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EVALUATING KNOWLEDGE-ORIENTED MANAGEMENT IN UNITED ARAB EMIRATES FIRMS: INDUSTRY CASE STUDY

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Abstract: *Purpose*: The purpose of this exploratory researchis to identify and measure the promotion of knowledge-oriented management in United Arab Emirates (UAE) industries.

Design/methodology/approach: This study was guided through questionnaires that surveyed 129 industrial firms, which represent 45 per cent of the total industrial firms that are located in Abu Dhabi Emirates. 103 participants completed and submitted their questionnaires (response rate: 79 per cent, which is sufficient for exploratoryresearch). The Directory of the Chamber of Commerce was the source of the study definitions.

Findings: The findings revealed that some indications of knowledge-oriented management were above the medium level (firm's missions and visions and firm's attitudes). The indices for human resources and management perceptions were average, but the firm's system was lower than average and the

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knowledge management level followed an increasing pace. In conclusion, some strategies were provided to increase the effectiveness of KM in the industry.

Keywords: *Knowledge management; Knowledge transfer; Knowledge; Industry; UAE.*

INTRODUCTION: THE INCREASING SIGNIFICANCE OF KM IN INDUSTRY

Knowledge management (KM) is a systematic mix of values, contextual information and experiences that incorporate new theories and information. However, an essential element of success in KM is creating an organizational culture that can motivate, support, encourage, capture, create, share, codify and reuse knowledge at an individual, group and organizational level. Knowledge management is a concept in which an organization gathers, organizes, shares and analyzes the knowledge of individuals and groups across the organization in ways that directly improve performance (Anvariet al., 2010). According to Lam (2000), embrained knowledge is "formal, abstract or theoretical knowledge" such as scientific knowledge. For any firm, both tacit and explicit knowledge is embedded in human activities, whereas task-generated knowledge must be managed to serve its purpose and to help the firm grow (Ogaraet al.,2010). Due to changes within the economical and cultural arena, efforts have been made to change and adapt to a more challenging business environment and to overcome the heritage of an incompetent old organizational culture. Nevertheless, in order for these efforts to be fruitful they need to be sustained by practical solutions to enhance the role of KM in order to increase the willingness of employees to share their knowledge.

Thus, KM is concerned with the exploitation and

development of the knowledge assets of an organization with a view to supporting and developing the organization's objectives. Management entails all the processes associated with the identification, sharing and creation of knowledge (Endreset al., 2007). In recent years, a wide range of business techniques, including performance management, total quality management and quality assurance, have had both a direct and indirect impact on education, and KM is set to do the same. For Reige (2005), knowledge transfer is the movement of knowledge between its origin and the users within a specific context. Moreover, organizations are investing heavily in knowledge management inorder to improve the efficiency of their business. In fact, despite the wide literature on KM, there is an abundance of research describing how large companies are successfully practicing KM, but few contributions to research on the critical success factors for KM adoption in industrial firms (Evangelista et al., 2010) specifically in the United Arab Emirates (UAE).

Small businesses vary substantially in their resource positions, the goals of their founders, and their potential. Essentially, the motivation for KM implementation within an organization should be driven by the business needs or the quality of gained experience. Any KM implementation needs a clear road map that is derived from and based on goals and the available resources. Klein (2008) suggested that sharing knowledge is deeply interconnected with the underlying issue of how the knowledge has been created. Moreover, individuals are responsible for generating knowledge through the use of their cognitive abilities. The major objective of the present study is to identify and measure the promotion of knowledge-oriented management in UAE industries. This paper aims to redress some of the imbalance in the literature by putting KM into the context of industrial businesses in the UAE. The results of the study will help industrial organizations to

understand the impact of different enablers onsuccessful KM implementation, and how the effectiveness of KM affects any firm's performance.

