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## KNOWLEDGE SHARING CULTURE: A STUDY ON THE OMANI COMMERCIAL BANKING SECTOR

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### Abstract

The banking sector is one that is characterized by the high need of management experience and agility to cope with the fast-paced competition raised by the international alliances in this business. The Omani banking sector in general is one of the infrastructure businesses that has essential role in the realization of the Omani Renaissance. This sector has achieved remarkable improvements in terms of the cutting edge technology it has adopted. To reach the Omani aspiration in its economic renaissance, various soft issues beyond technology are to be tuned well to reach of the required competitiveness. Softer issues such as knowledge management are one of the critical soft issues that forms the aim of the study presented, and in particular, to explore how organizational knowledge is shared and nurtured in the sector. Questionnaire-based survey and semi-structured interviews were used to collect both qualitative and quantitative data from over 300 hundred banking employees from five different banks. Clustered sampling was used for the survey and interviews were selective; targeting senior administrator in the sector. The qualitative data was analyzed using SPSS descriptive statistics and thematic analysis was used for analyzing the qualitative data. The study found that the sector has built a competitive cutting edge banking technology over relatively short span of time; however there is still vast room for improvement at the administrative side of the work. Among the recommendations, is having a conscious systematic effort by the sector administration to build physical and virtual facilities for exchanging knowledge among its employees and to provide work stability and an effective reward system for knowledge sharing behavior.

**Keywords:** Knowledge Management, Knowledge Sharing, Organization Culture, Oman Commercial Banking Sector

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### 1. Introduction

Given the advancement of information and communication technologies (ICT), globe-wide competition and increased demand to quickly respond to customer need are two of a number of factors driving business for organizational change (Henry and Hartzler 1998; Bal and Teo, 2000 p.349; Miles and Snow, 1992). Backed by the tremendous advancements in ICT, the

knowledge-driven economy, 'Knowledge' has been recognized as a key intangible asset that influences building organizations' competitive advantage (Grant, 1996). Knowledge management has emerged on this valuable realization of knowledge. In fostering and optimizing this valuable organizational asset, a knowledge-based management perspective has emerged at the strategic level at first (Alavi and Leidner, 2001; Nonaka and Takeuchi, 1995). This perspective focuses on creating realization of the organizational knowledge as being a key for sustainable advantage through what an organization collectively knows (Davenport and Prusak, 1998) and also a key for organizational advantage (Teece, 1998; Tsai and Ghoshal, 1998).

Knowledge management (KM) is the term used to denote studies that focus on the collective professional knowledge that employees of one organization have. KM studies, to date, demonstrate that KM field is broad and multi-faceted in nature.

## 2. KM Field Evolvement at Glance

The field of KM was recognized as a field of research since the 1980s (Cooper, 2006; Hallin, and Marnburg, 2007) although human knowledge has a history as old as humans (Nonaka and Takeuchi, 1995). Moreover, inquiring knowledge has been a focal question of philosophers since the ancient Greeks (Alavi and Leidner, 2001). Since its existence as a discipline, an increased number of organizations have embedded KM principles in their business strategies and the reported results and experiences show that: 1. Improvement in business process efficiency, 2. Better-organized communities, and 3. higher staff motivation (Nonaka and Takeuchi, 1995). To date, KM has passed through three levels of understanding by interested communities of researchers and practitioners. The main criterion in this change of the KM scope is the way it was recognized to be best implemented in organizations. The early understanding of KM was as an information technology (IT) related issue. At this time of its evolvement, KM systems (KMS) were considered to be the knowledge reservoir of the organization (Borghoff and Pareschi, 1998). The later stage of comprehending KM is through the socialization processes embedded in organizations when employee interacts with each other (Al-Alawi *et al.* 2007; Nonaka and Takeuchi 1995). This later view of KM has broadened its scope in organizations whereby the recent view of KM is the information systems (IS) based one that is a combination of both views (Schultze and Leidner, 2002). Thus, KM is IT-based in relation to the tools it uses to store, process, retrieve and share the tacit side, while the socialization is the environment within which the implicit part can be shared and created. Figure 1 illustrates the KM evolvement to date.

