event scheduling) quality

improvement (e.g. managing customer complaints) and reaction on emerging cases (Gronau, 2002). And, possible knowledge sources can be contents of files on a server, intranet pages, directory of business relevant persons, e-mail traffic that is guided to specialists for certain situations (e.g. for technical maintenance (Gronau, 2002). Bouncken (2002: 30) classifies this knowledge stated in sources as task-specific, task-related, transactive memory and guest-related knowledge for hotels. Hoteliers should always seek, use and value knowledge like professionals in other business sectors. Thus knowledge existing in hospitality enterprises should be managed in the scope of strategic manner with certain processes. Cooper (2006) classifies knowledge management processes in hotels as knowledge stocks and mapping, knowledge capturing, knowledge codifying, knowledge flow and knowledge transfer. And, Bouncken (2002) classifies those processes as knowledge identification, acquisition and development of knowledge, knowledge accumulation, retrieval and distribution, and knowledge controlling. On the other hand we classify KM processes, in accordance with general KM literature, as acquisition, creation, sharing, storage and documentation, and utilization of knowledge as mentioned earlier.

Knowledge Acquisition: Companies firstly try to identify knowledge that exists outside and inside of organization but cannot be detected/found, in the context of knowledge acquisition (Shi, 2010: 12; Isa, Abdullah, Hamzah, ArsHad, 2008: 105, Bratianu, 2011: 6, Al-Busaidi, 2011: 402, Sun, 2010: 508). In this stage, the required knowledge generally has information characteristics. Companies capture required information in two ways, from inside and outside of the organization (Wiig, 1999: 2). First, they capture knowledge existing in the organization by knowledge workers. Second, they outsource or purchase required information existing outside of the organization (Bergeron, 2003: 95). Companies capture required information by means of their customers, suppliers, competitors, relation with strategic alliances (Fink and Ploder, 2011: 52), books, software, academic publications, research reports and video conferences (Bratianu, 2011: 6). Besides companies utilize structured interviews, talk loud analysis, protocols, questionnaires, observations and simulations to capture the required information (Dalkir, 2005: 81). Bouncken (2002) states that in hospitality enterprises knowledge acquisition concentrates on external knowledge retrieval from customers, external experts, tourist offices and often enhances the assimilation of previously unnoticed information. The author also emphasizes that knowledge develops (captures) via service research, service practice and distribution and cooperation of knowledge among employees in hotels.

Knowledge Creation: Knowledge creation is getting new and useful knowledge from the information that is captured from the sources existing inside and outside of the organization. Nonaka and Takeuchi (1995: 59-73) describe knowledge creation as a process of socialization, externalization, combination and internalization. According to researchers, implicit/tacit knowledge creation is a spiral process starting at the individual level and moving up through expanding communities of interaction that crosses sectional, departmental, divisional and organizational boundaries (Nonaka and Takeuchi, 1995: 72). On the other hand, knowledge which is created in the organization should be shared before and after knowledge creation processes in order to use it efficiently at an individual and organizational level.

Knowledge Sharing: Knowledge sharing can be described as transferring or disseminating of knowledge from a worker, group or organization to another (Lee, 2001: 324). Also, it can be described as interaction between explicit and implicit knowledge (Lee, Gillespie, Mann and Wearing: 2010: 474). In a broader perspective, knowledge sharing is composed of the activities that involve gathering, absorbing, and/or transferring product and/or service information between organizations and customers, alliance partners, and/or employees (Chen and Barnes, 2006). To provide effective knowledge sharing in organizations; motivation and encouragement systems and an open organizational structure should be designed to support knowledge flow, technological support should be provided such as intranet and internet (Cook and Cook, 2004: 314; Riege, 2005: 29). Physical areas that enable informal communication such as talking rooms, water cooler/teapot and cafeteria areas should be designed and finally some activities that enable face to face communication should be organized such as meetings (Davenport and Prusak, 2000: 89-95). Contrary to this fact, high personnel turnover and rotating staff limit the knowledge sharing in hotels. Thus, hotels' management should concentrate on transforming tacit knowledge to explicit knowledge.

Knowledge Storage and Documentation: This process basically aims to make organizational knowledge accessible for everyone. Knowledge storage and documentation process identifies which knowledge will be stored in the organization (Hattendorf, 2002: 65), and includes codification and storing of knowledge captured from organization members and external sources (Alavi and Leidner, 1999).

