

Knowledge Transfer from Retiring Employees in Public Sector in Oman: Challenges and Issues

Venkat Ram Raj Thumiki*, Ph.D.

*Assistant Professor & Marketing Program Coordinator, Department of Management & Law, Faculty of Business and Economics, Modern College of Business and Science, Muscat, Oman.

Email: venkat@mcbs.edu.om

Hesham Magd, Ph.D.

Associate Dean – Quality Assurance & Accreditation; Head – Faculty of Business and Economics, Modern College of Business & Science, Muscat, Oman.

** Corresponding Author*

Abstract

Purpose: Main purpose of this research is to evaluate the attitude of retiring employees on transferring their knowledge to the existing employees and to identify challenges in implementation of knowledge transfer process in public sector organizations in Oman.

Design/ Methodology/ Approach: Data collected using Snowball sampling technique from 76 retiring employees was analyzed, using multiple response set analysis, Chi-square and ANOVA along with post-hoc tests.

Findings: Retiring employees exhibited positive attitude towards transferring their knowledge. Retiring employees opine that their knowledge can benefit the organization but are not fully prepared to transfer their knowledge. According to them, organizations need to develop resources for implementing knowledge transfer strategies.

Research limitations/implications: The study focused only on the perspective of retiring employees and not the other category of employees. Response rate was low as the questionnaire was self-administered. Due to Snowball sampling technique, it can be assumed that the questionnaire was forwarded to representative sample.

Practical implications: Retiring employees have job-related knowledge and expertise that could be tapped and disseminated not only among the existing employees but also to the new joiners. Public sector organizations need to have a standard process of knowledge transfer from the retiring employees. If implemented effectively, this practice can not only enhance the organizational performance but also reduce the cost of employee development.

Originality/value: This research contributes to the field of knowledge management by identifying challenges to be addressed and strategies to be adopted for effective implementation of knowledge transfer from the retiring employees in the public sector in Oman.

Keywords: Knowledge transfer, Knowledge sharing, Retiring employees, Mentoring, Workshops

1. Introduction

Public sector in Sultanate of Oman includes Ministries, Authorities and Government-owned companies catering to sectors such as health, IT, education, agriculture, facilities and petroleum (Omanuna, n.d.). It is the most important sector of employment in Oman as according to the National Centre for Statistics and Information it includes approximately 39 organizations and institutions (Service, 2019) with around 229,386 employees by the end of 2020 (Al Sherbini, 2020). As per the recent government's decision (Oman sets retirement age, 2020), nearly 5,000 employees retired from government sector by the end of December 2020 (CSEPF, 2020). These retiring employees possess invaluable skills, knowledge, and accumulated experiences not only developed during their tenure, but also through formal training processes provided by their firms to build their knowledge management capacity (Santoro et al., 2018). They have, over a period of more than 30 years, pooled-up the expertise and know-how related to tackling the challenging situations in their jobs (Syed & Rowland, 2004). It is this premise, that gives rise to the thought of knowledge transfer from retiring employees to the existing employees. Though the benefits are widely acceptable and undisputed, there arises a need to identify the key challenges that need to be addressed in deriving the benefits of knowledge transfer.

1.1 Need for the study

According to Ouriques et al. (2019), organizations should analyse various issues before designing and implementing knowledge transfer process including the study of attitude of transferor (Koloniari & Fassoulis, 2017). Though mass retirements are common in public sector, (Hennigan, 2013; Luzer, 2013; Davey, 2011), it is for the first time in the history of Oman that such a huge number of employees are retiring from the public sector (Service, 2019). Hence, it is important for the public sector in Oman to have a proper knowledge transfer strategy for transferring the retiring employees knowledge to the existing employees (Abubakar, 2019). Also, no study was earlier conducted in Oman related to transfer of knowledge from retiring employees in the public sector. Though Alavi and Leidner (2001) found that mentoring and training are used in Omani public sector for knowledge transfer, it was not specific to transferring the knowledge of retiring employees and also it was done two decades ago. Hence, there is a need to conduct the study again to identify the modern and more valid techniques that can fit the current scenario (Antunes & Pinheiro, 2020).

1.2 Objectives and scope of the study

Two main objectives of the study are, to evaluate the attitude of retiring employees towards transferring their knowledge to the existing employees and to identify the challenges in the implementation of knowledge transfer process in public sector organizations in Oman from the viewpoint of retiring employees. This research covered only the public sector in Oman as large number of employees are retiring due to the Government's recent decision. This study is conducted from the retiring employees' perspective.