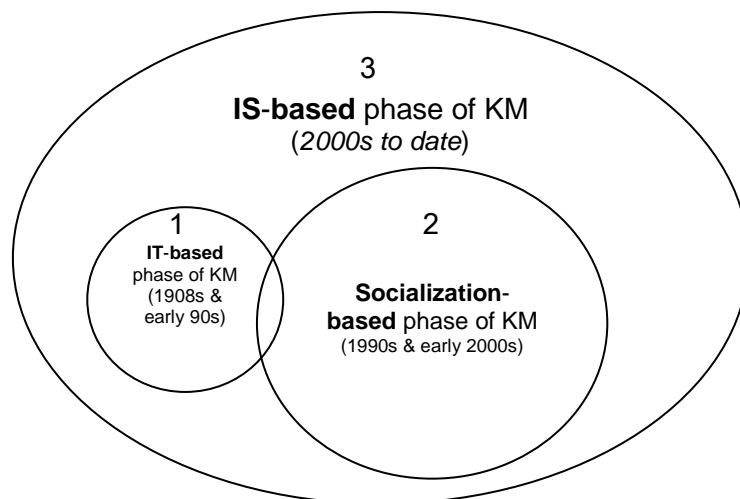


Figure 1. IS-Based Knowledge Sharing Evolution

Throughout its evolvement, KM has witnessed major shifts in its maturity and various researchers have contributed their views on how KM has matured (i.e. Koenig, 2002; Snowden, 2002; Toumi, 2002, Sveiby, 2001; McElroy, 1999). A study by Vorakulpipat and Rezgui (2006) summarized the KM shifts into what they call its generations from knowledge sharing (KS) to knowledge creation (KC) to reach its highest generation into value creation (VC).

KS forms the first generation and refers to the overall organizational environment including strategies, practices and tools that nurture knowledge dissemination among employees. KC, the second generation, leverages the outcome of KM from merely sharing professional knowledge to come up with new knowledge by enhancing the use of the organization's strategies, practices and tools it provides to its employee. VC, as the third and last generation of KM, aims at fine tuning the organizational environment to create value.

Given the limited number of studies exploring the status quo of managing knowledge in organizations in Oman, the study presented aims to contribute to this body of knowledge and add a building block by exploring how organizational knowledge is shared in Omani organizations. Knowledge sharing environments and efforts in the Omani commercial banking sector OCBS is, therefore, the aim of this study is developing an understanding of how the OCBS realizes one of the most vital assets that is needed in today's extreme competition. Davenport and Prusak (1998) demonstrate that knowledge sharing is critical to organizations' success. Learning organizations are mainly characterized by their ability to manage their organizational knowledge sharing environment successfully that enhances their competency (Goh, 2002; Nonaka, 1994).

### **3. Methodology**

#### **3.1. Research Community & Sampling**

The Omani commercial banking sector has been selected given the importance they play in the Omani shift to become a multi-source economy by funding large segment of the working capital in all industries at the medium and small enterprises MSEs in particular.

Knowledge sharing for this study adopts the concept of 'ba' that refers to the place (physical or virtual) within which individuals' knowledge can be effectively shared and nurtured (Nonaka and Konno, 1998). In an organizational setting, this can be achieved through the various aspects of the corporate organizational culture at both its visible and invisible levels. Davenport and Prusak (1998) state that organizations use KM initiatives for one of three purposes: the first is to show the role of knowledge in an organization and making it visible such as using maps, yellow pages and Web logs. The second is to build a knowledge sharing culture through the encouragement and aggregation of behaviors to share or create knowledge proactively. The third purpose is to build knowledge infrastructure that comprises both knowledge management systems (KMS) and people networks supported by the space, tools, time and encouragement to interact and collaborate. It is worth noting for the purpose of this study that knowledge sharing practices refer to the kind of physical as well as virtual facilities that an organization intentionally make available for prospering its employees' knowledge, in addition to all kinds of motivational arrangements the organization undertakes to support this knowledge sharing by its employees.

A total of seven Omani commercial banks were extant at the time of the study, two of which did not show interest to participate in this study. These banks are Al Ahli Bank, Bank Dhofar, Bank Muscat, Bank Sohar, Oman Arab Bank, Oman International Bank and National Bank of Oman. In addition, there are other commercial banks functioning in Oman but they were not included in this study as they are not an Omani brand but are braches of international banks. Table 1 shows the available banks in Oman at the time of the study and the year of establishment of each one of them.

Clustered sampling was adopted in selecting branches of the five participated banks. Clustered sampling was selected due to the special geographical nature of Oman that spread over two main areas, one in the north that include the capital city Muscat and one in the south where Salalah is the main city. All targeted banks by this research have branches in both north

and south areas. The survey, therefore, has researched the branches that are located in the south area only making clustered sampling a best choice.