KNOWLEDGE MANAGEMENT POLICIES AND PRACTICES

Knowledge management enables the existing individual knowledge to be captured and transformed into organizational knowledge which in turn must be diffused and shared by many employees. The management must let go of the long-established philosophy that knowledge is power (Yehet al., 2006). Organizational knowledge and improving the knowledge held by management are issues of concern to these enterprises. Because the managerial activities in the firms involved in the study were the managers' responsibility and their managing efforts proved to be successful, it was clear that those surveyed in the sample were aware of the importance of implementing the KM system in their firms, and that such awareness is compatible with knowledge-sharing perceptions. Knowledge management includes any effort exerted by the managers to exploit organizational knowledge in different departments of the firm or within its hierarchy (Finkl and Ploder, 2009).

Knowledge is an intangible set of information having distinctive characteristics that are usually reflected in a specific context (Wang et al., 2006). Therefore, the development of knowledge systems in all aspects of life, including the management of industrial firms, has been a matter of survival to the firms that generated these systems. This knowledge facilitates the firms' decisions and survival strategies in industry since it links employees and systems to accomplish a more effective and sustainable use of the available resources. According to Goh (2002), organizations today focus on finding and using effective means for the transfer of knowledge

to sustain a competitive advantage and improve their performance. Therefore, knowledge management efforts in such situations may be regarded as enablers that facilitate the transfer of knowledge within an organization. When the management of the organization and the employees share the same values and perceptions and they internalize these values, the relationship between the leader and the employees will be stronger (Orlikowski, 2000; Singh and Premarajan, 2007). Top management efforts are therefore important in implementing the knowledge system to facilitate communication among employees, which will positively influence perceived knowledge benefits. An organization's management should beaware that the employees are part of the knowledge system as well as the data side of the equation. KM can be implemented successfully only if an encouraging and collaborative environment exists (Song, 2008). To be credible, the KM system research and development should preserve and build upon the significant literature that exists in different but related fields (Waldvogel and Whelan, 2008). KM is a formalized, integrated approach for the identification and management of an organization's knowledge assets. Thus, the transfer of knowledge within the organization depends on the context in which the knowledge has been created and shared. However, the impact of KM implementation in terms of performance improvement and related benefits is still elusive (Walsham, 2006). KM is therefore concerned with the exploitation and development of the knowledge assets of an organization in order to improve the organization's objectives.

Management entails all the processes associated with the identification, sharing and creation of knowledge. Organizations that succeed in practicing KM are likely to view knowledge as an asset and to develop organizational norms and values that support the creation and sharing of knowledge. Thus, KM has to create an environment to enhance

and facilitate the transfer and practice of knowledge within the firm (Hustad, 2007). It should also be developed in a way that will help employees to effectively create, share and exploit knowledge to enhance their organization's efficiency and subsequently, answer their questions. Evaluating knowledge-based organizations has become one of the most important issues in KM as a strategy for improving the competitiveness and performance of organizations (Garcia-Perez and Mitra, 2008).

KNOWLEDGE MANAGEMENT AND THE ORGANIZATIONAL ENVIRONMENT

Knowledge management has received widespread attention in recent years. Companies have highlighted the importance of knowledge as the basis for competitive advantage in the field of business although it is regarded as an intangible asset in the firm. Many organizations have gained profit from KM because they recognize its importance in business growth and development (Pillania, 2008). KM is a critical area for managers in today's competitive environment. However, there is general consensus in relation to the fact that the benefits of KM have not yet been fully exploited by small firms. Deng and Poole (2008) suggested that different channels should be used to transfer different kinds of knowledge. In a survey of various industries, the data suggested that depending on the industry, different channels are of differing importance. For example, 64 per cent of the respondents in the pharmaceutical industry rated meetings or conferences as "moderately" to "very" important,while 50 per cent of the respondents in the same industry rated patents as "moderately" to "very" important. However, 51 per cent of the respondents in the aerospace industry rated meetings or conferences to be "moderately or "very" important, in contrast to the 14 per cent of the respondents in that industry who gave the same rating

