Knowledge management in the hospitality industry: A review of empirical research

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Abstract

Knowledge management (KM) has emerged over the last decade to become one of the most debated management concepts, but in the hospitality industry KM has not achieved the same scale of applications and empirical research as in other fields. This paper presents the first state-of-the-art survey of empirical KM research in the hospitality field. Database searches of the KM concept and related topics yielded 2365 hits, of which only 19 empirical articles were identified. The contents of the articles are discussed in juxtaposition with static versus dynamic perspectives on knowledge. The empirical quality of articles is assessed against relevant theory-of-science criteria. Findings reveal that five empirical contributions offer high research quality, and the remaining studies demonstrate that empirical KM research is limited, inconclusive, low on generalization and testability. It is suggested that future research should offer insight into actual learning dynamics to define what domain-specific knowledge means for hospitality management and employees, to investigate how to store real-time contextual knowledge, investigating employees’ versus managers’ knowledge abilities in forecasting business change, and to illuminate how knowledge vision and knowledge activities may be aligned.

Keywords: Knowledge management (KM); Knowledge; Organizational learning; Hospitality; Review; Research suggestions

1. Introduction

The study and practice of knowledge management (KM) to have grown rapidly in most industries, with the exception of the tourism and hospitality sector (Bouncken, 2002; Cooper, 2006; Grizelj, 2003; Hjalager, 2002; Ruhanen & Cooper, 2004; Yun, 2004). This situation is argued to subsist although the industry is developing into a highly knowledge-based industry as a result of recent advancements in information processing that allow for an extensive use of knowledge transfer, knowledge reuse, storage and production of knowledge (Pyo, Uysal, & Chang, 2002).

Considering the intense industry-wide competition where customers persistently demand the best deals, for management and employees in the hotel industry it becomes a question of thorough knowledge and understanding of all elements of the business, including how it should continuously change in accordance with societal changes and changes in customers’ preferences. The question may, therefore, be what kind of knowledge should be developed and focused on with the aim of setting the company apart from its competitors (Ruhanen & Cooper, 2004).

Tourism researchers have suggested reasons why KM is limited in research and practice in the tourism and hospitality industry (e.g. Cooper, 2006; Grizelj, 2003; Ruhanen & Cooper, 2004; Yun, 2004). This situation is argued to subsist although the industry is developing into a highly knowledge-based industry as a result of recent advancements in information processing that allow for an extensive use of knowledge transfer, knowledge reuse, storage and production of knowledge (Pyo, Uysal, & Chang, 2002).

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Tourism researchers have suggested reasons why KM is limited in research and practice in the tourism and hospitality industry (e.g. Cooper, 2006; Grizelj, 2003; Ruhanen & Cooper, 2004). KM concepts in the literature are mostly developed from a manufactured and multinational perspective (e.g. Nonaka & Takeuchi, 1995), thus failing to take into account the many facets of tourism services based on networks and the need for an inter-organizational perspective (Grizelj, 2003). Cooper (2006) also suggests that with the new trends within the KM literature and practice, which offer new techniques and perspectives, researchers within the fields of tourism and KM must change the traditional focus on KM as “a management concept only valid within individual organizations” (p. 49). In tourism research, KM thinking needs to be expanded to embrace inter-organizational issues in respect to knowledge stocks and flows within organizational

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networks. Davidson and Voss (2002, p. 32) offer a broad definition of KM, to which Cooper (2006, p. 51) adds the tourism emphasis: “...knowledge management is about applying the knowledge assets available to [a tourism] organization to create competitive advantage”.

The fundamental lack of applied scientific knowledge of knowledge-based concepts in the development of tourism management impedes the practical debate on KM in the industry (Grizelj, 2003). Some authors also argue that the published KM research in both tourism and hospitality is limited, inconclusive and mostly descriptive, focusing on anecdotal and one-off case studies (Ruhanen & Cooper, 2004). Others acknowledge that tourism research in general does not bring anything substantial or significant to the body of research or to the industry because the research is mostly company or sector-specific and operationally focused (Cooper, Shepherd, & Westlake, 1994).

From a strategic management perspective based on static versus dynamic views on KM, this paper surveys and frames the empirical state-of-the-art in KM in the hospitality sector at an industry, inter- and intra-organizational level. It highlights loopholes and opportunities for further studies in order to advance the general quality level of research in the field. Why is KM important in the hospitality industry and what are the challenges of KM applications for management? What is the theoretical content of empirical contributions? What strategic perspectives pertaining to static versus dynamic views on knowledge and knowledge development do authors employ? What is the empirical quality in juxtaposition with theory-of-science criteria? What are relevant future research directions? These are the questions that will be addressed in this paper.

2. Theory review: the concept of KM

KM did not emerge as an academic field until the 1980s (Cooper, 2006, p. 48), and although practitioners and academics have increasingly recognized the potential benefits of KM, an ongoing dispute continues about the meaning of the concept (e.g. Davenport & Prusak, 1998; von Krogh, Ichijo, & Nonaka, 2000; Malhotra, 2001; Nonaka, 1991; Nonaka & Takeuchi, 1995). Hence, it is relevant to think of KM in the broadest context: KM may be understood as the practice of capturing and developing individual and collective knowledge within an organization for the purpose of using it to promote innovation through the transfer of knowledge and continuous learning (Davenport, De Long, & Beers, 1998; Nonaka, 1991; Quinn, Anderson, & Finkelstein, 1996). Moreover, KM can be seen as a means of developing organizational effectiveness and competitiveness and is an approach for identifying, capturing, creating and applying knowledge with the aim of improving competitiveness through new innovative KM strategies (Grizelj, 2003).

Scholars (e.g. Nonaka & Takeuchi, 1995; Sveiby, 2001; Tuomi, 2002; Wiig, 1997) have identified historical phases of the KM literature. According to Tuomi (2002), KM first originated on the maps of strategy consultants and conference organizers around 1995, and has its birth in different disciplines that separately addressed KM issues from the 1960s until the late 1990s. The early discipline within KM was on information systems. Around the mid-1990s, the focus on KM shifted towards organizational development, intellectual capital management and competence management. Towards the late 1990s, social learning, organizational sense making, innovation and change management became the most discussed themes within KM.

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. Around the onset of the new millennium, some empirical studies on innovation and learning curves in the hospitality sector related to knowledge sharing appeared (e.g. Baum & Ingram, 1998; Ingram...
& Baum, 1997a, b). As a result of an increasing use of technology in the service sector today, learning curves have shortened tremendously. Consequently, innovation activities across all areas of the tourism industry (Cooper, 2006) have become common in order to achieve sustainable competitive advantage.

2.1. Tacit and explicit knowledge

The KM literature distinguishes among several forms of knowledge with different implications for strategic decision-making (Styhre, 2004). To Baumard (1999, p. 19), knowledge is the object of a continuum that extends from interpreted information such as a simple penciled diagram, to the non-representable such as intuitions and hunches. Another differentiation of knowledge originates from Polanyi (1958), who distinguishes between explicit and tacit knowledge. While explicit knowledge is open knowledge in the form of communication and can be codified in documents, books, databases and reports, tacit knowledge refers to all intellectual capital or physical capabilities and skills that the individual cannot fully articulate, represent or codify. Tacit knowledge is thus difficult to measure and represent, but is described as a critical asset for individual, group and organizational performance (Styhre, 2004). Baumard (1999) and Lam (2000) also acknowledge that besides the practices and procedures that individuals learn, some human actions cannot be fully explained and these are characterized by the fluid and vague in knowledge denoted as “the tacit component”.

