

# An Exploration of Knowledge Sharing Practices, Barriers and Enablers in Small and Micro-Organisations

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## **1. Introduction**

In a powerful and often quoted statement Burns (2007: 14) rightly argues that ‘small firms are not just scaled down versions of large ones’. Indeed, they are fundamentally different with respect to their nature and the unique challenges they face. Similarly, micro-organisations<sup>1</sup> are also distinct in nature (Kelliher and Reinl, 2009). Nevertheless, knowledge management research has historically focussed overwhelmingly on larger organisations, potentially limiting the insights that can be gleaned from the discipline for small and micro-organisations (Kelliher and Reinl, 2009). This, however, is changing. There is a growing tide of research into knowledge management in small organisations and, to a lesser extent, micro-organisations (for example, Alvarez et al., 2016; Hutchinson and Quintas, 2008; Presutti et al., 2011; Roy and Thérin, 2008). This literature has highlighted that knowledge management practices in small organisations are qualitatively different to those found in larger organisations (Hutchinson and Quintas, 2008; Zieba et al., 2016). Partly as a result of this, Zieba et al (2016: 292-293) argue that ‘there is the need for more extensive research to investigate if and how small and micro companies manage their knowledge’. In this chapter we respond to this call by reporting on our empirical study into knowledge sharing in two micro-organisations and one small organisation.

Knowledge sharing (or the transfer of knowledge) appears as a core process in a number of well-known typologies of knowledge management activity (Barth, 2003; Maier and Mosley, 2003; Hislop, 2009; Becerra-Fernandez & Sabherwal, 2014) and scholars have argued for its fundamental importance. For example, Puccinelli (1998: 40) has stated that ‘to successfully reap the rewards of KM (knowledge management), knowledge sharing is the most important consideration’. Empirical evidence supports the view that knowledge sharing is a key factor in the successful innovation of products and services (Hislop, 2005; Jackson et al., 2006), and is fundamental to organizational

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<sup>1</sup> In this chapter, micro-organizations are considered to be those with up to 9 employees and small organizations are those with 10-49 employees (Muller et al., 2015).

learning (Goh, 2002) and the creation of new organisational knowledge (Nonaka and Takeuchi, 1995).

As such, knowledge management and knowledge sharing could be of great value to small and micro-organisations. The importance of researching knowledge management in such organisations, therefore, in order to understand and inform knowledge management in practice within these contexts, becomes crucial. This is especially so since small and micro-organisations play a vital role in economies nationally and globally. For example, at the beginning of 2015, private sector small and micro-enterprises in the UK alone employed more than 12 million people and contributed £1.2 trillion of turnover (Department for Business Innovation and Skills, 2015). Furthermore, small and micro-organisations outside of the financial business sector<sup>2</sup> contributed almost half of EU employment in these non-financial sectors (Muller et al., 2015). Clearly, therefore, any benefit that these organisations can gain from the findings of research into knowledge management and knowledge sharing in small and micro-organisations could have important wider economic impacts.

Our focus within this chapter is to analyse the opportunities for, and challenges to, knowledge sharing within small and micro-organisations. In order to achieve this, we specifically seek to achieve the following objectives: -

1. Develop deep and contextualised insights into knowledge sharing practices in two micro-organisations and one small organisation.
2. Understand and analyse the enablers of, and barriers to, knowledge sharing within these settings.
3. Embed these insights within wider knowledge management literature and elucidate implications for practitioners and policy makers.

## **2. The Research Study**

Our study comprised of 13 semi-structured interviews with managers and employees in two micro-organisations and one small organisation based in knowledge intensive industries. Both managers and employees were interviewed in order to gain a holistic understanding of knowledge

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<sup>2</sup> The financial business sector includes 'financial services, government services, education, health, arts and culture, agriculture, forestry, and fishing' (Muller et al., 2015: 7)

sharing in each organisation and to access differing perspectives about knowledge sharing. Indeed, in line with the phenomenological orientation of our inquiry, the interviews sought to gain deep understanding into each interviewee’s individual perceptions of their lived experience in relation to knowledge sharing in their organisations (Jankowicz, 2005; Saunders et al., 2016). We also endeavoured to select interviewees from a diverse range of job roles in order, once again, to access a fuller and more holistic picture of knowledge sharing within the organisations.