2. Literature review

2.1 Knowledge management & knowledge transfer techniques

Knowledge management process starts with creating knowledge and progresses to storing and further sharing it within the organization (Ramirez et al., 2011; Girard, 2015). Knowledge transfer, the next most important aspect in knowledge management process (Huang & Peng, 2018; Cullen,

2008) refers to the procedure of knowledge sharing (Gilbert & Cordey-Hayes, 1996) by experienced employees (Kwan & Cheung, 2006) through diverse means and techniques (Akram, 2009) not only with the new hires (Ferraris et al., 2017) but also among those who may replace them (Webb, 2017; Paulin & Suneson, 2012). Choice of knowledge transfer method varies with the type of knowledge (Chart 1) because transferring tacit knowledge is challenging compared to the transfer of explicit knowledge (Guzman & Wilson, 2005) as it is based on experience and consciousness (Koloniari & Fassoulis, 2017; Yim et al., 2017). Tacit knowledge can be better transferred through mentorship, a downward approach and job-shadowing, an upward approach (Maestro, 2020; Santoro et al., 2018). Whereas, explicit knowledge can be better transferred through case study method which is being currently used by IT (de Wit-de et al., 2019) and manufacturing sectors (Ferraris et al., 2017). Thus, there is no single strategy that fits all situations (Dayan et al., 2017), as learning abilities and personal characteristics vary between employee cohorts and individuals (Oseledchik et al., 2017; Webb, 2017) and it depends up on other factors such as type of knowledge, efficacy and attitude of employees (de Wit-de et al., 2019; Antunes & Pinheiro, 2020; Palvalin et al., 2018; Rhodes et al., 2008; Hamaguchi et al., 2017).

Chart 1: Differences between explicit and tacit knowledge

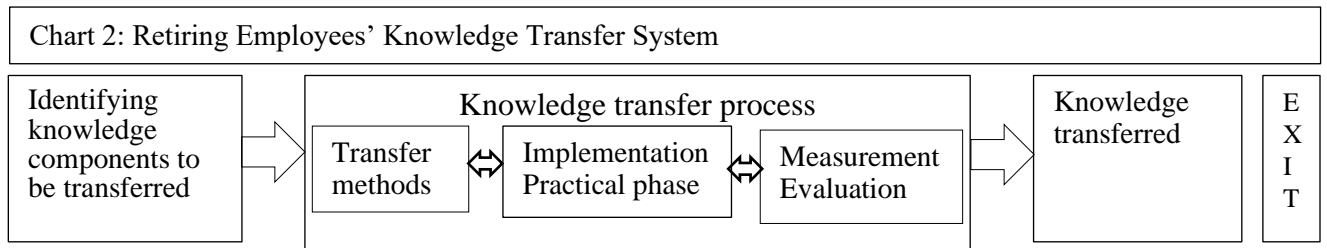
	Explicit knowledge	Tacit knowledge
Name	Easily identifiable, Relatively easy to share, Intrinsically incomplete, lacks context and requires interpretation	Within person knowledge, Difficult to articulate, Hard to share, Can be shared only indirectly
Typical example	Information, Know-how, Theoretical knowledge	Intuition & insight, Practical intelligence, skills & practice, Rules of thumb, Mental models and beliefs
Mechanisms for generating and sharing	Codification, Documentation, Databases & search engines, Blogs, Wikis and intranets	Practice, Personal and team reflection, Drawing mental maps, Apprenticeship Social interaction and mentoring, Storytelling and metaphors, New codification systems can make some tacit knowledge easier to share, through converting some elements of it into explicit knowledge

Source: Goffin et al., 2010: 41 cited in Magd & McCoy, 2014: 129

2.2 Issues and challenges in knowledge transfer

Though technology plays an affective role in knowledge transfer (Hafeez-Baig & Gururajan, 2012), the attitude and efficacy of transferor and transferee, that refers to ‘people’ (Hamaguchi et al., 2017) and the transfer strategies and measurement, that refer to ‘processes’ (Abubakar, 2019) are the two common aspects that need to be addressed (Hosseini et al., 2014; Dhamdhare, 2015; Kay, 2003; López-Nicolás & Meroño-Cerdán, 2011). Effective knowledge transfer exercise essentially deals with numerous challenges such as cultural aspects (Hislop et al., 2018; Webb, 2017) and economic aspects (Evaristo, 2007). Managers need to identify both personal and

organizational challenges for effective implementation of knowledge transfer (Mohajan, 2019). Other challenges include, identifying an appropriate technique (Bij et al., 2001), ensuring accuracy and completeness (Lin, 2011) and designing a proper rubric (Gervais et al., 2016; Ngoma & Lind, 2015).