**Table 1. The Omani banking sector - History of establishment**

<b>Local banks</b>	<b>Establishment</b>	<b>Foreign banks</b>	<b>Establishment</b>
1- Bank Muscat (BM)	1982	1- Habib Bank	1972
2- Oman International Bank (OIB)	1979	2- HSBC	1948
3- National Bank of Oman (NBO)	1973	3- Bank of Baroda	1976
4- Bank Dhofar (BD)	1990	4- Standard Chartered	1968
5- Oman Arab Bank (OAB)	1973	5- Bank Saderat Iran	1976
6- Bank Sohar	2007	6- National Bank of Abu Dhabi	1976
7- Ahli Bank	1998	7- Bank Melli Iran	1974
<b>Specialized banks</b>		8- State Bank of India	2004
1- Oman Development Bank	1977	9- Bank of Beirut	2006
2- Oman Housing bank	1977	10- Qatar National Bank	2007

Source: CBO (2010)

### 3.1. Research variables

Knowledge sharing has a vast and steady existence in KM literature. Many KS-related studies focused on what it constitutes a factor to nurture, or hoard, employees to share knowledge with their colleagues.

Given the three kinds of initiatives previously mentioned stated by Davenport and Prusak, 1998, practices, organizations use as mentioned previously to spread the KS culture in organizations, the variables/factors that were driven from literature can be framed as follows:

**a) KS installation (organizational dimension)** refers to any physical and/or virtual settings that the organization provides and make consciously available to all knowledge to be nurtured within. These would include the following:

- Availability of knowledge sharing facilities (KSF),
- Awareness of KSF availability,
- Nature of KSF (Physical and/or virtual, social and/or materialistic),
- Availability of social physical/virtual space and its level of use,
- Formal communication methods and their dependency,

**b) KS motivation (administrative dimension)** refers to the way management stimulate knowledge exchange behavior any form of groups of employees like formal work teams or ad-hoc committees. This includes the following factors:

- Organizational encouragement and support to use KSF
- Providing guidance/orientation, on using available KSF,

**c) KS deployment (interpersonal dimension)** the factors that lay in the personal side of employees are investigated in relation to how personnel react/pro-act to the facilities offered by the organization and to the motivations created by its management at all levels. It includes the following factors:

- Employees' benefits from available KSFs,
- Employees' reaction to others' KS behavior,
- Feeling towards sharing knowledge with others, and
- Personal motivations to share knowledge.

### **3.2. Data Collection and Analysis**

Data was collected through questionnaire-based survey and semi-structured interview. This is referred to as "Triangulation" (Birley and Moreland, 1998; Yin, 2003) which refers to the use of more than one data collection technique in order to have richer data from various angles that supports research findings. A survey was initially conducted by distributing nearly a thousand copies of which four hundreds are hardcopy and around six hundreds are softcopies sent by email. The data was then analyzed and followed by interviews. The questionnaire was made available in both English and Arabic since employees were a mix of Arab and non-Arab.

The questionnaire was validated using three methods proposed in research methodology related literature. First, variables were taken from knowledge sharing related literature (Al-Alawi *et al.* 2007). Second, a pilot study (Birley and Moreland, 1998) was used to seek expert opinion. Third, a reliability test was applied to this research instrument by using Cronbach's Alpha Coefficient which resulted in .879 which reflects high level of reliability denoting that the questionnaire can actually test what it is designed to test.

To comply with the research ethics, the research was conducted in compliance with the University of Salford Manchester Code of Ethics guidelines<sup>1</sup>. Basically, participating banks names were not revealed due to their request to remain anonymous. Instead, aliases were therefore used. Similarly, the names and specific position of the interviewees were also remained anonymous as requested.

The questionnaire was piloted on 21 employees from two different banks. The pilot study aimed to make sure that the questions were relevant to what was meant and also aimed to verify that respondents understood questions without ambiguity or bias towards one particular response. Furthermore, it was used to test the time required for respondents to complete it. As a result of the pilot study, the questions were modified to become clearer to respondents. Where it is widely accepted and understood that questionnaires are usually used for quantitative data (Rugg and Petre, 2007) it is very common to use them to collect qualitative data in form of open-ended questions though their limitations.