The following table explains the organizations involved in our study and the number of interviews undertaken in each organization.

**Table 1: Overview of Participating Organisations and Data Collection**

<u>Company</u>	<u>Micro / Small</u>	<u>Description</u>	<u>Number of Managers Interviewed</u>	<u>Number of Employees Interviewed</u>
Architect Org	Micro	Architect Org is an architectural design company offering design and construction detailing of buildings for both professional and non-professional clients. The organisation consists of 7 individuals, including the company principle.	2	3
Training Org	Small	Training Org offers short training courses and NVQ training mainly to those based in the care sector. The organisation consists of 12 staff members.	3	3
PR and Marketing Org	Micro	PR and Marketing Org offer marketing and PR services for both public and private sector organisations. The organisation consists of 4 individuals.	1	1

The interviews first sought to gain an understanding of the organisation and the interviewee’s role within the organisation. Then the interviewer sought to gauge the interviewee’s understanding of the concepts of ‘knowledge’, ‘knowledge management’, and ‘knowledge sharing’ before

explaining these concepts to them in order to ensure that each interviewee was clear about the concepts they were providing answers about and to facilitate their recall of practices within their organisation. Next, the interviewee was encouraged to provide insights into, and opinions about, the knowledge management and knowledge sharing practices within the organisation. The interviews then focussed on gaining insights into barriers to, and enablers of, knowledge sharing as well as the interviewee's perceptions about the effects of knowledge sharing. All interviews were audio recorded and transcribed fully prior to data analysis.

The data analysis process broadly followed a qualitative content analysis approach (Hseih and Shannon, 2005). The analysis began with the transcripts being read thoroughly and in-depth in order to immerse the researchers in the interviewee's world view and to facilitate the fragmentation of the data into broad categories. The categories largely emerged inductively during the analysis process. Once data was categorised, common themes within each category were identified for each individual organisation, before identifying and understanding the key themes across the three companies.

### **3. Empirical Findings**

In what follows the manner in which knowledge was shared in the three firms is presented, and the enablers and barriers to knowledge sharing are outlined. Participants' voices are prioritised to give the reader deeper insights into the realities of knowledge sharing in small and micro-organisations. Throughout, findings are placed within relevant theoretical frames. Readers that are familiar with the field will note many insights and themes commonly reported within the wider literature – we subsequently explore these further.

#### **3.1. Knowledge Sharing in Architect Org, Training Org and PR & Marketing Org**

Managers and employees in Architect Org and Training Org demonstrated little cognisance of knowledge management as a theoretical discipline, and yet, in many cases were able to identify what knowledge sharing is in layman's terms. Furthermore, they were able to discuss and explore the importance of knowledge sharing. When asked if he was aware of the concept of knowledge sharing, the project manager in Training Org stated: -

*'yes, but probably only in generic layman's terms really, within an organization I would assume that knowledge sharing is around communicating the right knowledge to the right people'* (Project Manager, Training Org)

The owner-manager of Architect Org perceived knowledge sharing in the following way: -

*'I think...I mean within any organization people are working individually on certain things...and its really pooling that knowledge... to the benefit of the particular project they work on, and then in a broader sense the organization within which they work'* (Owner-Manager, Architect Org)

By contrast the owner-manager of PR & Marketing Org was well versed in knowledge management and knowledge sharing. The above quotes provide an important insight; despite lacking a formal grasp of the concepts and abstractions of knowledge management, practitioners are still able to talk confidently about knowledge sharing. Indeed, the interviewer found that much embedded and situated activity within the organisations did constitute knowledge sharing practice – but was labelled with other (or no) names. This reflects Hutchinson and Quintas' (2008) observation that knowledge management practices can be undertaken within small organisations without being labelled as such and without being driven by knowledge management theory as found within the extant literature.

The majority of knowledge sharing activity reported in the three organisations is consistent with the personalisation approach described by Hansen et al (1999). Indeed, the main approach to knowledge sharing tended to be the use of unorganised ad-hoc face-to-face exchanges between organisational members. Such activities included responding to questions, informal chatting, demonstrating technical skills, and providing insights and suggestions. These knowledge sharing interactions often occurred in response to specific operational concerns when necessary and possible.