to patents (Rollof and Sefcik,2010).Human factors need to be taken into account regarding the creation and sharing of knowledge in order to make the process easier.Thus, management should consider psychological factors rather than focusing purely on sharing knowledge. Knowledge consists of information, technology, know-how and skills. Value and sustainability are better achieved through the integration of these resources rather than through competition (Endreset al., 2007). Management, knowledge and technology play a vital role in attaining high product quality, economic development and growth. Managing these resources and capabilities helps the organization in creating competitiveness in the industry. Organizations that succeed in practicing KM tend to view knowledge as an asset and to develop organizational norms and values that support the creation and sharing of knowledge. KM is adopted to cater to the critical issues of organizational adaptation and competence in order to face increasing environmental change (Omerzel and Antoncic, 2008). Therefore, in order to improve their competitive efforts, organizations and institutions must focus on producing 'knowledge workers' (Godin, 2008). The challenge is that KM systems are inert and the knowledge development process is too complex to be managed in a bureaucratic or technical manner. A successful manager knows that the value of knowledge management is recognized more clearly now than ever. Organizations require effective knowledge-sharing mechanisms that enhance the firms' ability to learn and innovate effectively. This can happen when meaningful information reaches the management in the organization.

Organizations invest heavily in knowledge management in order to improve their performance, and use it as a critical resource for sustaining innovative ideas and achieving competitive advantage (Wenger and Snyder, 2000). They require a new foundation for KM that is capable of encompassing all

the underlying disciplines and perspectives without becoming just another perspective on KM (Parboteeahet al., 2010). Therefore, the role of management is to establish the hierarchies of a structured information base to enable the efficient access and transfer of information throughout the organization, and above all, to create a suitable atmosphere with a culture ofsharing.

Organizations cannot, by themselves, initiate and manage KM initiatives in a single way, using a single module. Rather, networking within a group with driven business interests and common practices is a valid KM tool for regionally based organizations (Cummings and Teng, 2003).

THE RESEARCH METHODOLOGY

The research methodology comprised both qualitative and quantitative methods and a literature review of KM in general was undertaken. The research adopted in this paper is exploratory in nature, aiming to identify and measure the promotion of knowledge-oriented management in United Arab Emirates (UAE) industries.

The instrument used was a standardized questionnaire on knowledge management of which the internal correlation was calculated through Cronbach'salpha at95per cent, and then analyzed using a Kruskal-Wallis test. A questionnaire survey was conducted, and the final version of the questionnaire was tested via interview. The questionnaire was submitted during face-to-face interviews involving managers and owners regardless of their skills and job titles. 129 questionnaires were distributed. Among the participants were general managers, representing 45per cent of the total industrial firms. 103 participants completed their questionnaires, making the response rate 79per cent. Five sets of measures were used to

measure each of the five constructs:management perceptions, the firm's attitudes, the firm's mission and vision, the firm's system and human resources. Measures were made by integrating the Rampersad test (2001) and the journal of organizational knowledge test (2007), before subjecting the data to a formal pre-test by managers and experts. Cronbach'salpha for the first factor is 0.73, which indicates high overall internal consistency among the items representing the variable.

FINDINGS OF THE STUDY

The correlation and validity of the instrument's statements were tested via Cronbach's alpha method.The correlation for all the subscales of KM was high and significant at 0.01. The correlation for the indicators of the firm's attitude came in the first rank (r=0.891), the firm's mission and vision in the second rank (r=0.780), the firm's system in the third rank (r= 0.701), management perceptions in the fourth rank (r= 0.661) and human resources (r= 0.580) came in the last rank (see Table 1).

According to Cronbach'salpha indicator, management perceptions was sound (0.81), and the firm's attitudes were very good (0.91). Among the indicators, the firm's mission and vision was the lowest (0.70), whereas other indicators such as internal process (0.79) and human resources (0.87) surpassed it.The reliability alphas of total KM (0.98) were very strong (Table 1) and this is an indication that the research instrument has reliable validity. However, the minimum of the alpha value for sub scales was equal to 70per cent, which was a rather high value.