The total number of questionnaire copies distributed was nearly 1000 (both hard and soft copies), 373 completed questionnaires were received with only three of these being soft copies. 82 of the returned copies were not reliable to include in the analysis due to the incompleteness and randomness in completing them. The remaining copies eligible for analysis were 291. This makes the response rate of total contacted respondents 37.3 percent and for the eligible for analysis 29.1 percent. In the second stage of data collection, five interviews were conducted with senior management personnel of these banks. Two of these personnel were of the same bank making the participant banks four out of the five surveyed.

Data collected were carefully sorted to ensure their eligibility to be analyzed. The quantitative data were analyzed using the computer application Statistical Package for Social Sciences (SPSS) applying the descriptive statistical tests to its fitness to the type of data that were collected. The interviews were semi-structured and data collected through it were analyzed thematically.

### **4. Findings**

The results of the questionnaire data analysis, as shown in Table 2, show that the employees' awareness of the availability of knowledge sharing resources in their organizations is considerable, representing 72.5 percent of the total sample size. 92.9 percent of these replied to be frequently using these resources with almost equal intervals of this use ranging from

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<sup>1</sup> <http://the-sra.org.uk/research-ethics/ethics-guidelines/>

everyday to once a month (every day 31.1 percent, once a week 26.5 percent, once a month 26.5 percent) with 15.8 percent using the resources irregularly. This item was multi-selection since employees can use more than one resource and on different intervals. Concerning the nature of these resources, 68 percent (of the 211 respondents who actually replied that they are using these resources) provided that there is a computer-based knowledge sharing resources available with an average 49.5 percent reliance on formal gathering and lesser on circulated various paper- based forms of helpful documents. The least of the resources is reported with the informal gathering among employees to exchange their knowledge (problems and solutions experiences). This was an important question during the interviews where information beyond these simple results was further explored. All interviewees explained that knowledge resources available are basically digitized bank documents available online over an Intranet to facilitate employees' access when they require them. It is worth recalling here that Internet access is not granted for all employees, which limits the benefit of their availability online. In addition, there is no Web logs (Blogs) offered by the sample organizations for employees to exchange matters of interest which facilitate individual experiences to flow among employees. The formal gathering is basically for discussing routine work agendas. The informal gatherings such as a short-notice meetings that are usually held for the exchange of ideas and opinions on some important issue(s) to the relevant team or unit with no need for recording minutes or to the upper managerial level have 14.4 percent of respondents, which was mentioned by interviewees in this regards.

**Table 2. Questionnaire results summary**

No.	Variable	Answer options	Results (percent)
1	Awareness of KS facilities	Yes	72.5
		No	27.5
1.1	Frequent use of these facilities	Yes	92.9
		No	7.1
1.2	Frequency of KS resources use	Every day	31.1
		Once a week	26.5
		Once a month	26.5
		irregular	15.8
1.3	Nature of KS resources	Computer-based	68
		Paper-based	40.9
		Formal gatherings	49.5
		Informal gatherings	14.4
1.4	Rate the benefit of the available KS resources	Very helpful	39.8
		Helpful	52.6
		neutral	5.2
		Helpless	1.4
1.5	Organization encouragement to use KS resources	Yes	93.4
		No	6.6
1.6	Organization provided orientation on how to use the KS resources	Yes	93
		No	7
1.7	Efficiency of such orientation(s)	Very efficient	31.6
		Efficient	55.7
		neutral	9.2
		Inefficient	1.7
2	Description of management moral encouragement to share professional knowledge and experience	Very encouraging	31.9
		Encouraging	50
		Neutral	13.8
		Discouraging	3.3
3	Incentives used by organization to encourage sharing professional knowledge and experience	Very discouraging	1
		Money	70.8
		Gifts	46.4
		Shopping vouchers	15.8
		Days off	14.8

