

Barriers and Enablers of Tacit Knowledge Transfer in Australian Higher Education Institutions

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Abstract: - Transfer of tacit knowledge is essential and higher education institutions play a crucial role in the transfer of tacit knowledge. This study seeks to understand the barriers and enablers of tacit knowledge transfer, specifically in the context of universities. Interviews of academics in four Australian universities were conducted. Data has been reported based on a structured interpretative approach. Results from the research may thus lead to more complete conclusions regarding the barriers and enablers of tacit knowledge transfer within the academic community. The findings suggest that human, social and organisational culture factors are addressed to ensure successful tacit knowledge transfer.

Keywords: - Tacit Knowledge, Tacit Knowledge Transfer, Barriers, Enablers, Higher Education Institutions, Universities, Knowledge Management, Australia.

1 Introduction

The transfer of tacit knowledge is important for all types and sizes of organisations so that skills, expertise and experience of its employees are shared and passed throughout the organisation, than just being retained by the employees who possess it. The use of knowledge in organisations can attribute to improvements in organisational processes and is a key element in creating and sustaining competitive advantage [1]. As organisational knowledge is greatly dependent on the tacit knowledge that its employees possess, it is important to pursue strategies that encourage sharing of employees' knowledge.

Knowledge exists in both explicit (tangible) and tacit (intangible) forms. Tacit knowledge is difficult to access and transfer [2] but it is possible to convert tacit knowledge into explicit [3]. It is crucial that organisations identify where tacit knowledge is located so that it can be easily transferred. More importantly, an assessment of the barriers and enablers should be carried out to contribute to greater tacit knowledge transfer [4].

From a tacit knowledge sharing perspective in an organisational context, there are two evident problems, firstly sharing is difficult [5] and secondly, a restrictive knowledge-sharing culture [6]. Tacit knowledge, which is embedded in the minds of employees, is difficult to transfer.

Moreover, even if the employees are willing to part with their tacit knowledge, there are barriers of tacit knowledge transfer in the universities context. In the case of universities, most tacit knowledge is located within its academic and research employees. In universities, an aspect of knowledge transfer would imply the sharing of work-related knowledge and expertise by academics with their peers within the university [7]. Therefore, university academics form the primary source of data for this research.

There is an apparent lack of understanding of the barriers and enablers that affect knowledge sharing [7]. Most previous research has predominantly focussed on knowledge sharing in the corporate sector disregarding higher education institutions [8]. This study plugs that scarcity gap by not just focussing on knowledge sharing but specifically on tacit knowledge transfer in the higher education institutions' context, from the perspective of Australian university academics.

This paper is structured as follows. In the next section, a review of the literature has been carried out. This is followed by the research method in section three, which outlines some nuances of the adopted qualitative approach. Section four then outlines the findings, along with a discussion. The last section of the paper draws the conclusion, outlines limitations and avenues for further research.

2 Literature Review

Tacit knowledge comprises of the skills, ideas and experiences people possess, which are hard to access and transfer [9]. Nonaka, Toyama and Konno [10] suggest that explicit knowledge can be expressed in a formal and systematic language and is easily shared whereas tacit knowledge is personal and includes subjective insights, intuitions and hunches. A definition of knowledge transfer is “the focused, unidirectional communication of knowledge between individuals, groups, or organizations such that the recipient of knowledge (a) has a cognitive understanding, (b) has the ability to apply the knowledge, or (c) applies the knowledge.” [11], pg. 542.

Nonaka [3] has argued that knowledge can only exist at the level of the individual, so it becomes really important to use the knowledge individuals possess. Apart from using their tacit knowledge, the means of making that personal knowledge available for reuse via knowledge transfer is important. The factors that adversely affect the success of knowledge management implementation are classified as knowledge management barriers [12]. However, knowledge management is a large discipline and looking at implementation and knowledge management under one lens would only provide a siloed picture. The importance of knowledge sharing cannot be underscored. There has been a call to specifically identify the barriers to tacit knowledge transfer in the universities context [13].