The tacit knowledge component encompasses cognitive and technical elements. While technical elements are related to skills and learned know-how of specific actions, cognitive elements refer to paradigms, schemes and beliefs that provide individuals with the ability to understand the environment (Baumard, 1999). Wagner and Sternberg (1985) refer to tacit knowledge as knowledge below our conscious awareness that is not directly taught but learned as a result of domain-specific knowledge. For instance, in hotel organizations, a major part of frontline personnel’s domain-specific knowledge is developed due to their interactions with guests, managers, colleagues, suppliers, employees of competing hotels and other external interest groups on a regular basis. During social interactions with these groups, frontline employees tend to perceive impressions of how each of these groups acts towards their workplace. As a consequence, frontline personnel become skillful and knowing agents (Polanyi, 1958) about others’ perceptions of the state of the hospitality business.

3. The importance and challenges of KM applications in the hospitality industry

The hospitality industry is characterized by its outputs of service products, which primarily satisfy the demand for accommodation, food and beverage (Buttle, 1986). For the achievement of the final service products, hospitality companies collaborate with a variety of service industries (i.e. convention agencies, online travel agencies, tour operators, carriers, entertainment, shopping and local sightseeing agencies) in which some compete and others collaborate with each other. One common characteristic of hospitality companies with these service providers is especially dominant: their service processes are becoming knowledge-based or knowledge-intensive due to the great influence and use of information and communication technology (Kahle, 2002). For example, Sheldon (1997) argues that the tourism and hospitality industry is one of the largest users of information technology (IT). Moreover, the industry is knowledge-intensive as a result of the nature of the service product, where the service delivery occurs as a result of interaction between customers and employees and where it is required that employees are knowledgeable of customers’ needs in order to achieve customer satisfaction (Kahle, 2002; Kotler, Bowen, & Makens, 1999).

In the hotel industry, only a small number of hotels have implemented KM systems, although they are likely to gain benefits from KM due to chain requirements of an overall quality standard of their geographically dispersed hotels (Bouncken, 2002; Medlik, 1990).

Existing efforts in KM practices are particularly observed within hotel chains, which have to deliver an overall service quality standard. For instance, a case study of anecdotal character conducted by Bouncken (2002) of the Accor Hotel Group with 3500 hotels worldwide, 130 000 employees and which owns brands like Formula One, Ibis, Novotel and Sofitel, revealed that the corporation is developing KM-based strategies and is engaged in KM activities. The Accor Corporation in Germany (with 6000 employees) has implemented a KM system based on three components: (a) IT-based knowledge accumulation; (b) access to the IT-based knowledge system; and (c) motivation for knowledge use and creation. An Internet-based intranet has been modified and improved with the aim of incorporating data about best practices, service innovations and training possibilities. Another example of KM approaches is that of the Hilton Corporation, which operates 2700 hotels in more than 70 countries. The Hilton University, an established corporate university, is developing a learning culture for Hilton Hotels by encouraging and offering a consistent approach to training for team members at all levels using e-learning technology (Baldwin-Evans, 2006; Hilton University, 2006). Although Hilton International emphasizes knowledge sharing and on-the-job mentoring in respect to competency development of its members, they introduced in 2002 a new innovative e-learning system that is highly cost-effective and can advance generic skills in terms of communications and customer service (Hilton University, 2006).

Since Hilton University launched its e-learning system, more than 10 000 Hilton members have completed 100 000 e-learning programs (Hilton University, 2006).
The foregoing examples demonstrate that some actors in the industry acknowledge their position in a knowledge-intensive industry that requires continuous advancement of learning and knowledge-sharing activities in order to improve their business. However, these examples are only some of the few.

A recent study shows that hospitality management considers KM and information to be relevant concepts, but they are confronted with too many unclear KM strategies, activities and implementation techniques (Bouncken & Pyo, 2002, p. 3). This finding is confirmed by Yun (2004), who argues that the tourism and hospitality industry adapts slowly to KM strategies due to the complexity of the concept, which requires certain skills in data mining, statistics and substantial knowledge of tourism and hospitality management.

Enz and Siguaw (2003) find that innovation ideas and best practices champions in hospitality companies both begin and end with individuals. Unfortunately, when managers who have brought about creative ideas for implementation leave their job, many finding of the practices they initiated are discontinued. These findings indicate something about the nature of hospitality best practices where two factors in particular appear to reduce the permanence of innovative initiatives: first, there is high mobility of managers in the industry; second, there is a high rate of consolidation through mergers and acquisitions. This results in difficulties in maintaining benefits of individual learning in the organizational system. Therefore, hospitality companies may particularly benefit from KM systems in respect to codification of best practices and innovation ideas.

4. Strategic perspectives on Knowledge

When considering the different approaches to KM and development in hospitality organizations, two dimensions appear to be important: (1) whether knowledge is viewed as static or dynamic; and (2) how essential it is for management to make the knowledge explicit and measurable and be able to control it. When a static view of knowledge is employed, one can define what knowledge is or should lead to, based on experience. A dynamic view implies that knowledge is continuously changing (Stacey, 2001) and has a potential to develop new ideas that could be of business value for the company. In other words: a static view will serve the need to operate known routines, and a dynamic view will serve the need to continuously develop routines.

The other dimension, degree of measurement, control and storage is a question of how dependent fulfillment of service tasks is or should be on employees' individual and group knowledge. Some hospitality companies strive to explicitly describe every routine, hoping to be able to operate independently of human specialist knowledge. In the hospitality sector, this could be one way to avoid problems of high turnover. An alternative and more humanistically inspired standpoint is to view the excitement and prosperity that growing knowledge can bring as a sort of social glue that keeps managers and employees striving together towards mutual goals.

In Table 1, these dimensions are combined, resulting in four research questions concerning the strategic approach to KM and knowledge development (Tuomi, 2002).

In Box 1 (Table 1) the question of how to fill the gap between existing and needed knowledge is addressed. Management maps out, defines and measures what knowledge is needed, such as introducing a yield management system, and takes steps to realize this competence (e.g. courses for employees, engaging external consultants, hiring an employee with specific competence). Management, based on prior experience, controls what kind of competence value is added to the company. KM, by defining and filling competence gaps will, for example, be driven by resource-based strategic analyses (Porter, 1980) because the gap between strategically “needed” and “existing” organizational competencies must be defined and filled in order to realize generic strategies.

Traditionally, this static view of knowledge as something measurable and verifiable gave rise to theories and systems for measuring the stock of hospitality companies’ knowledge assets (e.g. see Bontis, 2001; Engström, Westnes, & Westnes, 2003; Sveiby, 1997). This tradition is commonly referred to as the measurement of an organization’s intellectual capital (Bontis, 2001). Stewart (1997, pp. 66–68) defines intellectual capital as: “...intellectual material—knowledge, information, intellectual property and experience—that can be put to use to create wealth”. In other words, intellectual capital denotes the assumption that sustainable competitive advantage is created from individual workers’ skills and knowledge that contribute to highest company performance (Hitt, Bierman, Shimizu, & Kohar, 2001).

