Development of Tacit Knowledge Transfer Mechanism in hotels, based on customized rules and routines.

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Abstract

It is widely accepted that since we have entered the "Knowledge Age", the intellectual capital is considered as the most valuable asset of every company; therefore, those who want to remain viable during these turbulent years will have to maximize their effort not only to retain, but to augment their intellectual capital. Moreover, in hotels where the factor of human interaction plays an important role towards the experience building, as the working environment cannot be characterized as stable or easily programmed, they depend more on their employees expertise and personal capabilities and less on manual and strict labor. In this research paper we acknowledge the importance of knowledge transfer and we focus on the less attended and studied form of knowledge; the Tacit one, which according to many researchers is almost impossible to transfer. Towards this framework, we argue that tacit knowledge transfer could be facilitated through the use of customized rules and routines. In this research paper, we focus on the correlation between the customized rules and the knowledge transfer factors of Trust and Communication. For that reason we contacted a research among 120 hotels in Greece and Cyprus, examining the correlation extent among the aforementioned factors and the development of customized rules.

Keywords: Tacit Knowledge Transfer Customized Rules, Routines.

Introduction

Sustainable tourism and *Knowledge Management* are well-accepted concepts in the contemporary tourism literature. In practice, the concept of *sustainable development* is increasingly discussed as tourism activities continue to impact economically, socio-culturally and environmentally on destinations and the industry itself (Weaver & Lawton, 2006; Dwyer, 2005), while knowledge management is considered the key factor in the process towards innovation and competitiveness.
However, the practical penetration of *sustainable development* at the organization level does not appear to extend much beyond a fashionable concept (Cooper, 2006; Weaver, 2006; Dwyer, 2005; Mowforth & Munt, 1998; Frazier, 1997; MacLellan, 1997; Wheeller, 1993;). In other words, the concept of sustainable development (i.e., the equal emphasis of economic, socio-cultural, and environmental dimensions in tourism decision making process) is more or less ignored by the tourism industry, assuming that firms, at large, are faced with difficulties to adopt sustainability related measures (Ahmed & Dwyer 2010). The lack of appropriate knowledge management may be considered as one of the major barriers to adopt sustainability-related practices across the tourism industry (Baggio & Cooper, 2008; Weaver, 2006 Dwyer,2005;). Hislop et al. (1997) pointed out, that knowledge articulation occurs in networks of organizations attempting to innovate and build upon knowledge. They identify two major types of networks: "Micro level" networks existing within the firm and

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"Macro level" inter- organizational networks. Focusing on the Micro level networks, active knowledge transfer and distribution of tacit and explicit knowledge allows tourism firms to learn, respond and adjust flexibly and quickly to the constantly changing landscape of tourism, remaining competitive and, therefore, sustainable (Dwyer & Edwards, 2008).

Towards this direction, Ahmed and Dwyer (2010) argue that effective knowledge management is an imperative factor for tourism organizations to attempt and achieve sustainable development, acknowledging that knowledge is the backbone of innovation and competitiveness and the most valuable asset of businesses balance sheet, in general.

Knowledge Transfer Factors

Cummings and Teng (2003) argued that the precise definition of successful knowledge transfer is the ability to absorb the useful pieces of knowledge, adjust them to the company's needs, scopes and personnel skills and use them appropriately. According to Argote and Ingram (2000), Nonaka (1994), transferred knowledge should be customized and thoroughly adjusted to the specific characteristics, tools, routines of the company and personnel abilities. Knowledge could be considered as puzzle pieces which must be pieced together within the framework of a company. Knowledge receivers should have the ability to identify, pick and use the right pieces of knowledge in order to build the company's intellectual capital. This constant transformation and evolution of knowledge defines Nonaka's internalization of knowledge, during which the knowledge worker acquires the sense of ownership, commitment and use satisfaction, investing, at the same time, personal time, ideas and already acquired knowledge. The important question that needs to be answered is under which circumstances the knowledge worker will transfer his knowledge to the less experienced, enriching the actual knowledge capital contributing, at the same time, to the company's effort to innovate and apply sustainability measures.

Szulanski (2003), Davenport and Prusak (1998) identified as important among the factors of knowledge transfer trust and communication, arguing that lack of those factors could constrain the knowledge transfer process, weakening the organization intellectual capital. On the other hand, improving trust and communication policies, complexity and uncertainty among staff members could be strongly reduced. It is our argument in this paper, that customized rules, (based on the experience, the existing knowledge and current circumstances, - S.M.A.R.T. according to P. Drucker-) will enhance trust between knowledge workers; will simplify the communication network; will strongly facilitate the capability of anticipation and therefore reduce of complexity and uncertainty levels and finally will be positive correlated with the Tacit Knowledge transfer mechanism.