Knowledge Utilization: This process basically consists of carrying out activities to ensure that the knowledge is applied productively for its benefits (Fink and Ploder, 2011: 52). Organizational knowledge utilization

can be categorized as knowledge use at micro and macro level. Management of knowledge in micro level is prior and essential in organizational knowledge utilization to increase organizational performance and profitability. On the other hand, it is intended to use explicit knowledge disclosed by the organization to its environment as a part of marketing strategy or as a survival tool in a competitive market (Reychav and Weisberg, 2006: 225). In knowledge utilization processes, companies gain competitive advantage and create value by combining knowledge with products and services, applying it within new projects (Kasvi, Vartiainen and Hailikari, 2003: 572), and using this knowledge in decision making, policy making, problem solving and developing new products to meet human/enterprise needs (Salo, 2009; Al-Busaidi, 2011: 403).

Knowledge Management in Thermal Hotels and Afyonkarahisar as a Thermal Tourism Destination

Utilization of thermal water resources for health purposes is one of the oldest travel motivations dating back to ancient Egypt, Greek and Roman periods (Özer, 1991). Today, the effort for the utilization of natural thermal resources with support of the modern medicine, has caused the emergence of thermal tourism which is defined as a type of tourism which consists of various types of utilization methods such as "thermo-mineral water bath, drinking, inhalation, mud bath, cure (treatment) applications which combine supporting treatment methods as the climatic cure, physical therapy, rehabilitation, exercise, psychotherapy and diet as well as the use of thermal waters for entertainment and recreational purposes (Kültürve Turizm Bakanlığı, 2013). The realization of thermal tourism activities in an area is only possible with the existence of thermal facilities which includes spas where "mud, under-ground, sea and climate related natural healing elements are used as treatment instruments, drinking cure centres and climatic cure centres and recreational and treatment units in these locations (ResmiGazete, 2005).

The necessity to meet the treatment and recreational demands together in thermal tourism, distinguishes management and organizational structure of thermal tourism enterprises from others (Özbek, 1991). Service delivery in the same place for healthy and patient guests in thermal enterprises, having cure units in their organizational structure, application of different programs (physical therapy, rehabilitation, diet etc.) to patients within the scope of cure applications and need for certain period of time (21 days in average) for the completion of curing practises (Arasil, 1991) and necessity to enrich recreational areas require these enterprises to operate in a

complex structure and system (Özbek, 1991). This structure makes the knowledge important in thermal hotel enterprises to be able to manage the activities efficiently and effectively.

Thermal hotels are the enterprises which produce hospitality services same as other accommodation enterprises. Therefore, the acquisition, creation, sharing, storage, and utilization of knowledge in all areas falling within the scope hospitality enterprises' operations also apply to thermal hotel enterprises. For example, collection of knowledge from health institutions in target markets on frequently observed common diseases and health problems which can be treated by thermal treatment in those areas or obtaining knowledge related to competitors and their operations refers to the acquisition of knowledge management processes. The use of that knowledge for the planning and execution of their activities and development of new treatment methods and services is knowledge creation. The delivery of knowledge about meals arranged by the specialist doctor in the cure centre to the kitchen for preparation and food and beverage departments for its service can be given an example to knowledge flow and share. The storage of knowledge related to treatment practices to use it on the patients who indicate the similar health problems in future in databases/warehouses, and keeping information on weekly, monthly and annual occupancy rates in the front office is knowledge storage / documentation process. The use of acquired, created, shared and stored knowledge in a thermal hotel for the determination of future management strategies can be expressed as an example of the knowledge use.

Afyonkarahisar, an Aegean Province, is located in Phrygian Region which is planned to be developed as thermal tourism destination together with Ankara, Eskisehir, Kütahya and Uşak provinces in the Turkey's tourism strategy for 2023 (Kültürve Turizm Bakanlığı, 2013a). The basic attraction of the province, in terms of tourism is the natural thermal water resources located in its four regions; Ömer-Gecek (Centre), Hüdai (Sandıklı), Heybeli (Bolvadin) and Gazlıgöl (İhsaniye). All of these four thermal tourism regions of Afyonkarahisar have been announced as Thermal Tourism Region by the Ministry of Culture and Tourism. According to the 2012 statistics of Ministry of Culture and Tourism, 14 Ministry registered operation licensed hospitality enterprises operate in Afyonkarahisar. The bed capacity is 4,925 in these enterprises. There are also 15 Ministry registered investment licensed hospitality enterprises with a 9,100 bed capacity. The hospitality supra-structure of Afyonkarahisar is largely formed by the hospitality enterprises established for thermal tourism purposes. The most quality enterprises are especially located in Ömer-