Indicator	Cronbach'salpha	Mean	Correla-tions	Sig
Management Perceptions	.81	42.44	.661	.000
Firm's Attitudes	.91	19.73	.891	.000
Firm's Missions and Visions	.70	15.99	.780	.000
The Firm's System	.79	17.81	.701	.000
Human Resources	.87	18.11	.580	.000
KM- Total	.98	114		

Table 1:
Statistical Data

THE MEAN VARIABLES

The mean values on a five-point scale (1= strongly disagree; 5 = strongly agree) of the five indicators under KM were 42.44, 19.73, 15.99, 17.81 and 18.11 for management perceptions, the firm's attitudes, firm's mission and vision, the firm's system and human resources. The mean KM (sum) was 114, which indicates that the respondents believed that the level of knowledge management, according to the criteria mentioned, was a little less than average. It is clear that the firm's system is more challenging and tangible than the other indicators.

KRUSKAL-WALLIS TEST

ANOVA results showed that thehomogenization of variance was violated, so we applieda Kruskal-Wallis test. The results also revealed that there is a relationship between the firm's attitudes and KM [(=13.203, P=.006 / ((df=3) = 13.203, P< .02)], the firm's system and KM [((df=3) = 16.110, P< .02)],

and human resources and KM [(□(df=3) = 37.987, P< .02)]. In addition to this, the total of KM was [(□(df=3) = 14.113, P< .02)]. There were no significant differences between KM and items including management perceptions and the firm's mission and vision.

	Management Perceptions	The Firm's Attitudes	The Firm's Missions and Visions	The Firm's System	Human Resources	Total KM
Chi-Square	1.567	13.203	2.989	16.110	37.987	14.113
df	3	3	3	3	3	3
Asymp. Sig.	.709	.008	.285	.001	.000	.004
Indicators	42.44	19.73	15.99	17.81	18.11	114.08
No. of Firms	103	103	103	103	103	103

Table 2:
Test Statistics

CONCLUSION

This paper attempted to explore KM practices in industrial firms through an empirical investigation carried out on a set of 129 firms located in Abu Dhabi Emirate in the UAE. Knowledge management represents the direct result of the interaction between the individuals, the work environment and their organization. The purpose of this paper is to analyze knowledge management as a core component of the organizational knowledge dynamics for industrial firms. This study is important for all companies in the economy, especially in the industrial sector where managing knowledge is a way of doing business and achieving organizational objectives in the industrial sector of the UAE economy. It is proposed that organizational structure and operational process should be improved. Furthermore, the process of KM, knowledge creation, utilization, transformation and updating is considered but implemented slowly.

The firms' organizational culture and management attitudes will influence and hopefully add value to the efforts of the employees to build the knowledge-sharing required for the benefit of their firms. It is worth mentioning that there is observable evidence of KM practices in those industrial institutions that are also increasing at a slower pace. Respondents expressed their belief that the knowledge gained was mostly theoretical. There is a need to strengthen a two-way flow of information within these firms between departments and the organizational hierarchy.The positive commitment highlighted by the study indicates a need to concentrate on the behaviouraland human-oriented aspects, while most of the negative points indicate that there is a problem in the organizational structure.

STUDY LIMITATIONS

Elaboration may be needed in order to identify whether the correlation between age and KM is a significant, weak or negative relationship. Another limitation is the generalization and basic assumption that all organizations are the same. The organizations may be small or large, depending on the nature of their businesses, which may be posed as a question concerning the implementation of KM in different environments.

BIOGRAPHY

Prof. Khalid Alrawi graduated from the University of Oxford (UK) with an M.Phil in Management Sciences, and Strathclyde University (UK) with a Ph.D in Business Administration. Professor Alrawi has over thirty years of experience, with twenty-five years in academics and higher education. He is also an associate editor of various international journals and a member of many institutions in the USA and the Middle East. He has conducted various Faculty Development Programmes and published more than fifty-five research papers in leading publications. He is now working at the American University in the Emirates.

With eight years of teaching experience in Iraq, **Dr. Ahmed Alrawi** achieved his Ph.D from Baghdad University (HONS) in Economics. His current research interests are econometrics, team work, quantitative methods, and diversity in the workplace. He is now the assistant Dean of the College of Business Administration in the University of Al-Anbar/Iraq.

Dr. Maher Ibrahim received his Ph.D from the Suez Canal University/Ismailia, Egypt, specializing in education/mathematics. He has conducted various Faculty Development Programmes and published research papers in leading

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