Tacit Knowledge Transfer in Tourism

The literature, among the plethora of definitions regarding Knowledge Management, has developed two major categories of knowledge: a) Explicit and b) Tacit. Explicit knowledge is the kind of knowledge that is written and for that reason, easy to share, criticizes, prove and transfer (Nonaka & Takeuchi, 1991), while tacit knowledge, according to Davenport and Prusak, (1998), cannot be found in written forms, being tightly bonded with emotions and experience. Michael Polanyi (1966) wrote in *The Tacit Dimension* that "we can know more than we can tell", arguing that tacit knowledge is subconscious, hence impossible to transfer (Choo & Bontis, 2002). Aadne, et al. (1996) argued that the basis of knowledge is the tacit one, while Polanyi (1969) underline, that explicit knowledge rises from tacit which has been understood and codified. Cavusgil, et al. (2003), Inkpen and Dinur (1998), proposed that knowledge is a concrete spectrum moving from tacit to explicitness and reversely, according to its content, while Boisot (1998) argues that the achievement of competitive advantage and innovation depends in the extent of transformation of tacit knowledge to explicit.

Haldin-Herrgard (2004) contacted a literature review discussing the tacit knowledge, from 1958 to 2002. The review resulted in 149 different synonyms (epitomes) used, among them the most frequent were, intuition, skills, values, behavior, insight, mental models, practical intelligence, know-how, etc. All these synonyms and phrases were used to underline that tacit knowledge management is based on abstract meanings, practices and competences, the common approach and understanding of which will reverse in a significant extent the chaotic conditions of communication between the knowledge workers.

Knowledge management and knowledge sharing has been the subject of many scientific researches during the last few decades, but, as Shaw and Williams (2009) argued , in tourism, it is still an emerging agenda. Tourism, as one of the most important pillars of global development, with massive social, environmental and economical impacts, is a field where knowledge is the cornerstone of flexible management, constantly trying to anticipate the needs of the guests. This whole dynamic structure of experience building is widely based on those who can

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combine tacit knowledge and experience with explicit (written) knowledge that can be easily acquired in learning organizations.

Customized Rules.

Discussing the fact that tacit knowledge is important for the achievement of strategic planning and competitive advantage, Prahalad & Hamel (1990) argued that the competitive advantage which is based solely on documented (explicit) knowledge is only temporary and it will not last. On the contrary, they stressed out, that the use of tacit knowledge may build a solid competitive advantage, mainly due to the fact that tacit knowledge cannot be copied or imitated and it is flexible -therefore easily customized- towards the needs and scopes of the company. According to Polanyi, this is almost impossible to happen. Tacit knowledge cannot be easily transmitted and received among the staff of an organization. Keys (2006) tried to determine the possible ways of disseminating tacit knowledge among individuals and groups. Those would be: (i) Interviewing Expert, (ii) Learning from others and (iii) Observation. Estimating of the latter, observation could provide to the observer, valuable pieces of information and knowledge along with the possibility to capture the spontaneous nature of specific reactions, processes of procedures. At this point we need to take under consideration that routines and behaviors are developed as long as the leadership of the organization allows them to be developed. The managerial instrument used to control behaviors is mainly a system of rules, the flexibility of which will allows (or not) the development of routines and behaviors.

A grid of rules could be functional as long as they are fulfilling the S.M.A.R.T. criteria (Drucker 1958), creating simultaneously specific routines and behaviors. The focal point of this research is to develop a grid of customized rules, flexible enough to lead to behaviors that could be easily observed and routines wide enough, to be understood from the observer.

Importance of customized rules development.

Hodgson (1995) defines rules as patterns of thought or behavior which can be adopted either consciously or unconsciously, by individuals. Hodgson shows that the main characteristic of rules can be defined by the logical structure of condition and action: in circumstances X, do Y. The formal rules' contribution to the organization is to specify tasks and decision competencies for organization members, regulating hierarchical relationships and work procedures. Winter (1995b) also argues that the organization imposes a system of rules to face numerous constraints and to lead the staff not only to do a good job, but to do a better job, by reducing complexity, uncertainty and enhancing the capability of anticipation for decision makers. Cohen et al, (1995) consider that a rule is a relationship framework which allows individuals to trigger an action when a condition of it appears. The process of responding to this condition can be either automatic or deliberate and conscious. Reynaud (1997) argues that a routine is a pragmatic mean for the resolution of a problem to which the rule gives a theoretical, abstract and general answer. In this definition rules form the background of routines, hence it is impossible to adopt routines without having sets of rules, but both rules and routines are highly depended on the overall environment of the organization and the nature of production, determining the extent of rules and routines, flexibility. According to Gudela Grote and Johann C. Weichbrodt (2007), flexibility is important and vital parameter in uncertain environments. Milliman (et al, 1991) define that it offers more changes for the organization to survive in turbulent environments when employees are enough flexible to deal with disturbances. Concretively it can be achieved by very carefully selecting between safety rule types for each process (Gudela Grote and Johann C. Weichbrodt, 2007).