3. Research methodology

This descriptive research is based on analysis of primary data collected from 76 retiring employees. Snowball sampling technique was used as it was difficult to identify and reach the sample (Saunders et al., 2007). Statistical analyses conducted on SPSS version 17.0 included, multiple response-set and crosstabulation analyses (Argyrous, 1997), hypotheses testing along with post-hoc tests (Kothari, 2004). Bonferroni Correction was conducted to avoid Type-I error (Benjamini & Hochberg, 1995) and Cramer's V was calculated to further strengthen the analysis (Cohen, 1988; Kim, 2017; Saunders et al., 2007). The questionnaire was designed scientifically after reviewing the related literature. Demographic questions were included to find out the association between the behavior and demography of the respondents (Fisher et al., 2012). Attitude of the respondents was studied based on the Theory of Planned Behavior (Ajzen, 1991). Items related to respondents' awareness, opinion, willingness, self-efficacy, etc. were derived from the study by Susanty et al. (2012). Variables related to challenges and perceived benefits from knowledge transfer were derived from the study by Juhariand and Izhar (2018). The questionnaire passed through the review process in the Modern College of Business and Science (MCBS Policy Manual, 2018). Informed consent was taken from the subjects, the questionnaire was anonymous and did not seek any personal information (Saunders et al., 2007).

3.1 Framework of the study: Retiring Employees' Knowledge Transfer System (REKTS)

Conceptualized by the authors

REKTS starts with identifying key knowledge components related to the retiring employee's job. Appropriate transfer methods should be identified, and the transfer process should be made a daily routine for the retiring employee. Proper metrics are needed for assessing the effectiveness of the process. Thus, the retiring employee will exit after passing through the knowledge transfer system.

3.2 Reliability and validity of the questionnaire

The questionnaire was translated into Arabic language for better understanding of the questions. Questionnaire addressed the predictive validity (Chisnall, 2004) as there were items related to their future courses of action. Cronbach's alpha value of 0.824 indicated the reliability of the instrument (Cronbach, 1951).

4. Results and discussion of findings

4.1 Analysis of sample characteristics

Table 1 presents the demographic details of the sample. 76 percent are males while the rest 24 percent of the respondents are females. This sample characteristic matches with the population characteristic that has around 64% as male employees and 36% female employees in the Sultanate of Oman (Al Hattali, 2020; Gulf News hails Omani, 2020). Organization size in this research is determined in terms of number of employees based on the New SME Classification (2016) by the Public Authority of SME Development, Riyadh Oman. It can be seen that majority of the respondents are working in organizations with more than 200 employees.

4.2 Attitude of retiring employees towards knowledge transfer

Table 1: Demographic characteristics of sample (N=76)

	Demographic variable	No.	%
Gender	Male	58	76.3
	Female	18	23.7
	Total	76	100
Organization size	Less than 50 employees	2	2.6
	51 to 200 employees	21	27.6
	More than 200 employees	53	69.7
	Total	76	100

Table 2: Retiring employees attitude (REO) towards knowledge transfer (in descending order)

		Mean	Std.Dev.
REO1	I acquired expertise and knowledge related to my job during my tenure	4.61	.732
REO2	I am willing to transfer job-related knowledge to the existing employees	4.59	.790
REO2	Knowledge transfer from a senior employee will benefit a junior employee	4.55	.823
REO4	Knowledge transfer from retiring employees will contribute to improving the public sector performance	4.51	.825
REO5	I am aware of the areas of knowledge related to my work	4.49	.721
REO6	My knowledge transfer will be beneficial to my organization in all aspects	4.43	.888
REO7	My knowledge transfer will enhance performance of existing employees	4.42	.821
REO8	Knowledge transfer from retiring employees will contribute to enhanced organizational effectiveness	4.41	.803
REO9	I am committed to transfer my knowledge to other employees before I retire	4.22	1.091
REO10	I have the ability to transfer job-related knowledge to the existing employees	4.08	1.055
REO11	I am motivated to transfer my knowledge to the existing employees	3.89	1.090
REO12	People are positive in receiving knowledge and show learning attitude.	3.55	1.124
REO13	I am ready and can start the knowledge transfer sessions	3.42	1.349
REO14	My organization has resources and facilities for knowledge transfer	3.20	1.244
REO15	I have already made a plan of how to share my knowledge before I retire	2.79	1.310