Knowledge management has been widely explored in the corporate business sector, but higher educational institutions are lagging behind [14]. Undoubtedly, the transfer of tacit knowledge is a challenging task because of the very sticky nature of tacit knowledge. To exacerbate the issue, transfer of teachers’ tacit knowledge is a difficult point in the overall knowledge management efforts of universities [15]. It is vital to create a favourable environment with the right conditions for the spread, transformation, creation and application of tacit knowledge [15]. These right conditions can be termed as the enablers.

Despite the progress that has been made in understanding the nature of explicit knowledge, little has been done to explore the transfer of tacit knowledge especially by academics in higher education institutions. The current understanding of the nature of tacit knowledge and its implications for universities is still far from satisfactory. This study will reveal the barriers and enablers of tacit knowledge transfer in Australian higher education institutions. An insight into the impediments and

facilitators of knowledge sharing will pave the way for providing a significant advantage for organizations [16].

3 Research Method

Qualitative research is usually unstructured, more explorative and emphasises understanding and gaining insights [17]. In an attempt to gain a more accurate and clear picture of the respondents’ stance in an unrestricted environment, in-depth structured interviews were conducted to uncover enablers and barriers of tacit knowledge transfer. This research primarily conducted qualitative structured interviews using a predetermined list of open-ended questions and each research subject was asked exactly the same questions in exactly the same order [18]. The study took place using academics from four Australian public universities as the main sample as they deal with tacit knowledge on a daily basis.

The interviewee profile considered ideal for the interviews was a lecturer or senior lecturer and an associate professor or professor from each university. Eight interviews were carried out in total with two academics from each of the four universities. The reporting of data is based on a structured interpretative approach drawing demonstrative examples from the interview transcripts.

4 Findings and Discussion

There are several barriers that make the transfer of tacit knowledge difficult. It is vital to identify the barriers so that corrective action can be initiated. An interviewee illustrated differing barriers that deter the transfer of tacit knowledge ‘*Politics, mind sets, personalities*’ to name a few. Communication was big on the list of barriers that most interviewees provided. One of the interviewee remarked that ‘*communication issues, and cultural issues - personal - culture of the person and the organisational culture both. The person who is coming from a different background who’s not willing to share on the forums, if we go for coffee he will share more than writing which is available to public.*’ It is evident from this comment that providing an informal means of communication may be more suitable to tacit knowledge transfer rather than strictly formalising it or making it mandatory. Knowledge sharing cannot be instructed or forced but can be nurtured by providing a facilitative environment [19].

Another barrier was the lack of interest in tacit knowledge sharing that was resonated by an interviewee in the comment that *'some staff are not interested in my ideas, my intentions may be misinterpreted as criticism.'* Moving away from these personal characteristics, an interviewee identified *'Job insecurity as another one'* Work overload was also cited as a barrier by an interviewee who stated that *'people are often too tired and overburdened with admin and bureaucracy to engage in meaningful sharing and reflection.'* Another interviewee remarked that *'Realistically, we are overloaded with work and the flow of information. This can often prevent sharing of ideas, experiences and skills because you need to prioritise your work and the basics (research, teaching, administration) take precedence.'* In fact the issue of high staff workload being a barrier was cited a number of times by various interviewees.

It is imperative that the identified barriers are eliminated or at least reduced so that tacit knowledge transfer can take place effectively. To support this claim an interviewee very appropriately commented that *'I guess if all the barriers I mentioned could be turned into – really examined or turned to the table around, that would be a way of capturing the tacit knowledge.'* However the interviewees also specifically identified various enablers of tacit knowledge transfer so that it can be captured and reused.

One of the interviewee remarked that it is important to *'create an atmosphere of encouraging people'* so that tacit knowledge transfer can take place. This interviewee also focussed on the need to create more avenues for informal sharing. The interviewee said that *'I actually personally enjoy the coffee room for knowledge sharing - we help each other, advise each other, so I think it's just great. There's no bossing in there - we are all equal - and that's just the kind of environment probably - very good.'* This demonstrates a good example of collegiality in an informal environment. Informal settings such as social events and coffee breaks provide a good place for knowledge sharing although more knowledge sharing appears to take place in formal settings than in informal settings [20].

