Knowledge Management in Hospitality and Tourism Industry: A KM Research Perspective

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Abstract
Nowadays, the business landscape is changing rapidly and the competitive environment is no longer predictable. Survival and success depend entirely on the organization's ability to adjust to the dynamics of the business environment by making effective decision-making and proper utilization of skills and knowledge of employees. These are recent developments that represent the recognition of knowledge as a key competitive tool for the hospitality and tourism sector because need to upgrade their customer service to a much higher plane in order to survive in this competitive environment. Tourism, as one of the world's major economic sectors will ultimately be required to adapt to these changes. But, hospitality and tourism industry has been slow in adopting KM approach. Therefore, suggestion if hospitality and tourism sector as an activity-based service sector that information and knowledge are fundamental want to remain competitive in this changing era, the adoption of a knowledge management approach will be required. This paper presents an overview of the relatively new concept of knowledge management and the issues in applying such an approach to a sector such as hospitality and tourism.

Keywords: Knowledge, Knowledge Management, Hospitality and Tourism Industry, Review.

1. Introduction
The generation and use of new knowledge to feed innovation and product development is critical for the competitiveness of both tourism destinations and enterprises. While the pivotal role of knowledge as a competitive tool has long been recognized, the emergence of knowledge management as an academic field is much more recent, dating from the 80s. As a competitive tool, the essentials of the process involve identifying relevant knowledge and capturing it, transferring and sharing it, and ensuring that organizations are engineered to optimize flows and to manage them efficiently. This demands an open decentralized environment where individuals are empowered to view knowledge as a resource to be shared and not hoarded. The knowledge of the employees who are able when using it generates new ideas is fundamental for gaining competitive advantage for the enterprise. Knowledge management plays an important part in tourism, as well (Cooper, 2006). However, tourism has been slow in adopting this approach (Stamboulis & Skayannis, 2003). The reasons for this delay include:

1. The poor connection between the industry and the academic research (Stamboulis & Skayannis, 2003). Unlike some primary industries, in hospitality and tourism the links between businesses and researchers are neither close nor formalized. Faulkner, Pearce and Shaw (1994) note that transferring knowledge to hospitality and tourism is one of the most challenging issues for researchers.

2. The hostile-adoption environment (Cooper, 2006). This is especially characteristic of vocational businesses and small businesses, since the application of KM demands a large amount of time and money.

3. No clear applicability for hospitality and tourism service and inter-organizational perspectives (Grizelj, 2003). Since the concepts of KM are developed largely from a manufactured and multinational perspective (Nonaka & Takeuchi, 1995), it has failed to take many aspects of hospitality and tourism services into account. Grizelj (2003) points out that KM concept do not bring up the hospitality and tourism issues based on networks and lack an inter-organizational perspective.

In order to remain competitive, hospitality and tourism companies must adopt the KM approach (Ruhanen & Cooper, 2004). As customers become more experienced at finding the best deals for hotels, restaurants, travel agencies, and tourist destinations, the hospitality and tourism organizations face increasingly intense worldwide
competition. Considering the severe competition and the nature of the industry, employees and managers have to acquire more knowledge, in order to consistently provide the best deals and service to customers. What is more, customers’ preferences can be various and changeable, requiring employees and managers to understand the changes and continue to provide the best experience (Hallin & Marnburg, 2008). This paper argues that the growing literature and practice of knowledge management provides new perspectives and techniques to address the challenge. This paper argues that for this approach to be applied to tourism, and particularly destinations, the traditional knowledge management focus on the single organization will need to be changed. The term tourism in this context applies to both public and private sector organizations, and to their macro-level articulation at destinations.