In Box 2 (Table 1), knowledge is viewed dynamically under management control: The era of automatic KM was elicited when computer development made a dream of artificial intelligence come true. New hard- and software in the mid-1990s made it possible to store and analyze data in ways that had not been possible before. “The idea that human expertise could be presented in a computer system and made available whenever and wherever needed, became a commonplace truth” (Tuomi, 2002, p. 70). This promise made it possible to

Table 1

<table>
<thead>
<tr>
<th>Research questions asked depending on management and knowledge perspectives</th>
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<tbody>
<tr>
<td>Management’s objectives</td>
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<td>------------------------</td>
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<tr>
<td></td>
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<tr>
<td>Measurement, control and storage</td>
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<tr>
<td>Facilitation and development</td>
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</table>
run businesses more or less without depending on human capital (cf. Feigenbaum, Nii, & Mc Corduck, 1988), and knowledge was seen as explicit, controllable and something that could be organized and structured according to companies’ contextual needs.

In Box 3 (Table 1) the question of how to develop non-existing knowledge that is needed is addressed. When asked this question, the company does not know what competence it needs, but has a vision of the goals for which the competence should strive (e.g. management in a hotel that will focus on a special group of guests by delivering “tailor-made” service). In these situations, management will promote organizational learning towards their vision (Senge, 1992), somewhat as described in theories of transformational leadership (see, e.g. Connelly et al., 2000). Instead of controlling and making the competence explicit, the employees are empowered in order to reach organizational objectives. A question is posed about how this is done and which possible obstacles are hindering the processes (Argyris, 1985; Argyris & Schö¨n, 1978; Senge, 1992).

The question in Box 4 (Table 1) also outlines another alternative in KM that emphasizes knowledge as something that is created within the organization: “…hotels are viewed as knowledge-enabling organizations where managers and employees share information and experiences to create new insights and skills” (Gjelsvik, 2002, p. 33). According to this view, organizations can be seen as entities of their own perceptions. The organizational knowledge is personalized (Bouncken, 2002), which means that knowledge resides in and among peoples’ minds, not in books and computers. Managers facilitate and support knowledge development instead of controlling and measuring it. The existence of tacit knowledge is a “social glue” that makes people function together (Nonaka & Nishiguchi, 2001). For example, Gjelsvik (2002) describes hotel departments as potential micro-communities of practice, and Wenger (1998) as enthusiastic teams that share what they know, having common goals and values.

The four perspectives on KM outlined in Table 1 may raise the question of what is “best” for the hospitality industry. The answer to such a question will depend on what kind of operations and within which contexts KM should be employed. In practical business, all four perspectives may be of relevance.

5. Methodology

5.1. Data collection

The literature review took place from March to April 2006 and is founded on a search for the keywords “knowledge management” and “organizational learning” in hospitality and tourism-related databases. In other relevant databases, the search was based on the keywords: (a) “knowledge management and tourism/tourist destinations/travel industry/hospitality/hotel(s)/lodging/hotel industry”; (b) “knowledge and tourism/tourist destinations/travel industry/hospitality/hotel(s)/lodging/hotel industry”; and (c) “organizational learning and tourism/tourist destinations/travel industry/hospitality/hotel(s)/lodging/hotel industry”. In Table 2, the literature search records are listed for each search engine.

The total results of hits of all term combinations in the searched engines yielded 2365 contributions. These include theoretical, empirical and anecdotal contributions and newsletters from tourism and hospitality-related magazines. All 2365 contributions were screened and sorted into four groups: (a) theoretical contributions; (b) empirical contributions; (c) case stories of anecdotal character; and (d) non-applicable contributions for each search engine. After sorting contributions into these groups for each search engine, each group was carefully filtered for hospitality-related contributions. Reoccurring publications were then filtered from each search engine. Finally, the findings of hospitality-related articles yielded 19 empirical and 14 case stories of anecdotal character. The case stories that appeared, however, will not be included in the evaluation of contributions.

The identified empirical articles came from a variety of strategic and management journal sources, including Strategic Management Journal, Academy of Management and Administrative Science Quarterly. Articles also came from tourism and hospitality journals, including Tourism Management, Scandinavian Journal of Hospitality and Tourism and International Journal of Contemporary Hospitality Management. A few articles appeared in KM journals such as the Journal of Intellectual Capital and Journal of Knowledge Management, and information system journals such as Internet Research: Electronic Networking Applications and Policy and IEEE Transactions on Fuzzy Systems. One article also appeared in Managerial Auditing Journal, one in Human Resource Development Quarterly, and one article came from the Journal of European Industrial Training.

5.2. Evaluation criteria

In order to maintain a manageable perspective towards the research, evaluation of research contributions was

<table>
<thead>
<tr>
<th>DATABASES</th>
<th>RESULTS</th>
<th>EMPERICAL STUDIES</th>
<th>CASE STUDIES OF ANECDOTAL CHARACTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic search elite</td>
<td>19</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Article first</td>
<td>124</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Business source elite</td>
<td>81</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Econlit</td>
<td>208</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>First search</td>
<td>989</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Hospitality and tourism index</td>
<td>115</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Ingenta</td>
<td>482</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>ISI web of science</td>
<td>347</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>2365</td>
<td>19</td>
<td>14</td>
</tr>
</tbody>
</table>

limited to basic theory-of-science criteria. Criteria by Popper (1968) and Kuhn (1989) were employed for evaluation of the research’s quality. This principally concerns theory-of-science criteria pertaining to the discourse of testability and generalization. The testability (Popper, 1968) relates to whether the theory and the empirical applications are concise in such a way that other researchers can reproduce the research process to determine whether the contribution constitutes a scientific advance in the field of KM. The generalization principal relates to whether the theory is broad in scope and extends beyond the particularly observed setting (Kuhn, 1989) in such a way that it may be applied to the general KM debate in hospitality.

6. Results and discussion of content of contributions

In the search of hospitality-related empirical studies, three categories of reported studies were found. One category focuses on using an industrial perspective, another on inter-organizational issues within destinations, and the third research stream uses a business approach, an intra-organizational perspective.

The 19 empirical studies presented in Table 3 represent different views of KM and organizational learning, and some of the contributions address more than one KM topic.

The second and the third columns in Table 3 address the domain studied for each contribution and the methodology. The fourth column provides some assessments of which perspectives on KM (cf. Table 1) are prevalent in the respective research articles. In the last column in Table 3, the implications of each study are identified in order to compare them in terms of the KM implications they raise on knowledge and knowledge development.

6.1. Studies with an industrial perspective

Three studies appeared that address a dynamic view on KM within the category of industrial perspectives of KM.

A study by Canina, Enz, and Harrison (2005) provides evidence concerning strategic dynamics of competitive clusters in the hospitality industry and how hotel companies may benefit from the competitive strategic position of other hotels in respect to their agglomeration. The theory of agglomeration pertains to the characteristics of why competing companies (e.g. low-cost and differentiated companies) often cluster in geographic groups. These clusters are particularly common in service industries where upscale shops are located in the same area as discount shops (Canina et al., 2005). The study provides some evidence concerning proximity in the transfer of knowledge. Proximity may not only be geographic as in this case, only among companies, but is likely to be present in knowledge sharing and knowledge transfer in general among personnel in major hotel chains. This is also supported by newer economic geography theory, which distinguishes between local and global connections, emphasizing that learning processes among actors in geographic clusters of innovation tend to draw on the serendipity of co-presence (Amin & Cohendet, 2005).

