Research Article

Mandating the Transfer of Tacit Knowledge in Australian Universities

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Abstract

The transfer and reuse of tacit knowledge is important in every organisation. As universities are an important part of our society and play a significant role in the transfer of tacit knowledge, it is vital that teaching staff engage in transferring tacit knowledge not only to their students but also amongst their peers too. This research paper explores whether the transfer of tacit knowledge should be made mandatory and a key performance indicator in the annual performance appraisal of academic staff. As academics are classified as knowledge workers, this study has gathered primary data through interviews of teaching staff in four post 1992 Australian universities. The findings have revealed there is a high level of discontent towards making tacit knowledge transfer mandatory particularly because it can be challenging to measure. The paper outlines multiple recommendations that can create and promote a tacit knowledge sharing culture in universities, largely driven by motivation and encouragement by senior management.

Keywords: knowledge, tacit knowledge, knowledge management, knowledge transfer, key performance indicator, university, academics

Introduction

Universities have traditionally operated as 'ivory towers', and it is time to look beyond those towers to engage in the transfer of tacit knowledge. Tacit knowledge is credited for tangible and measurable increase of organisational efficiency (Gerard 2003). Most knowledge in organisations exists in peoples' minds as tacit knowledge that has grown and developed through years of experience (Zack 1998).

Tacit knowledge is difficult to measure and has not been studied extensively (Brockmann and Anthony 1998). The lack of attention to the 'elicitation and measurement of tacit knowledge in industry and organisational environments' (pg. 375) has also been highlighted by Garcia-Perez & Mitra (2007). Knowledge management organisational efforts often fail because people issues related to attitudes towards knowledge sharing and motivation are neglected (Carter and Scarbrough 2001). To add to the problem,

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employees are reluctant to share tacit knowledge as they do not see it as knowledge and worth sharing (Holloway 2000). Most researchers agree that tacit knowledge should be measured although it can be risky (Nonaka and Takeuchi 1995) but few have taken the perspective of university academics. No studies currently exist that explore academics' perception about making the transfer of tacit knowledge mandatory. This paper explores whether transfer of tacit knowledge can be made mandatory and a key performance indicator in the annual performance appraisal/review of academic staff. For this purpose four post 1992 Australian universities were selected.

As sharing knowledge is the *raison d'être* of universities, they were specifically chosen for this study. Universities can be classified as knowledge intensive organisations because they are coherent with the definition of knowledge intensive firms provided by Alvesson (2000) as 'companies where most work can be said to be of an intellectual nature and where well qualified employees form the major part of the workforce' (pg. 1101). Universities are also an essential fragment of our society and play a significant role in knowledge transfer. The success of universities is judged by the extent to which they create new knowledge and transfer it to others (Howard 2005). A study by Fullwood, Rowley and Delbridge (2013) found that knowledge sharing culture is individualistic in universities and poses significant challenges.

Individuals are more concerned about their performance when they are held accountable (Frink & Klimoski 1998), however there are no studies that report on whether academics are in favour of being held accountable for tacit knowledge transfer. Also, as most existing knowledge management studies are case-based (Wang 2005), this study gathers qualitative data to plug the gaps. Wang (2005) also highlights that 'research is greatly needed to examine how people react to accountability mechanisms' (pg. 57). This leads to examining whether transfer of tacit knowledge should be made mandatory as it further points towards

accountability. Knowledge workers (university academics in this case) capture and apply tacit knowledge which helps to develop and sustain competitive advantage (Nissen 2005). The loss of such knowledge workers breaks down existing social networks within an organisation and it takes time and effort to rebuild the social networks so that knowledge sharing can start again (Coleman 1988). Since it may not be possible at all times to retain knowledge workers (Chugh 2013), it is becoming increasingly important to share and preserve their tacit knowledge (Droege & Hoobler 2003). This paper does not concern itself with the transfer of tacit knowledge that takes place in classes when academics are teaching but more towards tacit knowledge transfer to peers and the wider academic community. There are negligible existing studies that focus on tacit knowledge transfer in Australian universities and little knowledge and information about making tacit knowledge transfer mandatory at Australian universities. To achieve the aims, this study solicits data from academics in four Australian universities.

The rest of the paper is organised as follows. The next section presents a review of the literature. The paper then provides an insight into the research methodology adopted for the study. Findings and discussion then follow. Finally, the key premises of the research have been summarised and the paper's limitations are explicitly stated with an outlook for possible future research.