2. Knowledge Management

Knowledge has been increasingly recognized as the most important and valuable asset in organizations and as a key differentiating factor in business (Stewart et al., 2000). Many researchers have claimed the knowledge asset has an enabling role to play in the formulation of successful strategies and achieving the organizational overall objectives (Snyman and Kruger, 2004; Maier and Remus, 2002). Knowledge Management (KM) term first presented by Karl Wiig in 1986, propose that the foundation of Knowledge Management is comprised of the way knowledge is created, used in problem solving and decision making, and manifested cognitively as well as in culture, technology, and procedures (Wiig, 1995). Davenport & Prusak (2000) explain that KM is "managing the corporation's knowledge through a systematic and organized specified process for acquiring, organizing, sustaining, applying, sharing and renewing both the tacit and explicit knowledge of employees to enhance organizational performance and create value". Beckman (1999) argued that knowledge management concerns the formalization of and access to experience, knowledge, and expertise that create new capabilities, enable superior performance, encourage innovation, and enhance customer value. Bhatt (2001), on the other hand, state that KM is a process of knowledge creation, validation, presentation, distribution, and application. Mishra (2009) brings comprehensive perspective to the field by describing KM as deliberate and systematic coordination of people, technology, processes, and organizational structure within an organization in order to add value through reuse and innovation. Researchers multiple and diverse definitions of knowledge management have been proposed in the literature. Goswami (2008) explained that the objective of knowledge management is to capture tacit knowledge of different stakeholders of the organization as customers, shareholders, employees, suppliers etc. and make it explicit so that other employees can take advantage of it. Such sharing of information will enable improved and quicker decision making and benefit the organization. The reason for different and various definitions about knowledge management is that some definitions focus on knowledge management processes and some of consider to the aim. Essentially KM is a process by which intellectual property (IP) and research outcomes are transformed into capabilities to assist enterprises to act as intelligently as possible to secure long-term viability and success (Wiig, 1997). In an organisational context, KM might encompass: customer-focused knowledge; intellectual asset management; innovation and knowledge creation; and most importantly; use research to understand the processes and practices for the generation, identification, assimilation and distribution of knowledge (Shariq, 1997). Such investigations will allow organizations to use knowledge and skills to satisfy customers and exploit market opportunities both domestically and internationally (Coordination Committee on Science and Technology, 1998). By adopting a KM approach, it is suggested that, organisations will increase their opportunity to become more profitable, efficient and competitive; operate more intelligently in the market place; and create learning, networked organizations (Beijerse, 1999).

Sveiby (2001) divides the development of the literature into three phases. As Tuomi (2002), he suggests that the early phase, from the mid-60s and onwards, was dominated by information technology with focus on enhancing productivity by controlling the rapid growth of information volume.

In the mid-to late-1980s, there was a new shift from the production- to the market-driven society (Cooper, 2006; Sveiby, 2001). It was during this second phase that customers became increasingly discriminating and began requiring products and services that would provide them with the best possible advantages, thus making them more successful in their own pursuits (Wiig, 1997). Competition among firms about which could provide the best services and products based on knowledge became a reality, and data warehousing became the theme of the day. In 1989, the Sloan Management Review published its first KM related article, and the same year, several management consulting firms started offering services to clients to tap knowledge pools (Wiig, 1997). According to Sveiby (2001), it was in this second phase that the view on intellectual capital was brought about and that organizations could increase their competitive advantage through tapping knowledge stocks that had not previously been considered. The third phase of the KM literature started emerging in the mid-to late-1990s and continued into the 21st century.
In his book *Post-Capitalist Society* (1993), Drucker (1993) claimed that the Western World was entering into what he denoted as the knowledge society in which the basic economic resource would be knowledge and no longer capital, natural resources or labor. Drucker emphasized that organizations have to be prepared to abandon knowledge that has become outdated and learn to create new knowledge through: (1) continuing improvement of every activity; (2) development of new applications from its own successes; and (3) continuous innovation as an organized process. This period has the most to offer the tourism (Cooper, 2006) and hospitality industry. As the Information Age moves into the knowledge economy, knowledge has become an essential resource for developing competitive advantage based on the production, distribution and use of information.

Knowledge can be classified into two:

**Explicit knowledge:** It is the knowledge that is collected, stored, distributed and shared primarily as electronic or paper documents. It is simply the knowledge acquired through training and education.