**Table 2 (continued)**

4	Evaluation of incentives to KS behavior	Very encouraging	19.9
		Encouraging	33
		Neutral	34
		Discouraging	13.1
5	Availability of social space for breaks and informal gatherings	Yes	2.1
		No	97.9
5.1	Frequency of using this place	Once a month	21.6
		Other (irregular)	11.4
6	Availability of virtual space	Yes	4.1
		No	95.9
7	Colleagues reaction to knowledge sharing behavior	Very appreciative	26.8
		Appreciative	57
		Don't know	6.2
		Ignorant	7.9
		Not appreciative	2.1
8	Evaluation of colleagues' behavior to share their knowledge	Very willing	28.5
		Willing	58.1
		No difference	5.2
		Unwilling	7.9
		Very unwilling	0.3
9	Level of trust among colleagues to share knowledge	Complete trust	27.5
		Trust	57
		Don't know	12.4
		No trust	3.1
		No trust at all	0.0
10	Rate of communication effectiveness to complete tasks among colleagues	Very smooth	19.9
		Smooth	56.4
		Just acceptable	17.2
		Unsmooth	6.5
		Full of obstacles	0.0
11	Methods used in communication (face-to-face)		99
	- Level of dependency	Fr.(72.7), S(24.5), R(2.8)	
	Methods used in communication (paper memos)		83.2
	- Level of dependency	Fr.(23.1), S(62.4), R(14.5)	
	Methods used in communication (phone)		100
	- Level of dependency	Fr.(75.5), S(21.7), R(2.8)	
	Methods used in communication (e-mails)		100
- Level of dependency	Fr.(71.1), S(22), R(6.9)		
12	Personal preference to share knowledge	Yes	99.3
		No	0.7
13	Personal motivator to share knowledge with others	Moral rewards by organization	95.5
		Monetary/physical rewards	69.1
		My own nature	
		Happy to benefit others	83.2
		In return when others share their knowledge	85.2
		89.3	

## 5. Discussion

By triangulating both collected data by questionnaire and interview and intersecting then integrating them, it can be derived firstly, that there is a serious move in the sector to improve the overall internal system to make it capable of competing the foreigner banks that have the advantage of the long experience in banking as well as in the international markets. This was stated directly and indirectly by all the interviewees. The analysis shows that the knowledge

sharing environment of the OCBS, given the three dimensions of factors mentioned above, is as follows:

### **5.1. KS Installation (Organizational Dimension)**

This dimension was investigated by collecting data on the organization structure, the type of formal communication network applied in the sector and also the facilities provided by the sector including social physical and virtual spaces. With regards to the organizational structure, the results show that the majority of respondents (88 percent) answered that they have hierarchical organizational structure with 79 percent responding that the formal communication is of a bureaucratic nature. Hence, the sector seems to keep the traditional hierarchy where conventional levels of management and department-based structure are the one prevails. Basically, tasks are assigned to individuals rather than to teams though various forms of collective work was deployed, like committees, it is still not the main component of achieving tasks and responsibility remains on individuals. As a consequence, the formal communication that is practiced in the sector is the traditional hierarchical ones (moving the three levels of management: top, middle and first) with a marginal effect of the informal channels through the interpersonal relations among employees. Traditional hierarchical communication is characterized by the high level of details and direction of communication among the various levels of the management that take the form of reporting. This type of communication is argued to be hindering the flow of information in the organizations (Al-Alawi *et al.* 2007). On the other side, moving away from the traditional structure of communication is argued to be encouraging to richer flow of information among employees (Syed-Ikhsan and Rowland, 2004). Besides, the interview results show that there is very limited less-restricted agenda that allow more points of interest to employees to be discussed and in a more convenient atmosphere. Analysis of data at this point reveals also that the resources (facilities) provided by the sector are limited to the digitized documents provided by the relevant banks in addition to using the e-mail for exchanging ideas, proposing suggestions, etc. Two banks, however, provided a direct informal channel through their Websites to share any suggestions an employee may seek to contribute to the bank's service or process progress. The importance of making available spaces for employees' social interaction has been widely pointed out and researched in the knowledge sharing and creation fields with the concept of 'ba' being the referral concept in this concern (Hoof and Huysman, 2009; Cross *et al.* 2002; Nonaka and Konno, 1998). As for the knowledge sharing supporting facilities provided by the sector, it can be seen that spaces - physical (e.g. common rooms) and virtual (e.g. Web logs) – are not available. Therefore, the employees' social interactions are not supported, which in turn, limits their opportunities for exchanging their knowledge (Chiu and Wang, 2006; Cross *et al.* 2002; Tsai, 2002; De Long and Fahey, 2000; Shah, 1998; Lee, 1997; Szulanski, 1996; Ibarra and Andrews, 1993).