Literature Review

The phrase 'tacit knowledge' was coined by Polanyi (1958) but in recent years it has been used by theorists as an important part in the process of knowledge management (Firestone & McElroy 2003). Tacit knowledge is important for the study of knowledge management and provides competitive advantage (Nissen 2005). Busch (2008) has defined tacit knowledge as knowledge that cannot be codified, is implicit in nature and not necessarily written anywhere and not able to be readily expressed. This implies that tacit

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knowledge would include peoples' skills, experiences, insight and judgement. Knowing the right feel of bread dough before it goes into the oven is an example of tacit knowledge (Nonaka & Takeuchi 1995). This tacit knowledge is difficult to access and not necessarily available for reuse. Polanyi (1966) believes that a large part of human knowledge is tacit in nature and accessing it can present challenges. However, tacit knowledge should be distributed throughout an organisation (Daghfous, Belkhodja & Angell 2013) and should not be lost.

Sharing of tacit knowledge is difficult, complex and time consuming (Hislop 2009). Housel and Bell (2001) state that 'knowledge resides primarily within human heads; when 'head count' is reduced, inevitably the sum of knowledge within the organization is reduced, sometimes critically' (pg. 5). Hence, it

becomes important to transfer tacit knowledge from an individual into a separate object in the form of something tangible.

Nonaka (1994) has provided four modes of knowledge conversion and transfer – Socialisation, Externalisation, Combination and Internalisation. Since the first two modes focus solely on tacit knowledge, it is important to briefly delve into them. Socialisation refers to knowledge that is created when tacit knowledge is converted into new forms of tacit knowledge. It is experiential knowledge that is created by people sharing their experience with others. Externalisation refers to the conversion of tacit knowledge into explicit knowledge. It involves eliciting, articulating and translating the tacit knowledge of others into a tangible format so that it is available for reuse. Table 1 highlights key aspects of Socialisation and Externalisation.

Table 1: Socialisation and Externalisation

Socialisation (Tacit to Tacit)	Externalisation (Tacit to Explicit)
• Tacit knowledge passed from one person to another through social exchanges.	• Tacit knowledge is articulated and documented making it available for further sharing.
• Examples - Face to face interactions, observations, guidance, discussion, practice	• Examples - Training manuals, policies and procedures, databases

In similar vein, transfer of tacit knowledge can be undertaken through various formal and informal mechanisms (Holtham and Courtney 1998). Informal mechanisms include time off work, 'water-cooler' conversations and providing other social avenues for transfer of tacit knowledge whilst formal mechanisms include seminars, conferences, training sessions and so forth. For the purpose of this paper, it has been assumed that tacit knowledge transfer could be undertaken through any of these means as it is possible to record both formal and informal mechanisms.

Alvesson and Karreman (2001) have suggested that tacit knowledge is difficult to manage. McKinlay (2002) suggested that some staff are reluctant to participate in the knowledge management efforts of their work places. This links in to the notion of performance evaluation and monitoring and examining employee outputs (Larson & Callahan 1990). Wang (2005) has suggested that evaluating employee performance assists in prompting the sharing of knowledge. If the transfer of tacit knowledge is made mandatory, it will tie in with annual performance reviews and hence, it becomes

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important to explore what employees feel about such practices.

The motivation of employees is an important determinant in knowledge sharing efforts. Since tacit knowledge is sticky in nature (Szulanski 1996) and embodied in people, they are often reluctant to part with it. Flood et al (2001) have suggested the tacit knowledge of employees can only be used if employees are willing to part with it on a voluntary basis. On the other end, employees often do not share tacit knowledge as it could be seen as a poor reflection on their work performance (Weiss 1999; Holloway 2000). Often employees retain their tacit knowledge and do not share it freely with others because they believe that retention of knowledge provides them with benefits and status (Willman et al. 2000). Other factors that inhibit employees from sharing knowledge and participating in organisational knowledge management initiatives are job security, status, esteem and power loss and fear of revealing their personal drawbacks (Newell et al. 2006; Renzl 2008). Since tacit knowledge is personal and belongs to the employees, they can decide what to use, how to use, when to use, where to use and who to share it with. Some studies (Empson 2001; Morris 2001) have found that human, social and cultural factors were important in determining the impact (success or failure) of knowledge management initiatives. These authors also found that employees were often unwilling to share their knowledge. So, this leads us to the question - should transfer of tacit knowledge be made mandatory?