Quite a few interviewees focussed on the provision of more resources so that tacit knowledge transfer could take place. An interviewee remarked that *'the rules of the resource allocation right from the top is not conducive of tacit knowledge transfer at all.'* Apart from monetary resources, lack of time was another concern. An interviewee commented on the reason for not engaging in sharing knowledge

was that *'Without sufficient time, with fulltime teaching and part time researching, sharing my ideas, experiences and skills are not on my priority list. I am struggling to have sufficient time to teaching and research on everyday basis.'* A fine line between the economics of academics' day-to-day operations and sharing of knowledge can only be achieved if some sort of time-release is provided. Humans and social factors should be considered and adequately addressed for tacit knowledge transfer to take place successfully [21].

Cultivating a culture that encourages and promotes tacit knowledge sharing is also vital. One of the interviewee's commented that *'there's a challenge in tempering someone's tacit understanding in a culturally contextual sort of environment.'* It is this sort of challenge that senior managers need to reduce so that the university environment can become more conducive to knowledge sharing. Another interview stated that *'cultivate a sharing culture, it's a good way to start with.'* Yet another interviewee focussed upon the importance of an open culture by saying that *'develop a knowledge sharing culture, so that people come forward and share their good and maybe sometimes bad experience. A learning organisation is one that allows people to take risks.'*

An interviewee commented that *'Cultural change often needed lead by management encouraging the sharing of ideas.'* Hence a cultural shift is required which needs to be promoted by top management. Pan and Scarborough [22] have emphasised that senior management play an important role in bringing about and facilitating a cultural change. Senior management plays an important role because their behaviour influences that of people working under them.

Technology has also been identified as an enabler of tacit knowledge sharing by multiple interviewees who see Information and Communication Technologies (ICT) playing an important role in capturing, sharing and applying tacit knowledge. An interviewee focussed on developing expertise finder directories that *'they could set that up so it's sort of a knowledge bank of saying these are the topics that people have the skills in.'* Expertise finder directories are already available at most universities.

It is important to highlight that 'the opposite of a knowledge-sharing enabler often also exists as a barrier' [23], pg. 56. The existence of some of the identified issues can be seen as a barrier or an enabler depending upon the context. For any successful tacit knowledge transfer initiative in an organisation, it is vital that human, social and

organisational culture factors are addressed to ensure success.

5 Conclusion

The results from the study suggest that the transfer of tacit knowledge transfer in higher education institutions is often hampered by culture (personal and organisational), inadequate communication, lack of resources, lack of peer trust, job insecurity, lack of leadership, organisational politics, lack of avenues for informal interactions and work overload. On the other hand, the enablers constitute the cultivation of a sharing culture, encouraging open communication, providing adequate resources, encouraging documentation, promoting openness and trust, providing job security, senior management commitment, providing incentives, introducing technology and providing more avenues for informal interactions.

This study contributes to the literature by providing a more integrative view of various tacit knowledge transfer enablers and barriers; as both driven by individuals (academics) and the expectations of workplaces (universities). For greater transfer of tacit knowledge, universities need to create conditions that strengthen the enablers and suppress the barriers. It is crucial that universities acknowledge the value of their intellectual capital and develop channels that allow the transfer of tacit knowledge.

As can be expected, the study has its limitations. The sample consists of academics from universities i.e. higher education sector. Hence, the findings of this study may not be generalisable across other industries and sectors. In addition, as the findings pertain to only Australian universities, the results may be valid in developed countries but may not be generalisable to developing countries with a different culture. However, this explorative study paints a picture of the reality from the ground.

References:

- [1] D. Teece, "Future directions for KM," *California Management Review*, vol. 40, no. 3, pp. 123-126, 1998.
- [2] S. O. Syed-Ikhsan and F. Rowland, "Knowledge management in a public organization: a study on the relationship between organizational elements and the performance of knowledge transfer," *Journal of Knowledge Management*, vol. 8, no. 2, pp. 95-111, 2004.
- [3] I. Nonaka, "A dynamic theory of organizational knowledge creation," *Organization Science*, vol. 5, no. 1, pp. 14-37, 1994.
- [4] T. Foos, G. Schum, and S. Rothenberg, "Tacit knowledge transfer and the knowledge disconnect," *Journal of Knowledge Management*, vol. 10, no. 1, pp. 6-18, 2006.
- [5] H. S. Shim and G. L. Roth, "Sharing tacit knowledge among expert teaching professors and mentees: Considerations for career and technical education teacher educators," *Journal of Industrial Teacher Education*, vol. 44, pp. 5-28, 2007.
- [6] A. Riege, "Three-dozen knowledge-sharing barriers managers must consider," *Journal of Knowledge Management*, vol. 9, no. 3, pp. 18-35, 2005.
- [7] T. Ramayah, J. A. Yeap, and J. Ignatius, "Assessing knowledge sharing among academics: A validation of the knowledge sharing behavior scale (KSBS)," *Evaluation Review*, vol. 38, no. 2, pp. 160-187, 2014.
- [8] N. A. M. Ismail, M. X. Xu, M. Wood, and C. Welch, "To share or not to share? Research-knowledge sharing in higher education institution: preliminary results," *International Journal of Information Technology and Management*, vol. 12, no. 3-4, pp. 169-188, 2013.
- [9] R. Chugh, "Do Australian Universities Encourage Tacit Knowledge Transfer?," in *7th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management*, 2015, pp. 128-135.
- [10] I. Nonaka, R. Toyama, and N. Konno, "SECI, Ba and leadership: a unified model of dynamic knowledge creation," *Long Range Planning*, vol. 33, no. 1, pp. 5-34, 2000.
- [11] W. R. King, "Knowledge transfer," in *Encyclopedia of Knowledge Management*, D. Schwartz, Ed.: IGI Global, 2006, pp. 538-543.
- [12] M. Singh and R. Kant, "Knowledge management barriers: An interpretive structural modeling approach," *International Journal of Management Science and Engineering Management*, vol. 3, no. 2, pp. 141-150, 2008.
- [13] R. Chugh, S. Wibowo, and S. Grandhi, "Mandating the transfer of tacit knowledge in Australian Universities," *Journal of Organizational Knowledge Management*, vol. 2015, pp. 1-10, 2015.
- [14] A. I. Ojo, "Knowledge Management in Nigerian Universities: A Conceptual Model," *Interdisciplinary Journal of Information*,

Knowledge, and Management, vol. 11, pp. 331-345, 2016.

- [15] L. Zhang and Z. Han, "Analysis on the Management of College Teachers' Tacit Knowledge," *International Education Studies*, vol. 1, no. 3, pp. 21-24, 2008.
- [16] M. Asrar-ul-Haq and S. Anwar, "A systematic review of knowledge management and knowledge sharing: Trends, issues, and challenges," *Cogent Business & Management*, vol. 3, no. 1, pp. 1-17, 2016.
- [17] P. N. Ghauri and K. Grønhaug, *Research methods in business studies: A practical guide*. Pearson Education, 2005.
- [18] V. Minichiello, R. Aroni, E. Timewell, and L. Alexander, "In-depth interviewing: Researching people," ed: Melbourne: Longman Cheshire, 1990.
- [19] M. Hassan, I. Aksel, M. S. Nawaz, and S. Shaukat, "Knowledge Sharing Behavior Of Business Teachers Of Pakistani Universities: An Empirical Testing Of Theory Of Planned Behavior," *European Scientific Journal*, vol. 12, no. 13, pp. 29-40, 2016.
- [20] I. Reychav and D. Te'eni, "Knowledge exchange in the shrines of knowledge: The "how's" and "where's" of knowledge sharing processes," *Computers & Education*, vol. 53, no. 4, pp. 1266-1277, 2009.
- [21] S. Panahi, S. Panahi, J. Watson, J. Watson, H. Partridge, and H. Partridge, "Conceptualising social media support for tacit knowledge sharing: physicians' perspectives and experiences," *Journal of Knowledge Management*, vol. 20, no. 2, pp. 344-363, 2016.
- [22] S. L. Pan and H. Scarbrough, "Knowledge management in practice: An exploratory case study," *Technology Analysis & Strategic Management*, vol. 11, no. 3, pp. 359-374, 1999.
- [23] A.-M. Lilleore and E. Holme Hansen, "Knowledge-sharing enablers and barriers in pharmaceutical research and development," *Journal of Knowledge Management*, vol. 15, no. 1, pp. 53-70, 2011.