Gecek in city centre and Sandıklı- Hüdai (The most quality enterprises are especially located in Ömer-Gecek in city centre and Sandıklı- Hüdai regions). There are 5 five-star hospitality enterprises with a 3,204 bed capacity in Ömer-Gecek thermal tourism region. 1,140 beds are available in Sandıklı-Hüdai in two five-star hospitality enterprises. The share of these two regions in total Ministry registered bed capacity reaches to as high as 88%. While mostly a condominium supra-structure is observed in Gazlıgöl (While mostly a condominium supra-structure is observed in Gazlıgöl thermal tourism region), Heybeli thermal tourism region has small thermal enterprises which are operated by Bolvadin District Municipality. According to 2012 statistics of Ministry of Culture and Tourism, a total of 264,841 visitors of whom 7,720 are foreign and 257,121 are Turkish citizens were accommodated in Afyonkarahisar (Afyonkarahisar İl KültürveTurizm Müdürlüğü, 2013).

Methodology

In this descriptive study, it is primarily aimed to determine whether thermal hotels use KM and if it is to what degree they use KM processes in the scope of strategic management. Other basic objective of the study is to assign, on the condition that KM processes in thermal hotels differentiate according to some demographic variables of middle and senior hotel managers. It is also assumed that results of the survey will contribute to the related literature and hotel managers or owners who want to practice KM in his/her hotel in the context of strategic management to gain competitive advantage especially in the long term.

A quantitative research method was preferred to collect required data in this study. Thus, questionnaire method which is mostly preferred of quantitative research method was used. The questionnaire basically consists of two main sections. Some close-ended questions such as gender, age, department, and years of working experience in the hotel were asked to hotel managers in the first section. A 5-point Likert Scale consisting of 32 items about KM processes took part in the second section of the questionnaire. With these items, it is aimed to gather required data related to acquisition, creation, sharing, storage and documentation, and utilization of knowledge. KM process statements were adapted from Shi's (2010) PhD dissertation on KM.

The questionnaire was conducted starting from 10 February 2013 to 25 March 2013 in seven 5 star hotels located in Afyonkarahisar. A total of 67middle and senior managers were asked to complete the questionnaire

form vis-à-vis. PASW 18 statistical package programme was used to analyze the gathered data.

Data Analyses

For the purpose of the study, reliability analyses were performed in order to detect the validity of questionnaire data for the descriptive and discriminant analyses at beginning of the data analyze phase. As shown in Table 1, Cronbach Alpha defining reliability coefficient was found 0.955 for the 32 items of the questionnaire. Furthermore, Cronbach Alpha coefficient was found over 0.70 in each sub-factors of the KM scale. Questionnaire where the Cronbach Alpha coefficient is over 0.70 is often accepted as reliable in social sciences (Lehman et al. 2005). Thus, the data collected via questionnaire in this study was accepted reliable for the descriptive and discriminant analyses.

Table 1. Reliability Test Results

	Cronbach Alpha	n
KM scale (32 items)	0.955	32
KM scale sub-factors		
<i>a) Knowledge acquisition</i>	<i>0.853</i>	<i>6</i>
<i>b) Knowledge creation</i>	<i>0.834</i>	<i>5</i>
<i>c) Knowledge sharing</i>	<i>0.702</i>	<i>7</i>
<i>d) Knowledge storage and documentation</i>	<i>0.907</i>	<i>7</i>
<i>e) Knowledge utilization</i>	<i>0.871</i>	<i>7</i>

Just after the reliability analyze some demographic variables of middle and senior managers of the thermal hotels were analysed by descriptive analysis. As shown in Table 2, a great majority of the participants are men (65.7%), and 39 participants are married (58.2%) while 41.8% of the population is single. More than half of 67 participants with 56.7% namely 38 managers are between the ages of 25 and 34. Other major group involves the participants whose ages are between 35 and 44. According to results in Table 2, 34.3% of the participants have bachelor degree, while 21 participants (31.3%) graduated from high school, and 15 participants (22.4) have associate's degree. So, it can be said that a great majority of the middle and senior managers of thermal hotels in Afyonkarahisar are well educated with the percent of 57.7. Thus, we assumed that most of the middle and senior thermal hotel managers have information about KM

Ahmet Baytok, Hasan Hüseyin Soybali, Ozcan Zorlu

and they know how to use knowledge in accordance with a strategic perspective especially to gain competitive advantage in long term.