**Tacit knowledge:** This involves special productive knowledge and skills possessed by individual. It also includes cognitive skills such as belief, images, intuition and mental models as well as technical skills, processes and some of consider to the aim.
3. The Knowledge Management Processes

Table 1. The most significant knowledge management processes

<table>
<thead>
<tr>
<th>Source / process</th>
<th>Creation &amp; acquisition</th>
<th>Identification &amp; Selection</th>
<th>Save and organize</th>
<th>Refinement &amp; processing</th>
<th>Transfer &amp; sharing</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alavi &amp; Leidner (2001)</td>
<td>*</td>
<td></td>
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<td>*</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Shih et al (2001)</td>
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<tr>
<td>Allameh et al (2011)</td>
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<tr>
<td>Davenport (1998)</td>
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<td>Ward &amp; Aurum (2004)</td>
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<td>Hackett (2000)</td>
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<td>Herder et al. (2003)</td>
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<tr>
<td>Chang &amp; Chuang (2011)</td>
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<tr>
<td>King et al (2008)</td>
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<td>Wiig (2002)</td>
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<tr>
<td>Marr &amp; Spender (2004)</td>
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<td>Jashpara (2004)</td>
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<td>Daneshgar et al (2008)</td>
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</table>

As shown in Table (1), investigate dimensions of knowledge management reflect various processes to knowledge management in different periods and references. The knowledge management processes are in the literature mentioned as the knowledge management practices. KM practices are defined here as observable organizational activities that are related to knowledge management. It is an interrelated set of various business processes developed in an organization to create, store, transfer, and apply the knowledge. Knowledge management practices the first stage is knowledge acquisition, knowledge creation, knowledge storage, knowledge distribution, knowledge use, and knowledge maintaining (Patrick & Choi, 2009). Therefore we can infer that this process is mainly and axial processes in knowledge management that improves the performance and competitive advantage in organizations.

Table 2. Knowledge management processes (Kenneth et al., 2007)

<table>
<thead>
<tr>
<th>Knowledge Management System</th>
<th>Sources &amp; Type of Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition</td>
<td>✓ Corporate repositories</td>
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<tr>
<td></td>
<td>✓ Online expert systems</td>
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<tr>
<td></td>
<td>✓ Discovering patterns</td>
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<tr>
<td></td>
<td>✓ Transactional processing systems</td>
</tr>
<tr>
<td>Storage</td>
<td>✓ Creation of databases using</td>
</tr>
<tr>
<td></td>
<td>✓ Digitizing, tagging, indexing</td>
</tr>
<tr>
<td>Dissemination</td>
<td>✓ Portals</td>
</tr>
<tr>
<td></td>
<td>✓ E-mails</td>
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<td></td>
<td>✓ Instant messaging</td>
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<td></td>
<td>✓ Search engines</td>
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<tr>
<td></td>
<td>✓ Video conferencing</td>
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<tr>
<td>Applications</td>
<td>✓ FAQ repository</td>
</tr>
<tr>
<td></td>
<td>✓ Expert domains</td>
</tr>
<tr>
<td></td>
<td>✓ ERP (enterprise resource planning)</td>
</tr>
<tr>
<td></td>
<td>✓ CRM (customer relationship management)</td>
</tr>
<tr>
<td></td>
<td>✓ SCM (supply chain management)</td>
</tr>
</tbody>
</table>

4. Knowledge Management Applications

Kabene, King and Skaini (2006) state that there are six areas of KM applications: transactional, asset management, process based, analytical, innovation and developmental. Ward and Le (1996) believe E-learning is one of the most imperative KM approaches, as it allows the employees to have the training anywhere at any time.

Yahya and Goh (2002) point out generally there are two KM approaches. They are centralized KM and decentralized KM. They also introduced two companies: Seven-Eleven in Tokyo and BP. Seven-Eleven is an example of centralized KM approach, and this centralized KM relies on a central system to capture and store all the available knowledge. BP, which uses the decentralized KM approach, focuses on knowledge sharing in the organization.
E-learning, a computer-based training, has been introduced to many hospitality and tourism companies. Hospitality and tourism companies use E-learning to enhance customer service and information management. For example, Holiday Inn uses computer technology to investigate the needs of training and let employees to choose training schedules and contents. Although E-learning can be beneficial to organizations, some small and mid-size organizations may face challenges in applying it. Small or mid-size organizations are not able to afford the computer technology systems (Harris, 1995).