In a quantitative study of knowledge transfer and strategic alliances in the hotel industry, Espinosa, Martin, and Dobón (2003) particularly investigate and assess joint ventures as a form of strategic alliances and their viability of knowledge transfer. They find that although joint ventures offer major possibilities for learning among hospitality firms, great variations exist in how joint ventures are used for knowledge transfer in the world. The conclusion of the study is that although joint ventures offer possibilities for learning and knowledge transfer, they are a little used formula of alliance compared with franchising and management contracts in the hospitality industry, which account for the major types of collaboration. These results may indicate that hospitality leaders around the world are unaware of the strategic benefits of joint ventures and that tacit knowledge is dynamic and continuously developing. Thus, competitive advantage may be developed by means of joint ventures as knowledge facilitators, although a market seems a little unique.

Also, organizational learning within an industrial context has been studied. In their first study, Ingram and Baum (1997a) test the relationship between an organization’s own operating experience and its rate of failure. Further, they investigate a hotel’s likelihood of failure as a result of its industry’s operating experience (related to internal efficiency) and competitive experience (related to interdependency with other organizations’ competitive moves). Their findings suggest that hotels’ own experiences have a rather limited effect on organizational learning in the long run; in fact, learning merely by exploiting routines increases failure rates. The results also indicate that accumulated industrial operational experiences (by other hotels in the industry) affect the outcome of company failure at the time of its entry in the industry and during the organization’s life since entry. While industry operating experience since entry of an organization will lower its failure rate, the competitive experience accumulated in an industry has no significance on the failure rate of an organization at the time of entry. The competitive experience only has a negative effect on an organization’s failure rate during its history in the industry. First, these results indicate the need for a more open and dynamic view on learning that emphasizes the exploration of new routines and new ways of organizing the hotels’ total products. Second, they demonstrate the need for hotel organizations to continuously acquire knowledge from new markets for the purpose of seeing them as potential investment areas in the future, and to do what is necessary to get their hands on the existing competitive knowledge of incumbent competitive organizations.
Table 3
Published empirical studies of KM in hospitality

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Domain studied</th>
<th>Methodology</th>
<th>Perspective</th>
<th>Implications</th>
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<tbody>
<tr>
<td><strong>Industrial studies</strong></td>
<td></td>
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</tr>
<tr>
<td>Canina et al.</td>
<td>Strategic dynamics</td>
<td>Cross-sectional study of all major North American hotels ($n = 1,162$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Some hotels bear high costs associated with differentiating their service, while other hotels share in the benefits for free.</td>
</tr>
<tr>
<td>(2005)</td>
<td>Agglomeration effects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Espinosa et al.</td>
<td>Strategic dynamics</td>
<td>Combined quantitative and qualitative case studies adopted by the authors. ($n = 1,131$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Despite the advantages offered by joint ventures for learning and transferring knowledge, it is not the most used formula for strategic alliances.</td>
</tr>
<tr>
<td>(2003)</td>
<td>Joint ventures</td>
<td></td>
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<tr>
<td></td>
<td>Knowledge sharing</td>
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<td>Knowledge transfer</td>
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<td></td>
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<tr>
<td>Ingram and Baum</td>
<td>Industrial dynamics</td>
<td>Longitudinal study based on secondary data of the life histories of hotel chains in the USA from 1896 to 1985 ($n = 1,135$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Organizations benefit from their own operating experience, but are harmed in the long run. Benefit from industry’s operating experience.</td>
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<tr>
<td>(1997a)</td>
<td>Population learning</td>
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<td></td>
<td>Organizational learning</td>
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<td></td>
<td>Organizational failure</td>
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<tr>
<td><strong>Inter-organizational studies</strong></td>
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<tr>
<td>Baum and Ingram</td>
<td>Inter-organizational learning</td>
<td>Longitudinal study based on secondary data of the life histories of Manhattan hotel industry from 1898 to 1980 ($n = 558$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Knowledge captured from related hotels within a population will promote innovation, but only if they have strong ties.</td>
</tr>
<tr>
<td>(1998)</td>
<td>Organizational failure</td>
<td></td>
<td></td>
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<tr>
<td>Ingram and Baum</td>
<td>Inter-organizational learning</td>
<td>Longitudinal study based on secondary data of the life histories of hotel chains in the Manhattan hotel industry from 1898 to 1980 ($n = 558$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Survival benefits of hotel units in a chain are dependent on the local operating experience and number and distribution of hotel chains.</td>
</tr>
<tr>
<td>(1997b)</td>
<td>Chain affiliation</td>
<td></td>
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<td></td>
<td>Organizational failure</td>
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<tr>
<td>Ingram and Baum</td>
<td>Inter-organizational learning</td>
<td>Longitudinal study based on secondary data of the life histories of hotel chains in the Manhattan hotel industry from 1898 to 1980 ($n = 558$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Hotels’ own operating experiences have an effect on the likelihood of forming chain relationships, and chains’ experiences help hotels that are lacking in their own experience or have fallen into competency traps.</td>
</tr>
<tr>
<td>(2001)</td>
<td>Chain affiliation</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Likelihoods of chain formation and dissolution</td>
<td></td>
<td>Dynamic view/facilitation and development</td>
<td></td>
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<tr>
<td>Kyriakidou and Gore</td>
<td>Inter-organizational learning</td>
<td>Qualitative study based on semi-structured interviews with owners of hotels (guesthouses), restaurant, pubs, visitor attractions and leisure operations ($n = 89$)</td>
<td>Static view/dynamic view</td>
<td>Implications for management are the vital role of knowledge and information flow in shared and collaborative settings of missions and strategies.</td>
</tr>
<tr>
<td>(2005)</td>
<td>Benchmarking</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Knowledge sharing and transfer</td>
<td></td>
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<tr>
<td><strong>Intra-organizational studies</strong></td>
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<tr>
<td>Agut and Grau</td>
<td>Knowledge assessment</td>
<td>Questionnaire to hotel and restaurant managers ($n = 80$)</td>
<td>Static view/ measurement, control and storage</td>
<td>Comparison of two assessment instruments for deficits in managerial capabilities. Using assessments of managers’ gaps in competencies provides better information than asking them about their training needs.</td>
</tr>
<tr>
<td>Aksu and Özdemir</td>
<td>Individual learning</td>
<td>Quantitative study of staff members in three different five-star hotels in Antalya, Turkey ($n = 129$)</td>
<td>Dynamic view/facilitation and development</td>
<td>The greatest variance in enabling individual learning in hotels can be explained by superiors’ behavior.</td>
</tr>
<tr>
<td>(2005)</td>
<td>Organizational learning</td>
<td></td>
<td></td>
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<td></td>
<td>Organizational culture</td>
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<tr>
<td>Bayraktaroglu and Kutanis</td>
<td>Organizational learning</td>
<td>Longitudinal case study of Polat Renaissance Hotel in Istanbul ($n = 39$)</td>
<td>Dynamic view/facilitation and development</td>
<td>Transforming hotels to become learning organizations requires mental transformation of employees’ motivation towards new priority configurations.</td>
</tr>
<tr>
<td>(2003)</td>
<td>Learning organizations</td>
<td></td>
<td></td>
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<tr>
<td>Engström et al.</td>
<td>Evaluation of intellectual capital</td>
<td>Quantitative case study of Radisson SAS Hotels and Resorts ($n = 190$)</td>
<td>Static view/ measurement, control and storage</td>
<td>In general, methods to measure or evaluate intellectual capital are not validated.</td>
</tr>
<tr>
<td>(2003)</td>
<td></td>
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In the search of empirical studies, three longitudinal studies with an inter-organizational perspective appeared following on their industrial study of hotels’ inter-organizational relationships with their chain affiliations. Some of the hypotheses in the study pertain to the testing of knowledge transfer, learning and risk of hotel units’ strategic constraints by chain affiliations. Findings suggest that at the time a hotel unit joins a chain, it gains survival advantages if the chain has accumulated local operating experience, which it can transfer to the hotel unit.