Table 2. Results of Some Demographic Variables of the Participants

Variable	Sub-dimension	Frequency (n)	Percentage (%)	Cumulative Percentage (%)
Gender	<i>Male</i>	44	65.7	65.7
	<i>Female</i>	23	34.3	100
Age group	<i>24 and younger ages</i>	7	10.4	10.4
	<i>25 to 34 ages</i>	38	56.7	67.1
	<i>35 to 44 ages</i>	19	28.4	95.5
	<i>45 to 54 ages</i>	3	4.5	100
Marital status	<i>Married</i>	39	58.2	58.2
	<i>Single</i>	28	41.8	100
Education	<i>Primary education</i>	6	9.0	9.0
	<i>High school graduated</i>	21	31.3	40.3
	<i>Associate's degree</i>	15	22.4	62.7
	<i>Bachelor degree</i>	23	34.3	97.0
	<i>Master/PhD degree</i>	2	3.0	100
Department	<i>Food and Beverage</i>	17	25.4	25.4
	<i>Front Office</i>	12	17.9	43.3
	<i>Housekeeping</i>	7	10.4	53.7
	<i>Spa-Wellness</i>	7	10.4	64.1
	<i>Accounting</i>	6	9.0	73.1
	<i>Sales Marketing</i>	5	7.5	80.6
	<i>Senior Management</i>	3	4.5	85.1
	<i>Public Relations</i>	3	4.5	89.6
	<i>Animation</i>	3	4.5	94.1
	<i>Technique Services</i>	2	3.0	97.1
	<i>Human Resources</i>	1	1.5	98.6

	<i>Missing Value</i>	1	1.5	100
Year of working experience in hotel	<i>Less than 1 year</i>	14	20,9	20.9
	<i>1-5 years</i>	35	52,2	73.1
	<i>6-10 years</i>	12	17,9	91.0
	<i>11 years and above</i>	5	7,5	98.5
	<i>Missing Value</i>	1	1,5	100
Total (N)67	100 %			

The descriptive analyze results indicate that 25.4% of the participants are working at Food and Beverage departments of the thermal hotels. Also, another major group consists of Front Office department chiefs/managers with the percentage of 17.9. Departments of the participants ranked after Front Office ranked as Housekeeping (10.4%), Spa-Wellness (10.4%), Accounting (9.0%), Sales and Marketing (7.5%), Senior Management (4.5%), Public Relations (4.5%), Animation (4.5%), and others (4.5%) including Technique Service and Human Resources. Thus, results of this study are largely depend on F&B, Front Office, Housekeeping and Spa-Wellness department chiefs/managers' answers. Lastly, results show that a great majority of the participants have been working in the hotel from 1 year to 5 years (52.2%, n: 35). The percentage of middle and senior managers working for the less than one year is 20.9 with 14 participants.

Degree of KM Use in Hotels

In this section, the degree of KM processes used in thermal hotels was evaluated based on participants' views with descriptive analysis. Means and standard deviations were calculated to determine participants' response rates to the items. Participants' views about KM processes are presented in Table 3. Due to the results of all items above 3.00 (No idea) mean level, it can be assumed that thermal hotels realize all required transactions in the scope of KM processes.

Knowledge Management Processes in Thermal Hotels: An Application in
Afyonkarahisar Province, Turkey