### **5.2. KS Motivation (Administrative Dimension)**

Three factors are considered to be influential to share/not share employee's own knowledge with his/her colleagues: rewards system based on recognizing employee's contribution by the organization (Al-Alawi *et al.* 2007) and work (employment) stability (or turnover) (Scott and Hoobler, 2003). Rewards systems have been used and studied for their impact on the employees' behavior of sharing knowledge (Al-Alawi *et al.* 2007; Goh, 2002). Data analysis shows that the OCBS has been using reward systems. The impact of the sector's rewards system on employees sharing knowledge seems to be modest. Respondents showed 31 percent of their agreement on the influence of incentives to encourage them to share knowledge, while it is remarkably higher in the case of the moral motivations where it shows 73.2 percent. Combined with the interview data, the reward systems in the sector is critical due to its unclear setting to positively influence the exchange of knowledge among employees. The rewards system is basically dedicated to individual achievement not the sharing behavior, which therefore does not make this system effective in bringing employees' attention to the value of sharing behavior nor to the knowledge sharing behavior. Thus, this can weaken the system as a



motivating tool by the management to promote the desired behavior of knowledge sharing among employees. On the other hand, the percentage values of incentives show that they need reviewing in order to have effective impact on employees' achievements. The moral motivation seems to be practiced more effectively than incentives.

The results show that the sector should improve to make more efficient use of them. This situation is given by bringing together the statistical results of both those factors (that motivational factors when they are existent in the sector along with demotivational factors if they are not existent in the sector) to employees' knowledge sharing behavior. That is, 29.7 percent and 23.4 percent, respectively for those factors being motivational and 69.3 percent and 47.7 percent, respectively for being demotivational factors to employees to their knowledge sharing behavior. A special consideration should be devoted to the work stability factor. This is because of the sector's compliance with the 'Omanization policy' as part of the Omani economy in general that aim to substitute foreign labor that is mainly knowledge-based with Omanis. This might make foreign labor feel insecure in easily sharing their knowledge in an organization, or even a country, that they feel they can soon be replaced. Therefore, these two factors are influential on employees' knowledge sharing behavior but not yet sufficiently applied. This makes them both another critical factors for motivating the knowledge sharing environment in the OCBS.

### **5.3. KS Deployment (Interpersonal Dimension)**

The analysis of the data with regard to this group of factors focuses on uncovering the individual's role in reacting to the overall facilities and encouragement made by the organization to share their own professional knowledge with others. It, also, refers to the interpersonal relations that can hinder or motivate employees to exchange their own professional knowledge freely with their co-workers. 'Trust' is one of the key of the studied factors as reviewed by Powell *et al.* (2004) and Martins *et al.* (2004). Results on trust show its existence with a positive impact in the sector. The sector's management seems to have performed well in nurturing this interpersonal attribute since it is found at all administrative levels. Therefore, the trust is not only among employees of the same administrative level but also among employees with vertical formal relationship, which can be attributed to the management style in running the work. This factor, in fact, is found in the overall Omani culture that value and highlights trust among its members as all interviewees mentioned directly and indirectly. Another factor that affects nurturing knowledge sharing among employees in this dimension is the willingness of individuals to do so and the co-workers' reciprocal influence on their knowledge sharing behavior (Chiu and Wang, 2006; Goh, 2002). This factor also positively indicates the healthy interpersonal atmosphere that encourages sharing behavior in the sector. This can be seen as a consequence of having high level of trust among employees which, in turn, motivates their willingness for such kind of sharing.

## **6. Conclusion**

The sector seems to still have room for necessary improvements to make sharing knowledge mature in the sector. Among the three dimensions of factors to encourage knowledge sharing in the sector, namely organizational, administrative and interpersonal dimensions, the latter is found to be supportive by being an extension to the values that are found in Omani culture. This can naturally support any well planned and implemented practices of knowledge sharing taken at the other two dimensions, i.e. organizational and administrative. The organizational and the administrative dimensions require some attention by the sector to construct the necessary environment including moving towards more flattened organizational structures that can speed up the flow of information among all members, and consequently making faster responses to the sector's dynamic environment. Also, the sector is advised to set up physical and virtual facilities where employees can interact freely away from their offices. This can unlock the deeper tacit part of their professional knowledge. OCBS can consider also highlighting the value of exchanging professional knowledge among employees to make it clear message to its

employees how sharing knowledge is rewarding at the individual as well as at the organizational level. The latter action should be supported by adequate rewards systems, both monetary and moral, that should be clearly linked to one's behavior in sharing their knowledge with others. Enhancing stability at work is yet another factor that might be critical to one category of the employees who are non-Omani. Though the Omani employees form the larger segment of the human resource in the sector, the non-Omani segment is very important given that it has individuals with high level of expertise and knowledge that are very important to share it in the sector.

Given that this study is an exploratory in nature, further studies should be conducted to probe the interplay of the above mentioned factors in order to lever up the sector capability to manage its professional knowledge. Experiment studies are preferred to reach more practical conclusions. The OCBS support in this stage is essential to make real use of these research efforts.

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