Employees retiring from public sector in Oman indicated that they have acquired job-related knowledge and expertise during their tenure while working on various tasks (Table 2). It is the highest rated item with an average of 4.61 and a low standard deviation (0.732) that indicates the closeness of responses. This is consistent with the findings of Santoro et al. (2018) who found in their research conducted in Italy, that employees build knowledge management capacity during their tenure. Retiring employees expressed willingness to transfer their knowledge to existing employees (4.59), are aware of various knowledge related to their jobs (4.49) and strongly feel that knowledge transfer from a senior employee will benefit a junior employee in several ways (4.55). According to them, their knowledge transfer will contribute the improved performance of public sector (4.51) and will eventually enhance the organizational effectiveness (4.41). This finding matches with studies conducted by Svetina and Prodan (2008) in the manufacturing sector across 7 countries in Europe, wherein it was found that knowledge transfer will influence firm's performance. Also, Heisig et al. (2016) in their study of 222 industry experts and academia from 38 countries found that knowledge transfer has contributed to the increased business performance. Thus, it can be concluded that this is a global phenomenon and can be adopted by the public sector in Oman.

The respondents feel that they have ability to transfer job-related knowledge (4.08) but are not prepared to start the knowledge transfer activity (3.42) as they are apprehensive about the availability of organizational resources (3.20). The retiring employees indicated that they are committed to their organizations (4.22) and are also motivated (3.89) to transfer their knowledge to the existing employees. Similar findings were reported by Giampaoli et al. (2017) who found that the employee who transfers knowledge does not bother about the incentive and is instead self-motivated. No significant difference was found between male and female employees and between employees from different organizations with reference to their attitude towards knowledge transfer ($p \geq 0.050$). Initially, in the first order t-testing, differences were found between the responses of male and female respondents in case of 5 items, REA4, REA7, REA9, REA13 and REA15. But the Bonferroni correction conducted to avoid Type-I error revealed that the differences were not significant in these 5 items as well ($p \geq 0.003$). Demography of the respondents is not associated with their attitude towards knowledge transfer. Thus, it can be concluded that the retiring employees are confident about possessing job-related knowledge and are willing to contribute as well.

4.3 Perceived benefits of knowledge transfer from retiring employees

Table 3: Perceived benefits from the knowledge transfer (arranged in descending order)

	N	% of overall responses	% of respondents
Improvement of work-related skill of existing employees	66	19.0%	86.8%
Improved performance of existing employees	65	18.7%	85.5%
Improvement of CV of existing employees	59	17.0%	77.6%
Increased knowledge sharing attitude among employees	59	17.0%	77.6%
Enhance motivation and commitment of the workforce	50	14.4%	65.8%
Total	348	100.0%	457.9%

Retiring employees perceive enormous benefits of knowledge transfer (Table 3). According to them, it will help in improving the work-related skill of existing employees (86.8%; N=66) and will contribute to their enhanced performance (85.5%; N=65). These findings are consistent with study conducted by Nicolas (2004) who found that effective knowledge transfer will enhance work related performance by improving the decision making ability of learning employees. Retiring employees indicated that their knowledge transfer will contribute to the existing employees' personal growth and strengthens their CV in the job market (77.6%; N=59). Shehabat et al. (2020) too concluded in their study conducted in Jordan, that knowledge transfer has the invisible power to develop the humans and societies at large. Further, retiring employees feel that knowledge transfer activities will create a growth-oriented, knowledge sharing culture in the organization (77.6%; N=59) and will result in motivated and committed workforce (65.8%; N=50). Similar finding was presented by Vnoučková and Urbancova (2015) who conducted research in Czech

Republic and found that knowledge transfer enhanced capabilities among the existing employees and contributed to the reduced employee turnover. Gender and organization size of the respondents were not associated with their perceived benefits from knowledge transfer ($p \geq 0.050$).

4.4 Preferred knowledge transfer techniques

Table 4: Knowledge transfer techniques preferred by retiring employees (order of preference)

	N	% of overall responses	% of respondents
Workshops & presentations – virtual online	54	21.5%	72.0%
Mentoring and coaching	48	19.1%	64.0%
Workshops & presentations – physical in office	45	17.9%	60.0%
Sharing documents	43	17.1%	57.3%
Best practices meetings	38	15.1%	50.7%
Through exclusive software	23	9.2%	30.7%
Total	251	100%	334.7%

Multiple response set analysis revealed that more than 70% (N=54) preferred online workshops, virtual presentations and webinars to transfer their knowledge to the existing employees (Table 4). Other knowledge transfer techniques preferred are, mentoring (64%, N=48) and in-office workshops (60%, N=45). This could be due to their lack of comfort in using online processes. Further, around half of the respondents preferred to share the documents and participate in the best practices meetings.