Table 3. Descriptive Analysis Results of Knowledge Management Processes

<i>Sub-dimensions</i>	Items	\bar{x}	s.s
Knowledge Acquisition	Our hotel frequently seeks new knowledge outside the organization.		
	Our staff regularly gets new knowledge from external sources.	3.88	0.930
	Our hotel systematically analyses customer needs.	4.21	0.946
	Our hotel regularly captures knowledge of our competitors.	4.04	0.976
	Our hotel captures knowledge obtained from public research institutions including universities and etc.	3.62	1.064
	Our hotel regularly captures knowledge obtained from industrial associations, competitors, clients and suppliers.	4.19	0.821
Knowledge Creation	Our hotel frequently comes up with new ideas about our products and/or services.	4.26	0.966
	Our hotel frequently comes up with new ideas about our working methods and processes.	4.12	0.976
	If a traditional method is not effective anymore, our hotel develops a new method.	3.94	1.127
	Our hotel develops new ideas and innovations in collaboration between different departments.	3.82	1.066
	Our hotel develops new ideas and innovations in collaboration with external partners such as suppliers and clients.	4.01	0.913
Knowledge Sharing	In our hotel information and knowledge are actively shared within the departments.	3.94	1.149
	Different departments actively share information and knowledge among each other.	3.88	1.122
	Employees and managers exchange a lot of information and knowledge.	3.88	1.038
	Our hotel shares a lot of knowledge and information with strategic partners.	3.82	0.893
	Our hotel shares knowledge with competitors (through industrial associations, directly, etc.).	3.61	0.936
	In our hotel, previously made solutions and documents are easily available.	4.03	1.023
	In our hotel, much knowledge is distributed in informal ways (in the corridors, break rooms, etc.).	2.42	1.416
Knowledge Storage and Documentation	Our hotel does a lot of work to refine, organize and store the knowledge collected.	4.05	0.999
	The information sources, manuals and databases at our hotel's disposal are up-to-date.	3.99	0.929
	Hotel staff is systematically informed of changes in procedures, instructions and regulations.	4.09	1.011
	Our hotel has much information in the form of documents, databases.	3.94	0.919
	Our hotel possesses many core business processes and services.	3.98	0.969
	We are used to documenting in writing the things that are learnt in practice.	3.98	1.088
	We make sure that the most important experiences gained are documented.	3.96	0.991
Knowledge Utilization	Our hotel uses existing know-how in a creative manner for new applications.	3.92	0.966
	Our hotel is able to use the employees' knowledge in various business activities.	3.72	1.042
	Our hotel responds to changes in our customers' needs.	4.32	0.880
	Our hotel achieved major process improvements as a result of analyzing and applying knowledge from external parties.	3.96	1.134
	Different departments of our hotel frequently apply knowledge that was	3.75	1.146

	shared by other departments.		
	Many new ideas that our hotel develops are brought into reality.	3.70	1.115
	Our hotel's databases and documented knowledge are frequently used by employees.	3.70	1.243

\bar{x} : Mean, s.s: Standard Deviation.

Results shown in Table 3 indicate that, analyzing of customers' needs systematically (\bar{x} : 4.21 and s.s: 0.946) is the most applied knowledge acquisition process. Capturing knowledge from industrial associations, competitors, clients and suppliers (\bar{x} : 4.19 and s.s: 0.821) is the second highest knowledge acquisition process among other acquisition activities. This activity followed by seeking new knowledge outside the organization (\bar{x} : 4.15 and s.s: 0.949). On the other hand, capturing knowledge obtained from public research institutions including universities is the least realized process when it is compared to the others.

Participants' views about knowledge creation process refers that respondent thermal hotels effectively creates new knowledge in different ways. Coming up with new ideas about hotel products and services (\bar{x} : 4.26 and s.s: 0.966) is the most applied method in knowledge creation process among these ways. Coming up with new ideas about our working methods and processes (\bar{x} : 4.12 and s.s: 0.976) is the second most applied transaction. Thus, we can assume that thermal hotels operating in Afyonkarahisar are considered developing new ideas important. Also, as it is seen in knowledge creation sub-dimension, thermal hotels develop new methods when a classic method is not effective anymore (\bar{x} : 3.94 and s.s: 1.127), and also, thermal hotels develop new ideas in collaboration between departments (\bar{x} : 3.82 and s.s: 1.066). But these two methods are relatively less applied among others in knowledge creation process.

Participants' views about knowledge sharing process indicate that thermal hotels share the knowledge effectively, except for distributing knowledge in informal ways. With respect to the results in knowledge sharing sub-dimension, availability of previous solutions and documents (\bar{x} : 4.03 and s.s: 1.023) is the most important part of the knowledge sharing in thermal hotels. Sharing knowledge effectively within departments is the second most important way of knowledge sharing experiences (\bar{x} : 3.94 and s.s: 1.149) in respondent hotels. As mentioned before, the least applied way to share knowledge in thermal hotels among the others is the distribution of necessary knowledge in informal ways (\bar{x} : 2.42 and s.s: 1.416). This fact reflects two close-related and important situations in thermal hotels. First, thermal hotels generally use formal ways in communication and sharing knowledge. Second, by preferring formal ways especially in

communication, thermal hotels play an inhibiting role in sharing knowledge.