In their second study, Ingram and Baum (1997b) investigate the implications for hotel failure in terms of hotels’ inter-organizational relationships with their chain affiliations. Some of the hypotheses in the study pertain to the testing of knowledge transfer, learning and risk of hotel units’ strategic constraints by chain affiliations. Findings suggest that at the time a hotel unit joins a chain, it gains survival advantages if the chain has accumulated local operating experience, which it can transfer to the hotel unit. Moreover, the failure rate of the hotel unit is likely to be

6.2. Studies with an inter-organizational perspective

In the search of empirical studies, three longitudinal studies with an inter-organizational perspective appeared by Baum and Ingram following on their industrial study of 1997a. These studies focus on the life story of hotel units in the Manhattan hotel industry from 1898 to 1980, the relationship among hotels and their chain affiliations, chain formation and dissolution, inter-organizational learning, knowledge transfer and business failures. Further on the topic of inter-organizational learning and knowledge transfer, Kyriakidou and Gore (2005) study the relationship between organizational performance and best practices for small- and medium-sized enterprises.

In their second study, Ingram and Baum (1997b) investigate the implications for hotel failure in terms of hotels’ inter-organizational relationships with their chain affiliations. Some of the hypotheses in the study pertain to the testing of knowledge transfer, learning and risk of hotel units’ strategic constraints by chain affiliations. Findings suggest that at the time a hotel unit joins a chain, it gains survival advantages if the chain has accumulated local operating experience, which it can transfer to the hotel unit. Moreover, the failure rate of the hotel unit is likely to be
lowered further during the time of its relationship if the chain continues to accumulate knowledge that it can transfer to its units. The results indicate that knowledge transfer may have a major impact on the individual hotel’s survival rate, even after the chain affiliation is cut off. Conversely, hotel units are likely to suffer a higher failure rate if the chain affiliation does not accumulate local experience during the affiliation period. Another relevant finding of Ingram and Baum is that a hotel’s risk of failure drops significantly immediately after it joins a chain affiliation, but over time, its risk of failure will increase significantly towards that of an independent hotel. These findings demonstrate that in order to become a learning organization, strategic constraints by chain affiliations may in the long run harm a hotel. This view of Ingram and Baum on knowledge development is dynamic. Their findings indicate that for hotel chains to increase their survival chances, they must generate continuous learning, which means they must refrain from developing strategic constraints for their hotel units and instead treat them as independent knowledge generators and distributors.

Developing the foregoing study, Ingram and Baum (2001) tested the likelihood of hotels forming and dissolving chain relations as a function of hotels’ operating experiences with the purpose of enhancing their learning levels. Using the same data material as their study in 1997b, they found that when hotels have either low or high levels of their own experience, they are most likely to form a relationship with a chain. This is because chains can transfer vital knowledge to hotel units that lack their own experience, or chains are likely to help hotels break out of competency traps (hotels that have only exploited their own routines) due to too much of their own operating experience, which may result in failure. However, Ingram and Baum found that if hotels have moderate levels of their own experience, chain affiliations are not beneficial to them. Nevertheless, they found that non-local experience of chains increases the likelihood of hotels to terminate their relationships with chains. This indicates that hotel units may benefit in their learning processes from hotels’ local market knowledge but, on the other hand, can be harmed if the chain has non-local experience. Again, these findings imply a dynamic view of knowledge development in order for hotel companies to achieve competitiveness.

The third inter-organizational study by Baum and Ingram (1998) of the Manhattan hotel industry indicates that the dynamic application of knowledge captured from related hotels within a population will promote innovation, but only if they have formal and strong ties. On the other hand, organizations without such relationships in the population may be aware of innovation, but this is not enough to ensure successful transfers of innovation.

Overall, these three longitudinal studies prove the need for KM, which also emphasizes product development that has to incorporate a dynamic, double-loop learning where existing routines are evaluated according to market-strategic decisions.

A qualitative study by Kyriakidou and Gore (2005) of hospitality, tourism and leisure small and medium-sized enterprises (SMEs) also suggests that successful transfer of knowledge for learning can be in the form of benchmarking organizational cultures. They find that the best performers, and thus positive benchmarking elements for the transfer learning, are largely organizational cultures that place importance on cooperative settings of missions and strategies between employees and management. These findings demonstrate the need to improve the facilitation and development process of continuous learning. Yet, there may be a paradox in the strategy of benchmarking and transferring knowledge from other companies. If many company systems, structures and processes are anchored in tacit knowledge, it is difficult for other companies to copy the knowledge, and before they may have adopted parts of it, other companies have created new innovative strategies and activities. Managerial implications are to balance and combine their own company’s explorations with those of other companies. The present authors argue that benchmarking approaches to knowledge sharing and transfer should emphasize both a static and dynamic knowledge view. On the one hand, benchmarking implies measuring knowledge in order to transfer relevant and lacking knowledge areas to one’s own company; on the other, knowledge is transferred from competing or collaborative companies in order to generate continuous learning for one’s own company.

6.3. Studies with an intra-organizational perspective

Twelve empirical KM contributions appeared within the research stream of an intra-organizational perspective. Many of these articles take on a dynamic approach to KM since they address learning as a topic.

6.3.1. On organizational learning

Gjelsvik (2002) surveyed conditions of employment (part-time/full-time) and learning climates in a representative sample of Norwegian hotels. He found obstacles in respect to a significant difference in learning climate explained by a relatively large number of part-time employees. He concludes that this may be because when people enter an organization, they experience a supportive and informal learning climate in comparison with longer seniority. His analysis indicates that a lack of career opportunities reduces the learning climate and explains high turnover. Bayraktaroglu and Kutans’ (2003) longitudinal study of Hotel Polat Renaissance in Istanbul pertaining to an evaluation of the hotel’s transformation process into becoming a learning organization, indicates that non-written and non-verbal rules might be obstacles for reaching further steps in the learning organization transformation process. Yang (2004a) found that in his case studies of two hotels in Taiwan, double-loop learning and deuteron-loop learning are being practiced among sales people through continuous updating of sales routines.

but individual learning is not formalized and needs to be further triggered in order to enhance organizational learning. In one hotel case, it is also acknowledged that learning must incorporate various techniques in order to reinforce understanding and behavioral changes. These foregoing examples of obstacles to learning may be explained by some findings by Aksu and Özdemir (2005) of organizational learning in their study of five-star hotels in Turkey. Their results demonstrate the important role of superiors in enabling learning in hotel establishments by enhancing individual learning through dialogues with colleagues, team-working orientation, training and rewards.

Overall, the foregoing studies on organizational learning prove the need for a further understanding of factors in hospitality establishments that affect the positive continuous creation of learning and change.

6.3.2. On knowledge sharing and knowledge capturing

Yang’s (2004a, b) exploratory comparative case studies of five-star hotels in Taiwan found that the knowledge capturing process is fairly current. Interviewees report that they collect information related to the job and from their friends in the hotel industry. However, the results reveal that knowledge sharing and knowledge capturing take place in an informal and spontaneous way and that knowledge-sharing activities are not part of the hotels’ policies and routines. Yang (2004a) and Yang and Wan (2004) also acknowledge different obstacles to knowledge sharing in the researched hotel companies. One of the aspects mentioned by employees is the difficulty in imitating tacit knowledge based on working experience. Many interviewees argued that past experience is not workable and does not fit today’s environment because of the increase in diversity of people and the different conditions of the business environment. Another obstacle to sharing of knowledge was observed among supervisors. They feared their subordinates would be promoted faster than themselves as a result of knowledge sharing; thus, they only partially shared knowledge with subordinates. Yang and Wan (2004) also report that reluctance to knowledge sharing occurred when shared ideas involved changing daily operations.