Methodology

Four post 1992 Australian universities (names withheld for confidentiality reasons) have been selected for this study, based on their long history in the education sector as they evolved from colleges of advanced education and institutes of technologies. These four universities are undergoing a lot of change, both in terms of organisational structure and introduction of new programs, and are rapidly strengthening their position towards the provision of learning and teaching services to national and international students. It is their uniqueness in the education sector that makes them ideal for this study.

The study focussed on academics in universities because academics can be classified as knowledge workers who deal with tacit knowledge on a daily basis. The solitary research instrument that can reveal and build on tacit knowledge is the human (Lincoln & Guba 1985), hence academics were considered to be suitable for assessing whether transfer of tacit knowledge can be made mandatory and a key performance indicator in the annual performance appraisal/review of academic staff.

According to Gall, Gall and Borg (2002), qualitative research makes 'little use of numbers or statistics but instead relies heavily on verbal data and subjective analysis' (pg. 13). As qualitative methods aim at understanding the rich, complex and idiosyncratic nature of human phenomena (Cavana, Delahaye & Sekaran 2003), a qualitative method namely in the form of interviews was adopted. In this study, interviews were deemed to be important as they would provide an in-depth opportunity to ask a series of open-ended questions that would reveal whether transfer of tacit knowledge can be made mandatory in an unconstrained environment providing the opportunity to clarify and explain information. Various questions were asked as part of the interview but for the purposes of this paper only the question that explores whether tacit knowledge transfer can be made mandatory has been analysed.

Sample sizes in qualitative research should not be too large otherwise it becomes difficult to extract thick, rich data (Onwuegbuzie & Leech 2007). Since the aim of this study is not to estimate the prevalence of a phenomenon or to make generalisations but to provide an understanding of whether transfer of tacit knowledge can be made mandatory and a key performance indicator in the annual

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performance reviews of academic staff, to develop explanations and to generate ideas, only a small number of respondents were required. Thus, for the interviews, this study primarily employed a stratified purposeful sample to identify academics (a lecturer or senior lecturer and an associate professor or professor from each university). A total of eight interviews were conducted, which involved two academics from each university.

In order to keep the original flavour of the responses and create a link between the assessment of mandating the transfer of tacit knowledge and its inclusion in the annual performance review, the quotes from the interview have been quoted verbatim and a narrative analysis has been woven in the next section.

Findings and Discussion

Since tacit knowledge transfer improves organisational efficiency and leads to competitive advantage, it is important to review whether the transfer of tacit knowledge could be made mandatory and a key performance indicator in the annual performance appraisal/review for academic staff.

It is perhaps the ineffable nature of tacit knowledge because of which none of the interviewees copiously agreed to make the transfer of tacit knowledge mandatory. An interviewee said that *'anything mandatory becomes a pain.'* Another interviewee stated that tacit knowledge transfer is often done *'without knowing it and that's the natural way of tacit management sharing - and let's encourage that natural way, don't put any barrier to that - and that itself is better than mandatory.'* The reluctance also came out clearly in the following statement by an interviewee who said that *'mandating anything for academics is very difficult.'* The interviewees provided different options under which it could be included as a key performance indicator however the reluctance was very evident in the responses given. One of the option provided by an

interviewee was *'develop a mentoring system which was part of the deal, part of your employment that you had to be attached to somebody of experience for a period of time, then I think you could.'*

Another interviewee preferred the need to explore putting tacit knowledge transfer as a key performance indicator however focussed more on the need to recognise staff for their efforts. The interviewee exemplified that *'if we are honest enough we can actually figure out a way of putting it into key performance indicator in a way not greatly weighted, but recognising people for their efforts.'* Another interviewee was concerned about the lack of communication skills in effectively being able to transfer tacit knowledge and saw that as a deterrent to tacit knowledge transfer and including it as a key performance indicator. The interviewee remarked that *'people often have different communication skills so some people may not possess the necessary transferable ability to do so.'* An interviewee also cited concerns about contractual obligations which are exemplified in this statement *'If it is made mandatory then inclusion as key performance indicator would be good, but there will be contractual obstacles, and these need to be well considered.'*

Developing measurable benchmarks was also an evident issue and academics did not want to be held responsible for tacit knowledge transfer especially if it were not measurable or difficult to measure. An interviewee quizzed back by asking *'the question is how we measure the transfer of tacit knowledge?'* In order to know that knowledge has actually been transferred there need to be ways to measure it. To this effect, an interviewee commented that *'if you are going to set an objective then you need to have a measurement that is going to adequately measure whether the tacit knowledge has been transferred.'* This unfortunately echoes a popular management adage that says: 'if it cannot be measured, it cannot be managed.' Another interviewee remarked that tacit knowledge transfer *'is something that has to be spontaneous and it will become quasi mandatory really through*

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voluntary participation and that is much better than making it mandatory.'