Also, from the results about knowledge storage and documentation process, it can be seen that storage and documentation of knowledge is an important phase for KM in thermal hotels. Thus, all items regarding to storage and documentation have a mean level upper than 3.90. Informing hotel staff about changes in procedures, instructions and regulations (\bar{x} : 4.09 and s.s: 1.011) is the most applied method in knowledge storage and documentation. This method is followed by refining, organizing and storing of collected data (\bar{x} : 4.05 and s.s: 0.999), and updating information sources, manuals and databases (\bar{x} : 3.99 and s.s: 0.929). Also, regarding the results, thermal hotels give an importance to possess core business processes and services (\bar{x} : 3.98 and s.s: 1.088), documenting in writing (\bar{x} : 3.98 and s.s: 0.969) and documentation of important experiences (\bar{x} : 3.96 and s.s: 0.991).

At the final stage of descriptive analyses about KM process, knowledge utilization degree in thermal hotels is evaluated using participants' views. The results of this sub-dimension reflect that thermal hotels use knowledge in order to rapidly changing customers' needs (\bar{x} : 4.32 and s.s: 0.880). When we consider the achievement of a hotel establishment basically depending on satisfying customer, using knowledge for better services becomes more and more important. Thus, we can clearly state that thermal hotels in Afyonkarahisar are aware of the importance of KM. Regarding results, achieving major process developments by gathering and analyzing knowledge from external parties (\bar{x} : 3.96 and s.s: 1.134) is the second highest way in knowledge utilization. Other important using areas of knowledge in thermal hotels are developing new applications via know-how (\bar{x} : 3.92 and s.s: 0.966), application of shared knowledge in different departments (\bar{x} : 3.75 and s.s: 1.146), using employees' knowledge in business activities (\bar{x} : 3.72 and s.s: 1.042).

If we summarize the descriptive results about KM, thermal hotels operating in Afyonkarahisar give importance to KM, and as a result KM processes are highly applied in these hotels. When we consider sub-processes in KM processes, knowledge creation (\bar{x} : 4.03) is the most applied sub-process among the others. Knowledge acquisition (\bar{x} : 4.02) and knowledge storage and documentation (\bar{x} : 4.00), knowledge use (\bar{x} : 3.85) and knowledge sharing (\bar{x} : 3.65) sub-processes follow knowledge creation sub-process. Thus, it can be assumed that in thermal hotels, KM

Ahmet Baytok, Hasan Hüseyin Soybali, Ozcan Zorlu

is an essential part of providing service quality and gaining competitive advantage in the scope of strategic management.

Discriminant Analyses of KM Processes

At this last phase of data analyses, to determine whether KM processes vary regarding to different thermal hotels and some demographic variables of participants. In this context, firstly a Kruskal-Wallis H test performed in order to determine whether KM process differs according to respondent hotels.

Kruskal-Wallis H test results presented in Table 4 indicate that KM processes differ in the context of thermal hotels ($p < 0.05$ and $p: 0.01$). So, it can be figured out that each thermal hotel operating in Afyonkarahisar is applying its own KM project. Then, it can be assumed that each hotel owns some core KM steps which vary their KM project from other thermal hotels in Afyonkarahisar. And, thus we can assume that KM projects are considered as a core competence by thermal hotels.

Table 4. Kruskal-Wallis H Test Results Regarding to Thermal Hotels

	Chi-Square	df	Asymp. Sig.
KM process in general	19.875	4	0.001*
Knowledge acquisition	13.762	4	0.008*
Knowledge creation	14.050	4	0.007*
Knowledge sharing	10.205	4	0.037*
Knowledge storage and documentation	19.423	4	0.001*
Knowledge utilization	24.436	4	0.000*

*: Correlation is important at 0.05 significant levels.

After determining KM processes which differ regarding to thermal hotels, Manny-Whitney U test and Kruskal-Wallis H tests were performed in order to identify whether KM processes differ regarding to participants' demographic variables. In this context, firstly Manny Whitney U tests were performed to see whether KM processes differs regarding to gender of the participants. Second, Kruskal-Wallis H tests were performed in order to determine whether KM processes differ in terms of different age group, education level, working department and year of working experience of participants. In all tests Asymp. Sig. which refers significant level is higher than 0.05 for general KM processes and its sub-dimensions. So, KM processes in thermal hotels do not significantly differ regarding to gender, age group, education level, working department and year of working experience of who took part in the study.