Other factors mentioned by interviewees that cause obstacles to knowledge sharing are capability of staff, sharing with selected employees, attitudes of sharers and shares, management philosophy and work environment. Yang and Wan conclude in their study that the interviewees take for granted what type of knowledge is important to share, although there seem to be differences in perceptions about what knowledge is. The study indicates a difference in perceptions about what knowledge is between managers and operational staff. This view may also be supported in a recently completed study (Ogaard & Marnburg, 2006) of 260 Norwegian hotel units indicating that the existence of communities of practice in hotels may be true: the employees perceive their work environment as organic where they help each other, solve problems as they come along and share their knowledge in order to do a good job. Management in the same representative sample do not experience the working environment as organic, but mechanical. These results indicate that “something is going on” that is out of management’s experienced reach (i.e., that employees continuously learn from each other independent of formal organizational systems).

6.3.3. On training and training methods

A study by Agut and Grau (2002) on managerial competency needs and training requests in the Spanish hospitality industry analyze which evaluation methods of competency needs by hospitality managers provide the most accurate information about the real deficits in managerial capabilities. They test two known approaches to the analysis of gaps in management competencies: (1) technical and generic managerial competency needs in terms of gaps and (2) managerial training requests. According to their findings, Agut and Grau conclude that Method 1 provides the best and most accurate information of the two methods. While the first method contains an assessment of real gaps in competencies, the second method addresses questions of needs and is subject to errors because it does not analyze the causes of the problems. Agut and Grau’s study provides some indications of how to analyze the stock of knowledge in organizations and how to fill the gap between existing and needed knowledge. They take on a static view of the strategic management of knowledge, focusing on the measurement and control of knowledge.

A quantitative study presented by Jameson (2000) demonstrates the gap in training in small hospitality firms in England. As Jameson expected, the training in small firms is primarily on an informal basis. The research reveals that only 11% of 1103 companies in the sample had a formal training plan in place. Concerning training budgets, the results revealed that only 12% of the firms in the sample have them in place. Moreover, training methods are in the form of on-the-job training, which implies informal and unsophisticated methods, resulting in an insignificant improvement in the collective competency level (Jameson, 2000). Further on this topic, a study by Furunes (2005) of how Norwegian hospitality managers perceive effectiveness of alternative employee training methods in order to achieve training objectives reveals that one-to-one training is perceived as the best training method. This includes the best method for acquisition of knowledge, changing attitudes, problem-solving, interpersonal skill development, participant acceptance and knowledge retention. As concerns training methods actually employed in the hotels, there seems to be a perceived consistency with one-to-one training methods. However, the paradox is that lectures as a training method are the second most employed training method, but score low on perception of best methods.

The conditions of little-planned strategic efforts in training in the hospitality industry were also supported in
the study by Bayraktaroglu and Kutanis (2003), who found that non-written and non-articulated rules impede further learning for the organization. Studies on training and methods demonstrate the need for planned objectives aligned with knowledge philosophy, which is also demonstrated in the study by Furunes (2005), such that managers’ perceptions of best methods according to the knowledge philosophy are aligned with employed methods. The studies on training and methods emphasize a static view pertaining to filling the gap between existing and needed knowledge (ref. study by Agut & Grau, 2002; Furunes, 2005). If the organization strives towards becoming a learning organization, it is meaningful to continuously develop new routines. Consequently, on-the-job training should not be the only method used because it aims at exploiting one’s own routines instead of developing them. The study by Jameson (2000) supports this view, emphasizing development of non-existing knowledge that is needed in small hospitality and tourism firms in England to raise the overall competency level and place focus on the issue of facilitation and development.

6.3.4. On knowledge storage
An approach to knowledge acquisition and storage is exemplified by Yang and Wan (2004). In this approach, experiences are documented and computers are put into use, but the objective is communication and facilitation and not management control of the knowledge (ref. Table 1). In this system, the most used media for storing knowledge in their hotels under study are: the logbook, which contains records of the guests’ comments and complaints; standard operational procedures, containing records of daily, step-by-step operational procedures; and situational “bibles”, which contain frontline personnel’s records of guests’ praise, complaints and situations about the settlement of complaints. Storage also includes sales reports, employees’ newsletters and the development of intranet systems with the aim of enhancing the internal communication channels.

Anecdotal studies that present strategic tools for facilitating knowledge storage (see further Bourguet & Soto, 2000; Gronau, 2002; Steiner, Britsch, & Bourguinet, 2004) also appeared in the database search. Overall, the empirical study by Yang and Wan, 2004 and anecdotal case studies indicate an emergent need for further empirical research within the area of knowledge storage. Considering that inter-organizational networks and knowledge transfer among units enhance competitive advantage (Canina et al., 2005; Ingram & Baum, 1997b, 2001), it is important to understand how to memorize and store real-time contextual knowledge in a dynamic fashion.

6.3.5. Measuring and evaluating knowledge
A quantitative study by Engström et al. (2003) of Radisson SAS Hotels and Resorts explores the usefulness of conducting an intellectual capital evaluation and investigates the relationships among the chain’s intellectual capital (human capital, structural capital and customer capital) on hotel performance measures. Applying the ICAP method, which is a tool for evaluating intellectual capital and reflects the different elements of an organization’s value chain, Engström et al. evaluate the chain’s and each hotel unit’s total intellectual capital. This method includes management’s qualitative weighting of hotels’ value-creating activities in conjunction with benchmarking of the scores among hotel units within a hotel group. The results demonstrate that there exists some relationship between structural capital (represented by all organizational capabilities supporting employees’ productivity) and some financial figures (represented by room profit and F&B profit). Further, Engström et al. (2003) find a positive relationship between human capital (represented by employees’ intellectual capital) and structural capital, implying that hotels with both high human capital and structural capital will produce a greater profit. On the other hand, a weaker relationship was found between customer capital (current and potential value of relationship with customers) and human capital, and customer capital and structural capital. In comparison with earlier studies in the mid-1990s (e.g. Sveiby, 1997) that seek to quantify knowledge in a manner that implies a purely static perspective on knowledge, the authors move towards a more dynamic way of evaluating knowledge using management weighting of value-creating activities. However, it still seems fruitless to measure or evaluate intellectual capital considering that it continuously changes (Stacey, 2001).

6.3.6. On information management
In the search for empirical studies of information management, one empirical article appeared in addition to some case studies of anecdotal character (see, e.g. Uysal, 2004). A study by Stevens and McElhill (2000) focuses on developing a multi-dimensional positioning model/tool for using e-mail in organizations as a KM tool. The empirical study by Stevens and McElhill shows how managers in an up-market hotel group, among other service fields in the UK, understand their organizations’ present use of e-mail along four dimensions: information management, influence of people, corporate culture and KM. Stevens and McElhill develop a model that can be used to purposively change the position within the four dimensions. A questionnaire aimed at senior personnel with the purpose of considering the impact of e-mail on management reveals that the one hotel group included in the study has a negative position in respect to acknowledging the strategic importance of e-mail systems as a tool for knowledge sharing. In the hotel group, management does not encourage the leveraging of tacit knowledge by means of e-mail systems for the benefit of everyone within the company. This might indicate that management does not recognize the strategic importance of employees’ knowledge (see Table 2) concerning the state of their workplace as a result of interaction with guests and customers. The view of Stevens and McElhill is both dynamic and static. In one way, e-mails allow for
development of knowledge when employees receive them from external sources, and in another way, e-mails can be stored, offering a control possibility for management.