For example, Call (2005) introduces the KM system adopted by Ritz-Carlton Hotel. This KM system consists of best service and practices from employees in each department of the hotel and is updated annually. The hotel management views the employees as the most crucial component of KM.

Furthermore, Singapore Airlines invested a lot of money on improving its knowledge networks. It used this system to predict the flight tickets supply and demand. This well-developed knowledge network help the airline company maximize tickets sales (Goh, 2007).

5. Knowledge Management and Tourism
Knowledge management addresses the critical issue of organizational adaptation, survival, and competitiveness in the face of increasingly discontinuous environmental change (Malhotra 2002). For tourism, this environmental change is evident in both the supply environment and the changing nature of consumer behavior. Destinations are constantly adapting to changing situations by creating and using knowledge in order to respond to, for example, the safety and security measures necessary following the September 11 attacks on the United States (WTO 2001). Yet, although a number of authors have reviewed the tourism literature (Echtner and Jamal 1997; Tribe 1997) there are to date few examples of the application of knowledge management. The exceptions here are general reviews by Boucknen and Pyo (2002) and Ruhanen and Cooper (2004); more specific applications in Carson and Adams (2004) for tourist information centers; Gamble, Chalder and Stone (2000) for the intermediaries sector; Ayala (2000), Choi and Cho (2000), and Boucknen (2002) for the management of hotels; Pechlaner, Abfalter and Raich (2002) for cross-border destination systems; and Hawkins (2004) and Kahle (2002) on the process of transfer in tourism.

6. Knowledge Management Research in the Hospitality and Tourism Industry
Since the 1990s, KM has become a popular topic for researchers. However, the hospitality and tourism industry has not followed this trend until recently (Cooper, 2006). KM is primarily thought of from a multinational and manufacturing perspective; therefore, it fails to consider many aspects of the hospitality and tourism industry (Nonaka & Takeuchi, 1995). Unlike other industries, hospitality and tourism companies need to work with a variety of other industries, such as the service industry, to work out the service products (Hallin & Marnburg, 2008). As a result, when working in a hospitality and tourism context, KM concepts need to be extended to consider interorganizational issues. Cooper (2006) notes that the two approaches of the academic and the practitioner should be combined into a single and clear definition: for the hospitality and tourism sector, KM is the process of gaining competitive advantage by allocating knowledge assets within companies.

Employees are very important to hospitality and tourism organizations. Employees’ performance has a huge impact on organizational performance. Also the performance of employees can greatly affect the implication of KM. In order to effectively adopt KM approach to organizations, human resource needs to foster a KM culture that encourages KM applications. Yahya and Goh (2002) examined the relationship between human resource and KM, and found that training and performance appraisals are greatly associated with KM.

What is more, organizations use KM approach to retain employees and enhance customer satisfaction (Cooper, 2006). Hospitality and tourism knowledge is heavily labor dependent and employees use their knowledge in providing the best experience for customers, therefore, it is crucial that companies use KM approach to retain employees and customer satisfactory.

Customer satisfaction and loyalty are the most important factors to the success of a hotel. Hospitality and tourism employees have direct contact with customers. It is especially important for employees to have the knowledge about customer preferences and how to provide the best service (Boucknen, 2002).

Scholars point out that KM can greatly influence training. Delaney and Huselid (1996) pointed out that organizations should align training with the goals and strategies of the organization. The purpose of training is to share knowledge with employees, who can use it to improve performance (Frash, Antun, Kline, & Almanza,
2010). KM can help human resource specialists identify training needs in order to provide the right training to the right person. Training in hospitality and tourism organizations is imperative, as the majority of employees have direct contact with customers and organizations want to ensure that employees provide service that will attract new customers and retain returning customers (Nightingale, 1985). However, it is crucial for hospitality and tourism companies to decide the proper training method to meet the objectives. Because of the budget, time and availability of training personnel, sometimes training do not solve the specific training problems (Froiland, 1993).

Researchers agree that KM enables employees to be innovative about the company’s products and services. In order to be competitive, hospitality and tourism organizations need to produce new products and be creative about service (Cooper, 2006). By acquiring, sharing and transferring the required knowledge, KM leads employees to be creative, ultimately leading organizations to gain competitive advantage (Bouncken, 2002).