According to results of discriminant analysis presented in earlier paragraph, it is assumed that KM processes are not related with demographic variables of middle and senior managers in thermal hotels. When this fact has been taken into consideration within the scope of strategic management, it is seen that middle and senior managers apply similar KM processes in thermal hotels. Thus, thermal hotels apply KM processes in the scope of strategic management as their core competence, but these projects do not depend on managers' demographic variables.

Conclusion

In today's intensive competitive environment, thermal hotels improve their services with new strategic management tools in a creative manner. As one of these management tools, KM is gaining more importance among tourism industry and among thermal hotels as an important contributor to tourism industry. On the other hand, since the KM applications are relatively new in thermal hotels, there are still many problems in application KM processes. Furthermore, some hoteliers still do not have enough knowledge about KM processes. Thus, with this study evaluating KM processes in thermal hotels, it is aimed to provide a basic resource to the hoteliers and the related literature.

According to the results of this study, thermal hotels operating in Afyonkarahisar give importance to KM. As a result, KM processes are highly applied in respondent hotels. Among them, knowledge creation is the most applied KM process and knowledge acquisition, knowledge storage and documentation, knowledge utilization and knowledge sharing follows knowledge creation process. On the other hand, KM projects differ according to each thermal hotel. So, it can be concluded that each thermal hotel has its own specific methods or steps in KM processes. Also, results show that KM projects are independent from demographic characteristics of hotel managers. Thermal hotels should consider some suggestions given below in order to gain more benefit from KM processes.

First of all, all respondent thermal hotels should be in collaboration with academic institutions in the scope of gathering external knowledge and making this knowledge usable in KM. For example, thermal hospitality enterprises can obtain knowledge on new treatment methods from universities and use them in their curing units. In addition, thermal hospitality enterprises can develop joint training programs with universities to improve ability and qualifications of their employees. Second, thermal hotels should develop much more processes that support

knowledge sharing among departments. As well as formal knowledge flow, development of technology infrastructure which enables the enterprises to provide an electronic platform (intranet, e-mail etc.) to exchange information between employees can be encouraged. For example, the knowledge on diet programs prepared by the specialists in cure centers can be transferred to kitchen, service and front-office departments electronically. Electronic knowledge databases which provide access to all essential information for the departments can be formed. Third, knowledge sharing processes should be reconsidered in the hotels. In this context infrastructures required by new technologies can be formed to accelerate the flow of knowledge among departments. Fourth, effective using of knowledge databases should be encouraged among employees. The level of authorization of all staff can be increase to obtain all the necessary knowledge from the automation systems used in thermal hotel enterprises. For example, a cure centre employee can be authorized to get knowledge related to other departments from the joint databases. Fifth, informal communication should be supported to promote transforming of tacit knowledge to explicit knowledge. In this context, especially during breaks, the practices can be promoted to share the knowledge related to employees' works. For instance, instead of unnecessary conversations like gossiping during the break, employees can be encouraged to be with knowledge facilitator in managerial position and share the knowledge. During the working hours, various social activities which enable employees to come together and exchange knowledge can be planned. In the process of socialization, asking newly recruited employees to work with the experienced employees in a master-apprentice relationship for a certain period of time speeds up the process of socialization as well as transfer of tacit knowledge into explicit knowledge can be possible through with working with experienced employees and new employees together. Sixth, thermal hotels should benefit more from experiences and expertise of employees. Empowerment practices and practices to allow employees to use their initiative and take more responsibility can be realized. And at last, in KM process, applying of developed ideas can improve knowledge sharing and motivation and satisfaction of employees.

Application of this research in a limited area such as seven thermal hotels in Afyonkarahisar is one of limitations of this study. Also, lack of quantitative researches about KM processes in tourism industry makes it difficult to compare the results of this study with other studies. Finally, to understand KM concept in hospitality industry, more detailed studies should be conducted and results of those studies should be compared with this study. For instance, similar studies should be conducted in different regions and in different hospitality enterprises. Relation between

knowledge management and innovation and other related subjects must be analyzed. Information technologies and its impact on knowledge management in hotels should be investigated with future studies.

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