Table 5: Preference for knowledge transfer techniques is associated with gender of respondents - χ^2 independent test

Hypotheses	P-value	Dof	Significance	Effect size (Cramer's V)	Contingency table analysis	Bonferroni correction
Preference for in-office workshops	0.010	6	Significant	0.356 Strong	Males preferred in-office workshops	Significant
Preference for document sharing	0.009	2	Significant	0.351 Strong	Retiring employees from medium and large organizations preferred document sharing	Significant for only medium and large organizations

As per the details presented in Table 5, respondents' preference has a significant strong association with their demography (gender and organization size). Males preferred in-office knowledge transfer sessions $\chi^2(1, N = 76) = 9.649, p < 0.05$, Cramer's $V = 0.356$ and the z-test post-hoc with Bonferroni correction revealed that those from the medium and large organizations preferred document sharing technique $\chi^2(2, N = 76) = 9.649, p < 0.01$, Cramer's $V = 0.351$.

4.5 Challenges in implementation of knowledge transfer process

Table 6: Challenges foreseen by retiring employees in implementation of knowledge transfer process

	N	% of overall responses	% of respondents
Lack of understanding of the purpose of knowledge transfer	46	14.7%	62.2%
Lack of initiative from the Management / Head	45	14.4%	60.8%
Lack of skill among retiring employees regarding knowledge transfer	41	13.1%	55.4%
Lack of participation by learning employees	41	13.1%	55.4%
Lack of participation by retiring employees	35	11.2%	47.3%
Lack of resources	35	11.2%	47.3%
Lack of proper measurement or metrics	29	9.3%	39.2%
Cultural challenges	24	7.7%	32.4%
Cannot be integrated in the daily routine	16	5.1%	21.6%
Total	312	100.0%	421.6%

As appropriately identified by de Wit-de et al. (2019), in their literature review, several barriers pose challenges for effective knowledge transfer. Retiring employees in public sector in Oman agreed that implementation of knowledge transfer process is not exempted from certain challenges (Table 6). According them, there is a lack of understanding of the benefits of knowledge transfer process across the organization (62.2%; N=46). Retiring employees expect the initiative to be taken by Head of the department (60.8%; N=45) and opine that lack of infrastructure and resources are major challenges (47.3%; N=35). This is also supported by Kaldeen et al. (2020) who researched service sector in Sri Lanka and found that lack of infrastructure could be a challenge in the effective implementation of knowledge transfer process. Also, Giampaoli et al (2017) indicated that there was a lack of proper direction from the higher-ups in this regard.

Another major challenge is low self-efficacy among retiring employees regarding their knowledge transfer ability. Almost half of the sample exhibited low self-efficacy by indicating that they have lack of skill to transfer their knowledge (55.4%; N=41). This finding is consistent with the study conducted by Ergün and Avcı (2018) who found that low-self efficacy of knowledge givers is one of the impediments of effective knowledge transfer. Retiring employees feel that there is a need for proper metrics (39.2%; N=29). This is also supported by Shannak (2009) who concluded through his extant literature review that lack of effective measurement tools is one of the

challenges in implementation of knowledge transfer process. Hypothesis testing revealed that perceived challenges are not associated with their demography ($p \geq 0.050$). Hence, it can be interpreted that challenges are common for both gender types and for all sizes of organizations. These challenges identified by the retiring employees will enable the management of organizations in Omani public sector to address this key issue and result in effective implementation of knowledge transfer process.

5. Conclusion and recommendations

Public sector organizations in Oman suffer from loss of valuable knowledge when employees retire. Hence, there is a need for transferring their knowledge to the existing employees. As the retiring employees expressed lack of skill to transfer their knowledge, there is a need to provide required inputs to transform them into knowledge givers. As they perceive lack of understanding of the importance of knowledge transfer, there is a need for extensive persuasive communication across the organizations in public sector in Oman. Further, there is a need for organizations to devote reasonable resources towards transferring retiring employees' knowledge to the existing employees. As online procedures are preferred, online virtual presentations can be scheduled at regular intervals. It is recommended to make every retiring employee a mentor to either a newly hired employee or to the one who will occupy his/her position, making it a part of succession planning process. It is recommended for public sector organizations in Oman to establish systematic procedures for smooth and effective transfer of knowledge from retiring employees. The retiring employees' exit journey should be designed in such a way that they pass through the knowledge transfer system while retiring. It should be made a prerequisite (if possible) in the retiring exit process. Authors propose the Retiring Employees' Knowledge Transfer System (REKTS) presented in Chart 2 with the objective of effectively transferring the job-related knowledge from retiring employees to the existing employees.

5.1 Future scope of the study

The proposed framework of the Retiring Employees' Knowledge Transfer System (REKTS) could be tested for its effectiveness and improvement in the future.

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