6.3.7. Judgmental prediction and knowledge of future business change

In their case study, Ghalia and Wang (2000) present data from their experiences with development of a knowledge-based system, IS-JFK (intelligent system to support judgmental forecasting and knowledge). The system combines hotel managers’ judgments about future room demands with traditional statistical forecast techniques for room forecasting. The findings indicate that an IS-JFK system incorporating hotel managers’ knowledge (qualitative elements) may forecast more precisely compared with pure statistical forecasting systems based on historical data. In a forecasting system using solely statistical techniques, the limitations are chiefly that such systems do not consider external/non-random effects (events) that may have influenced the demand, but which are known by hotel managers. These findings indicate the need for more “soft forecasting models”, recognizing the importance of the tacit knowledge of hotel managers and employees about the future state of their companies from a demand perspective. These findings may also indicate that forecasting systems are becoming more dynamic and non-linear in nature, but this perspective of Ghalia and Wang still adheres to a static view on knowledge due to the nature of the study based on improvement of existing routines in forecasting.

7. Evaluation and discussion of empirical quality of contributions

In this section, empirical contributions are evaluated against relevant theory-of-science criteria of testability (Popper, 1968) and generalization (Kuhn, 1989) to assess the empirical quality of the contributions.

7.1. Studies with an industrial perspective

Of the industrial studies, Canina et al. (2005) and Ingram and Baum (1997a) are particularly founded on a sound theoretical framework and a systematic and elegant use of statistical methodology, while the study by Espinosa et al. (2003) fundamentally lacks a methodological framework.

Ingram and Baum’s (1997a) study includes a sample of 1135 hotel chains and represents the complete hotel chain industry in the USA from 1896 to 1985. A diligent longitudinal research design is employed, founded on secondary data where the dependent variable is RevPAR (revenue per available room) per year and the independent variables are differentiation-based agglomeration and strategic distances of firms within a cluster. Variables are explained properly and testability (Popper, 1968) is good. The study includes a sample of 1162 hotels, constituting 98% of the chain hotel inventory, and is thus representative of the entire US lodging population. The study thus satisfies generalization principals (Kuhn, 1989) of the hospitality and tourism industry, and there is reason to believe that these findings may also be applied to service industries in general where differentiation spillover effects are found, in retail, for instance.

The case study by Espinosa et al. is based on secondary data using information from others’ quantitative (Contractor & Kundu, 1998) and qualitative (e.g. Lorenz & Cullen, 1994) works, which makes it impossible to assess the methodological quality of this contribution. In fact, the present authors question whether this contribution falls under the label of empirical research. Espinosa et al. have not given an account for the methodological process and findings especially adopted from other researchers in respect to their qualitative case approach. Thus, the testability (Popper, 1968) of this study is limited. In the quantitative study adopted by Contractor and Kundu (1998), a sample of 1131 hotels is included, drawn from the International Hotels Group Directory representing America, Europe and Asia, and thus, at least in some sense, the study satisfies principles of generalization (Kuhn, 1989).

7.2. Studies with an inter-organizational perspective

The longitudinal and inter-organizational studies by Ingram and Baum (1997b, 2001) and Baum and Ingram (1998) are all founded on the use of industrial statistics. In all three contributions, the authors study the Manhattan hotel industry, including life history information, of 558 transient hotels that operated in Manhattan at any time between 1898 and 1980. As in their study in 1997a, these studies are based on a sound theoretical framework and an elegant use of secondary data. The testability (Popper, 1968) of these studies is regarded as high, and such macro-analyses provide important longitudinal overviews of the evolution of the Manhattan hotel industry. However, the results may not satisfy a generalization principal (Kuhn, 1989) for the global hotel industry or for a general KM debate because the Manhattan hotel industry is unique in many ways, attracting independent hotels in particular. Their studies focus on hotel chains in particular, and the Manhattan market thus may not be a good representation of the general American hotel market, but the study invites for replications in other geographical areas.
In their study of SME benchmarking, Kyriakidou and Gore (2005) use a qualitative approach. The study is quite good due to a semi-structured sample of 89 companies with informants (employees, senior managers and SME owners) and, as a result, provides a rather large sample considering the qualitative nature of the study with representation from different organizational hierarchy levels. Nevertheless, the testability (Popper, 1968) concerning how well the theory’s elements are accounted for is relatively poor because the authors have neither informed about the duration of interviews nor included the interview guide. However, the sampling group of cases has been accounted for in terms of snowball sampling and the analytical process is described. All in all, it may be concluded that this study could be significantly better reported.

7.3. Studies with an intra-organizational perspective

All the reported intra-organizational studies employ relevant qualitative and quantitative methods. Theoretically, however, these articles (e.g. Bayraktaroglu & Kutanis, 2003; Engström et al., 2003; Ghalia & Wang, 2000; Jameson, 2000; Yang, 2004a, b; Yang & Wan, 2004) are more pragmatic and less clear. This pragmatic use of theoretical approaches makes one wonder whether the authors realize the consequences and implications of the theories they employ.

As for the testability (Popper, 1968) pertaining to the degree to which the methods can be tested and controlled by other researchers, there is a great lack of descriptions of the designs and use of scales. For example, Yang (2004a, b) and Yang and Wan (2004) do not provide any information about the contents of their interview guides, which makes it difficult for the reader to assess the importance of what the respondents have and have not pointed out. In the studies by Gjelsvik (2002) and Engström et al. (2003), an exploratory research approach is employed in respect to construction of survey items. Yet, these items are developed without further presentations or discussions on the research traditions and possible reliable scales in the fields they address. In the study by Aksu and Özdemir (2005), information on scales is provided, but they are developed resulting from a literature review and the authors do not provide specific information about the sources of reference of these scales. Also, the study of Bayraktaroglu and Kutanis (2003) lacks in presenting results systematically in relation to their case example. Results are based on theoretical presentations rather than empirical inferences.

In respect to the study by Ghalia and Wang (2000), the contribution lacks information on scales of questionnaires and interview guides and thus does not meet the satisfaction criteria of testability (Popper, 1968).

In contrast, some studies are quite satisfactory in respect to testability. For instance, the study by Stevens and McElhill (2000) founded on a combination of quantitative and qualitative research includes appendices for both types of studies, and they provide questions for each dimension studied to demonstrate how they have built their positioning model of the use of e-mails in organizations. Agut and Grau (2002) and Furunes (2005) also include items in their studies and provide references of scales. Besides Engström et al.’s (2003) own-developed survey items, good descriptions of the ICAP methodology are applied.

From a generalization point of view (Kuhn, 1989) relating to the extent to which the results can be applied to settings other than the observed, few of the intra-organizational studies satisfy this principal. The scope of studies by Agut and Grau (2002); Aksu and Özdemir (2005); Bayraktaroglu and Kutanis (2003); Engström et al. (2003); Ghalia and Wang (2000); Yang (2004a, b), Yang and Wan (2004) support the view of tourism researchers (e.g. Ruhanen & Cooper, 2004) that studies are descriptive, focusing on one-off case studies that cannot be generalized. Although the studies by Agut and Grau, Engström et al., Ghalia and Wang and Aksu and Özdemir are quantitative, they use either a hotel chain as their case, or three hotels, or a region, as in the case of Agut and Grau. It becomes difficult to generalize their study to international hospitality settings and other service industries, and thereby to the general KM debate.