Hotels could be characterized as unstable environment, mainly due to the fact that there is not a strict line of production, but a set of services leading to an experience. Therefore, rules regulating the employees' behavior and routines need to be flexible. But the question that rises is "Up to what extent those rules will be flexible (or not) in order not to appear signs of looseness and disorganization? In other words, how these rules will be established regulated among the employees of the hotel? It is our argument that rules should be customized upon three elements: The experience and the training of the employee and the consideration of current circumstances and general environment. Each employee, should have his own customized set of rules, which will be constantly (maybe in daily basis) reformed among him and the head of the department.

The research model

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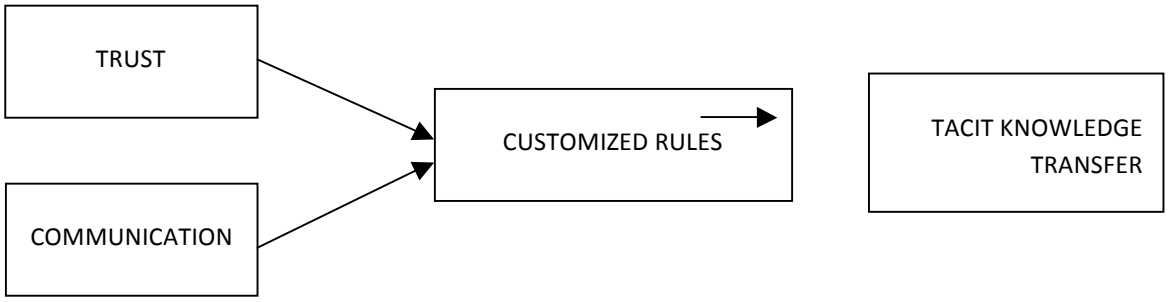
As noted above, the primary aim of the paper is to investigate the stimulation extent of tacit knowledge transfer and dissemination among staff members in a hotel, where the guesses, hunches, imaginings and passion – as forms and expressions of tacit knowledge – could be converted to explicit knowledge. In order to achieve this, we use the tool of Fuzzy Logic, combined with the development of a certain dynamic set of rules, built and based on democratic management structures, where constant dialogue is taking place, starting from the top management to the front line personnel. To facilitate the operationalization of the research problem the following research hypothesis is formulated : "the development of customized rules is positively correlated with the tacit knowledge factors of Trust and Communication." To prove the accuracy of the hypothesis, a model was developed:

Figure 1:

The overall hypothesis



Research Method

The primary research was conducted during the second half of 2010, realizing 120 semi structured interviews in 80 four and five star hotels, in Thessaloniki, Halkidiki, Athens and Rhodes, employing more than 20 employees each. For the acquired data, a descriptive analysis was conducted. The reliability of the questionnaire was tested, by the use of internal consistency and the Cronbach α test of reliability . Then a multiple linear regression analysis was contacted between the dependent (Trust, Communication and Knowledge Transfer) and independent (Customized Rules Development) variables. The complexity of the model was reduced by using the factor analysis method and the resulted factors were again correlated with the construct of "Customized Rules" to confirm the initial results.

The structure of the questionnaire was based on reference items determining each independent variable of effective knowledge transfer as shown in the following table:

Table 1
References of items per variable

Knowledge Transfer factors	**item reference source**
Communication	3 Items based on Becerra and Gupta (2003), Hansen, Nohria and Tierney (1999)
Trust	5 Items based on Levin and Cross (2004)
Knowledge Transfer	9 items based on Szulanski (2003), Pierce, Kostova and Dirks (2002),

Research Findings

Descriptive Statistical Analysis

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According to the results of descriptive statistical analysis, with the development of customized rules, there is a significant positive correlation and improvement regarding the constructs trust and communication. Trust is significantly influenced, mainly because customized rules improve personal competence and increase the employees' professionalism, a fact that finally creates a strong climate of trust in the hotel environment.

Communication, also, becomes more effective, as messages transmitted among members are more well-defined and clear. This improvement is observed not only on departmental level but also on the entirety of the business.

The knowledge transfer process is greatly facilitated, due to the fact of employees' ability to solve problems on the spot and more easily, increase of confidence, better use or prior knowledge and better acknowledgment of position's demand.