Table 2summarises the results and conceptual relationships that arose from the analysis

Table 2: Results and conceptual relationships

Repeating Ideas	Theme	Recommendations
• Transfer of tacit knowledge should not be made mandatory. • Making the transfer of tacit knowledge mandatory will not promote sharing of tacit knowledge. • Develop quantifiable benchmarks.	Tacit knowledge transfer can be encouraged but not made mandatory.	• Develop a mentoring program to help in the transfer of tacit knowledge. • Encourage and motivate voluntary participation in tacit knowledge sharing efforts. • Recognise employees for participating in tacit knowledge transfer. • Encourage observation and documentation. • Foster collaboration

It can be argued that if tacit knowledge transfer is made mandatory, then academics may not respond positively to any tacit knowledge sharing efforts. Considering that the overall consensus from all the interviewees was the non-inclusion of tacit knowledge transfer as a key performance indicator, it seems that tacit knowledge transfer can largely be driven by motivation and encouragement by senior management.

In the context of clarifying the scope for further action, measurable benchmarks for academic staff could include a set number of research outcomes, seminar presentations, attendance at conferences, documenting organisational processes, developing best practice manuals, and participation in communities of practice. Senior management should encourage staff to use, create and share tacit knowledge in a contributory and collaborative process. There should be a clear plan of encouraging employees to share their tacit knowledge and making it available for reuse. Reward mechanisms for the sharing of tacit knowledge could possibly help to reduce the resistance shown by academics. Champions of tacit knowledge sharing could be used as examples to promote and encourage a sharing culture. Mentoring programs could be useful in sharing tacit knowledge hence such programs should be formally developed in universities. Opportunities for transferring of tacit knowledge through socialisation and externalisation should be explored. If employees are not willing to part with their tacit knowledge, it has to be cultivated by

developing a sharing culture. At this stage, an interviewee's remarks help in concluding this section *'tacit knowledge transfer should be encouraged rather than made as mandatory, as compulsory.'*

Conclusion

The epistemology of mandating tacit knowledge transfer is a difficult debate. From an organisational perspective, it is important to know that tacit knowledge transfer is taking place. This can be achieved by measurement alone however from an individualistic perspective, there is an apparent reluctance. Tacit knowledge in general is an abstract concept and hard to measure. The importance of knowledge transfer cannot be inconspicuous and effort needs to be made to transfer it. The ineffability of tacit knowledge does not imply that universities or other organisations should not expend resources to encourage tacit knowledge transfer. It is through encouragement and motivation, appropriate mentoring programs, recognition and collaboration that tacit knowledge transfer will take place successfully.

The scope of the investigation of knowledge objects focused solely on individuals (university academics) and excluded any assessment at collective levels such as those of teams, functional groups, and inter-organisational level. The thought processes of knowledge workers at the collective level may not be the same as at the individual level. Hence, there is considerable scope for future research in this area between knowledge workers at the collective level. As this study was conducted in Australian universities, it is plausible that universities in other countries with different cultures may demonstrate dissimilar results. Finally, owing to the current sample size, it would also be deemed inappropriate to generalise the findings to a larger population of academics. However, like any exploratory study, this study also provides a picture of the reality. The data gained are not necessarily indicative of the universities but only indicative of the academics who responded. It is also not advisable to assume the analysis revealed the view of all academics in Australia or universities but a view of the interviewees only. Future studies could explore the reticence exhibited by academics and identify the barriers to tacit knowledge transfer in universities.

This paper has made a significant contribution to tacit knowledge management by addressing an important question that has largely been ignored till date. The key contributions of this study fall into three main areas. Firstly, it has added to existing research on tacit knowledge transfer. Secondly, it has used interviews to assess university academics' readiness to mandate the transfer of tacit knowledge. Thirdly, the findings can be used to instill a culture of encouragement and motivation so that tacit knowledge transfer can take place in an unrestrained environment. Although the findings have revealed there is a large level of discontent towards making tacit knowledge measurement mandatory, the transfer and reuse of tacit knowledge is important. Universities should encourage the transfer of tacit knowledge without necessarily making it a key performance indicator.

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