However, Gjelsvik’s, 2002 study is good because he surveys 38 hotels in Norway and it consists of a relatively large sample of 683 employees. Stevens and McElhill (2000) also satisfy the generalization principal in that their study includes different types of service industries such as mobile telecommunication, financing, hotels and universities. Furunes (2005) uses data from 56 hospitality managers, and although the sample is small, it may provide some generalization indications to the Norwegian hospitality industry, though not in relation to international settings and other service industries.

Overall, the present authors assess that there is room for much improvement of the general quality of empirical intra-organizational studies. Two of the industrial studies and three of the inter-organizational studies that appeared in the database search are founded on a careful design. The majority of reported research in the hospitality field uses a micro-business approach and is based on exploratory research. They are more interested in understanding the phenomena and not in drawing valid conclusions. Nevertheless, it would be expected that the researchers would adapt to basic research norms, for example by explaining sampling, theoretical insights, theory-based research questions, carrying out a proper research design, providing knowledge of reliable scales in the field and conducting proper analyses and inferences.

8. Overall evaluations

Focusing on knowledge and learning in our time gives promises of great strategic and sustainable competitive potentials if knowledge is developed and shared by companies, management and employees in the hospitality
industry (Bouncken, 2002; Grizelj, 2003; Yang & Wan, 2004). Researchers have pointed out that much knowledge is tacit in character (Nonaka & Takeuchi, 1995; Polanyi, 1958), and that the strategic advantages are connected to the existence and exploration of tacit knowledge (Nonaka, 1991; Nonaka & Takeuchi, 1995). However, contributions from several research traditions have resulted in quite different theoretical and practical perspectives on KM (Tuomi, 2002). Two dimensions become important: whether or not knowledge should be explicit and formalized under management control, and whether knowledge is empirically known and should be defined and planned (static view) or is something that continuously changes (dynamic view) (e.g. Stacey, 2001).

By scanning research databases, 2365 contributions were found. Nineteen empirical contributions addressing KM and related concepts (e.g. learning, training methods and information management) were identified within the hospitality field. Of the 19 empirical articles, 5 addressed a pure static view (see Table 3), where knowledge strategies are about filling the gap between existing and needed knowledge (Box 1). However, the majority of articles, 12 articles, employed a pure dynamic view on knowledge pertaining to creation of continuous learning and change through facilitation and development (Box 4). Thus, the number of articles adhering to this latter view seems to indicate the recognition of knowledge as something in perpetual change. Some articles addressed both a static and dynamic view on KM.

The theoretical assumptions in the majority of studies seem to indicate a trend towards a more dynamic way of seeing knowledge development and KM (Baum & Ingram, 1998; Canina et al., 2005; Gjelsvik, 2002; Ingram & Baum, 1997a, b, 2001; Yang & Wan, 2004), and even recognize the importance of non-linear relationships (Engström et al., 2003; Ghalia & Wang, 2000) in predicting future state of hospitality businesses by emphasizing management's evaluation and their judgmental weighting in forecasting of demands.

9. Theoretical and empirical implications of research

9.1. What we know of KM research and what we need to know

A juxtaposition of the implications of each research contribution in Table 3 has resulted in a further understanding of the articles’ empirical messages and research foci. In the section below, each of the four research perspectives in Table 1 represented by Boxes 1–4 will be discussed further.

9.2. Research quality of contributions

Only 5 of the 20 empirical articles were considered excellent according to the testability (Popper, 1968) and generalization (Kuhn, 1989) theory-of-science criteria: Baum and Ingram (1998), Canina et al. (2005) and Ingram and Baum (1997a, b, 2001). The findings of the quality of empirical articles thus justify observations of other researchers claiming that studies of KM are limited, inconclusive and mostly descriptive, focusing on anecdotal and one-off case studies. The majority of articles differ greatly with regard to the soundness of theoretical foundation, and all of the studies have a more or less serious design with methodological and inferential shortages. The present authors find that pragmatic theoretical perspectives of KM were particularly employed.

The review of published studies in KM revealed lacks in both theoretical foundation and methodology. One reason for this may be confusion or doubt about what the phenomena KM is, that is, what elements of business and social systems should be included or not, and what is the objective of KM. To answer such questions in a general way, such as “KM should give competitive advantages” and “The objective is to use knowledge more efficiently” is probably not a good justification for KM in a research project. Researchers have to be more specific concerning what are important objectives in the actual population they study.

10. Conclusion

The research objectives of this study were to identify the importance and challenges of KM for hospitality companies, to review theoretical content of empirical contributions against a static versus dynamic perspective on knowledge and to review empirical quality against theory-of-science criteria, testability (Popper, 1968) and generalization (Kuhn, 1989), respectively. Finally, objectives included suggesting future research directions.

The review, evaluation and discussion of published empirical research within KM in the field of hospitality have revealed some strong indications of potentials and obstacles for the hospitality industry and hospitality companies. For hospitality companies, KM is especially relevant for building up competitive advantage. The sector is becoming knowledge-intensive as a result of intensive use of technology and the nature of the service product, which is based on interaction between hospitality employees and guests/customers. Consequently, guests’/customers’ perceptions of service quality are dependent on hospitality employees’ skills of how to meet customer needs. Hence, hotels are likely to gain benefits from KM activities emphasizing knowledge sharing, which can improve employees’ knowledge of unique guests’/customers’ needs. KM is particularly relevant for hotel chains in terms of their requirement for consistency in quality standards of their geographically dispersed hotels. Moreover, hospitality companies can benefit from KM activities and systems in respect to development of knowledge networks among clusters of tourism enterprises. However, the industry is far behind when it comes to existing efforts in KM practices. Only some major chains (e.g. Accor and Hilton) are
concerned with KM activities, and acknowledge the great benefits that KM may bring them, especially in respect to learning and knowledge sharing.

This review of the theoretical content of KM contributions in the hospitality sector revealed that research on knowledge processes is scarce and dim, implying a great research potential. From a static perspective on knowledge, it is recommended to employ research concerning how to fill and control knowledge gaps through planned training efforts that combine exploitation of one’s own routines and exploration of new routines, thus enhancing innovation. There is also a need for understanding how hotels can avoid falling into competency traps (too much exploitation of one’s own routines) versus competitors’ knowledge positions by using methodologies for comparison. Other research issues of the static perspective are the understanding of the ability of employees versus managers in forecasting the future state of business embedded in their knowledge, and how to align knowledge vision and knowledge activities. KM research should be more aware of what company objectives KM is a part in order to make it meaningful beyond general normative formulations.

Within the dynamic knowledge perspective, there is a need to know more about what predicts good and bad learning climates, such as what promotes and hinders learning in hospitality companies, before speeding up the implementation process of KM systems. This includes identifying how employees versus management define their domain-specific knowledge. It is also relevant to carry out investigations on storage systems that can facilitate the sharing and distribution of real-time contextual knowledge in hospitality organizations. This in particular includes focus on knowledge-based systems. There also seem to be loopholes concerning how hospitality management perceives external stimuli and uncertainty as triggers for business change.

Overall, the review revealed that there is a great need for empirical KM studies in the hospitality context founded on a sound and proper research design that implies satisfactory testability and generalization (when the studies allow for it), and can thus contribute to an overall and comprehensive research debate of KM in hospitality.

References