Although the studies on KM in the hospitality and tourism sector have been limited, the businesses in the industry are increasingly reliant on the KM approach to improve performance and gain competitive advantage (Leiper, 2004). Due to the increased use of information technology (IT) and systems, hospitality and tourism services have become knowledge-based. Sheldon (1997) notes that the hospitality and tourism sector is one of the largest users of IT. As a result, it is imperative for hospitality and tourism organizations to encourage and learn from KM research in order to distinguish an organization from its competitors.

7. Importance of and Barriers to Applying Knowledge Management

Many scholars believe that the KM approach is a crucial tool for hospitality and tourism companies wishing to gain competitive advantages (Cooper, 2005; Jafari, 1990). In light of rapid changes to the economy, hospitality and tourism companies are facing serious problems: increasing operating uncertainty, changing customer preferences, shorter service product life cycles, and complicated intrusive constraints. KM is an important solution to those problems (Scott & Laws, 2006).

By following the knowledge management approach, companies can make better plans for the future, reach a better level of decision making, and ultimately increase competitiveness and gain maximum benefits (Cooper, 2002; Roos & Roos, 1997). Other industries, such as the space and computer industries, have been using KM tools for a long time. Many successful corporations have even set up research and development departments for collecting and analyzing data (Gupta & McDaniel, 2002). These data can help corporations to acquire useful information with which to make short-term and long-term decisions. Therefore, KM is the key to gaining competitive advantage. Because hospitality and tourism organizations face a more complicated reality than other organizations (Lemelin, 2006), these organizations should also engage in KM processes.

The literature on KM fails to consider many hospitality and tourism issues (Grizelj, 2003). KM research therefore needs to be improved to meet the specific requirements of the hospitality and tourism industry. Furthermore, managers are often faced with too many unclear and complicated KM concepts and implementation processes (Bouncken & Pyo, 2002; Yun, 2004). Delphi, conducting a survey about knowledge management with its practitioners, found that the future of KM would be greatly influenced by the practitioners’ ability to prove its benefits, obtain management support, and recognize the core knowledge (Plummer & Armitage, 2007).

Simply understanding the process of KM does not lead to gaining competitive advantage and generating profits. Knight and Howes (2003) think that the applications of KM are to improve business performance and meet the corporate missions. As a result, it is important to establish the connection between business strategy and KM in the early planning stages in order to apply KM system in all business operations and plans (Wiig, 1997). In this way, the best possible knowledge can be made available at every level of activity.

Two more barriers to KM application are cost and time. The KM process requires a change in management, and companies have to put a huge amount of money into the process and wait for the results (Cooper, 2006). Hospitality and tourism organizations are kept busy with daily jobs, and may not have time for identifying and planning from the available knowledge. Although it is easy to accumulate information in hospitality and tourism organizations, employees and managers, especially those from small and midsize companies, cannot easily derive the relevant information from all the information available to them (Gupta & McDaniel, 2002).

Finally, the very nature of the industry poses a challenge to the transfer of knowledge in the hospitality and tourism sector (Cooper, 2006). Davenport and Prusak (1998) and Hjalager (2002) demonstrate that different
cultures and different community practices lead to a lack of reliance between the knowledge producer and those who use the knowledge.

KM research is of primary importance to the hospitality and tourism industry and will benefit hospitality and tourism organizations. KM research can help companies adopt KM processes in their daily work and enhance the level of organizational learning. It may also have direct applications to business operations. The consensus among researchers is that KM research should continue to improve the issues described in previous studies.

8. Conclusions

Subjects involved in tourism should make clear their approach to knowledge management and declare their way of comprehension of the problem, i.e. if knowledge management is integral element of strategy of the learning enterprise or if it is the form of experience advancement in the field of information management. In case this objective is achieved, the indispensable part of knowledge management is definition of risks relating to knowledge management system and how to reduce them. Only in this way knowledge can be efficiently applied as the basis of competence advantage. So, if tourism is to become a sustainable industry sector and survive in this competitive world, it must collectively refocus its research agenda and move beyond short-term ad hoc and market driven research. A KM approach should be the underpinning objective for future research agendas so that the increasing intellectual capital in tourism can be transformed into industry competitiveness and sustainability.

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