Factor Analysis

The internal consistency of the questionnaire was checked using the coefficient alpha (α), to calculate the internal coherence of the scale. For the constructs (i) Trust, (ii) Communication, (iii) Perceived use of knowledge and (iv) Knowledge Transfer, which achieved a reliability score over > 0.80, there is high internal consistency which is a priori criterion before proceeding to the multivariate factor analysis method. In each construct the correlations were statistically significant and moreover, in all cases the significance of Bartlett test of sphericity was ,000 and the Measure of Sampling Adequecy was over ,65.

Regarding the Factor Analysis, the extraction method was based on Principal Component Analysis (PCA) and as rotation method was used Varimax with Kaiser Normalization.

More specifically, from the construct of Trust, two factors were extracted: "personal pertinence and professionalism" (1,2,3), "and "trust culture" (4,5)

Table 2:

Factor Analysis Outcome: Total Variance Explained (Trust)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**2,352**	47,036	47,036	2,352	47,036	47,036	2,005	40,093	40,093
2	**1,002**	20,033	67,069	1,002	20,033	67,069	1,349	26,976	67,069
3	**,783**	15,662	82,731						
4	,578	11,567	94,298						
5	,285	5,702	100,000						

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From the construct of communication, one factor were extracted “Overall Communication Improvement” (1,2,3)

Table 3:

Factor Analysis Outcome: Total Variance Explained (Communication)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**2,024**	67,470	67,470	2,024	67,470	67,470
2	,869	28,953	96,423			
3	,107	3,577	100,000			

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From the construct of "Knowledge Transfer" there variables were extracted: a) Better decision making process, b) Reinforcement of co operation and c) Better evaluation and use of the already existed knowledge.

Table 4:

Factor Analysis Outcome: Total Variance Explained (knowledge transfer)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1,997	22,188	22,188	1,997	22,188	22,188	1,796	19,956	19,956
2	1,416	15,739	37,926	1,416	15,739	37,926	1,492	16,583	36,538
3	1,109	12,328	50,254	1,109	12,328	50,254	1,234	13,716	50,254
4	,948	10,530	60,784						
5	,903	10,031	70,815						
6	,842	9,354	80,169						
7	,683	7,593	87,762						
8	,610	6,776	94,538						
9	,492	5,462	100,000						

Regressions

The outcomes of the factor analysis were further analyzed in order to reach the most positively correlated variable. For that reason, a multiple Linear Regression Analysis was performed.

More specifically, the factors of **Trust** had an assessment rate R^2=0,765 which means that the percentage of correlation is approximately 76%. The test is generally valid due to the fact that the Sig.= ,000 and the regression rates is -3,506 for the independent variable and 1,126 and 0,618 for each factor. The outcome is statistically important due to the fact of the sig=0,000 of the coefficients

The Factor of **Communication** had an assessment rate R^2=0,669 which means that the percentage of correlation is approximately 69%. The test is generally valid due to the fact that the Sig.= ,000 and the regression rates is -0,189 for the independent variable and 1,075 for the dependent variable. The outcome is statistically important due to the fact of the sig=0,000 of the coefficients.

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The factors of Knowledge Transfer had an assessment rate of R^2=0,561, meaning that the percentage of correlation is approximately 56%. The test is generally valid due to the fact that Sig=0,000 and the regression rates is -4,882 for the independent variable, 0,550 for the variable of better decision making, 0,358 for the variable of cooperation reinforcement and 1,315 for the third variable of better use of already existing knowledge. The outcome statistically important (0,15) taking into account the large number of variables.

Conclusion

Malhorta (2002) argues "The best information environments will take advantage of the ability of IT to overcome geography but will also acknowledge that the highest bandwidth network of all is found between the water fountain and the coffee machine" meaning that the assignees and the face to face meeting are by far the most important channels for generating, reusing and transferring knowledge. Santoro and Bierly (2006) support the argument that knowledge transfer is an inherently social processes of the workplace in many ways, not easy to formalize, codify, visualize and express, highly dependent upon interactions among team members (Joshi, Sarker and Sarker, 2007). Tacit knowledge is considered as the "body of the iceberg" of the intellectual capital, which, according to Druker (1993), is the most valuable asset of the organization. Hence, the initial scientific question is the exploitation manner of tacit knowledge, acknowledging the fact that the key factors of tacit knowledge transfer process seem to be mostly psychographic. The intangibility of tacit knowledge must be handled with also intangible factors, such as communication, trust, perception, etc. Researchers such as Szulanski (2003), Malhorta (2002), Nonaka (1998), Drucker (1993), Polayni (1969), and many others, agree that tacit knowledge depends on the extent of communication, trust, ability to express and culture. This research paper argues that the development of customized rules, could strongly improve communication and individual pertinence, enhancing the level of trust and tacit knowledge transfer.

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