*'the idea of sharing knowledge isn't anything that is particularly formalized ...it happens because people need something specific or they have a specific problem, they ask somebody else in the office'* (Owner-Manager, Architect Org)

*'we share knowledge and skills as well to help each other day-to-day, if there's something somebody can't do on the computer or something*

*technical we all help each other'* (Public Relations Operative, PR & Marketing Org)

There were also reports of more organised personalisation approaches such as regular meetings, and mentoring programmes in which new employees were paired with experienced employees. Attempts to move towards formal codification (Hansen et al, 1999) of some physical documents were also reported within two of the organisations (see Table 2).

**Table 2: Formal / Organised Knowledge Sharing Practices in the Organisations**

<u>Organisation</u>	<u>Personalisation</u>	<u>Codification</u>
Architect Org	Mentoring to support new architects and technicians	Use of a central document store
Training Org	Mentoring and buddying activities	
PR & Marketing Org	Weekly staff meetings  Interactive role plays	Web-based portal for storing client files  Creation of an organisational rule book

The informal and unorganised approach to knowledge sharing adopted by the firms in the present study is consistent with prior literature. It has been demonstrated that small and micro-organisations often manage and share knowledge in an informal and unplanned manner (Alvarez et al., 2016; Hutchinson and Quintas, 2008; Lim and Klobas, 2000; Nguyen and Burgess, 2014; Zieba et al., 2016). However, as we have demonstrated above, each firm within the study also engaged in formal personalisation and / or formal codification practices.

### **3.2. Knowledge Sharing Enablers**

Our empirical data revealed four interrelated enablers of knowledge sharing: 1. A desire on the part of managers to develop organised knowledge sharing approaches; 2. Practitioners'

recognition of the importance of knowledge sharing; 3. Practitioners' motivation to practice and participate in knowledge sharing; 4. Close proximity and social relationships between practitioners. Each of these will now be discussed in turn.

First, our data revealed dissatisfaction amongst some managers about some of the unorganised knowledge sharing practices taking place within their organisation. Such unorganised approaches could lead to some people not receiving knowledge and the essence of a piece of knowledge getting changed during multiple rounds of person-to-person knowledge sharing. It is perhaps unsurprising therefore that we found that in the three cases described there is a desire to transition to more formalised and organised knowledge sharing practices. Indeed, a number of managers desired greater structure and organisation to knowledge sharing within their organisations, as is illustrated in the following interview extracts.

*'(it is) essential that we do move it to a more central, a more controlled, way of sharing it, so that people are using up-to-date information, people are using the same information and people aren't doing something twice'* (Office Manager, Architect Org)

*'my honest opinion is that every three months or so that we all get together, every single person that's involved in the company'* (NVQ Centre Manager, Training Org)

*'we should have more staff meetings than we do but we have some'* (Company Manager, Training Org)

This management support for the development of organised knowledge sharing could prove to be a valuable enabler of knowledge sharing within the organisations and particularly for transitioning to a more organised knowledge sharing approach. Indeed, Davenport et al (1998: 54) identify that 'strong support from executives was crucial for transformation-oriented knowledge projects', with Wong and Aspinwall (2004: 49) suggesting that owner-managers of SMEs 'can be the main engine for change in the organization, provided that they recognise the importance and potential of KM'. Wong (2005) also identifies management support as vital for enhancing knowledge management in SMEs.

The management support for more organised knowledge sharing that we identified suggests that these managers recognise the importance of knowledge sharing. Indeed, we found that all practitioners interviewed for our study – both managers and employees – recognised the importance of knowledge sharing, mainly due to the organisational performance benefits

emanating from knowledge sharing. Nevertheless, some benefits for individuals were also cited. These practitioner beliefs in the importance of knowledge sharing represent the second enabler of knowledge sharing that we identified from our study, and are illustrated in the interview extracts below.

*'it's important that this knowledge and experience is disseminated just so that, you know, we don't make mistakes, but also that people are actually involved in what we do'* (Owner-Manager, Architect Org)

*'I feel it's really important, it's essential, I don't think organizations can function without it'* (Project Manager, Training Org)

*'it aids the organization as a whole and it can aid the individual by empowering them, making them more confident, and they can use their initiative if they've already got the previous solid base of knowledge'* (Trainee Accounts Administrator, Training Org)

*'motivation's the biggest one, massive impact motivation and feeling involved, and I think that's the biggest thing, people actually feel like they own something or that they've played a part in that, and also that three heads around a table are better than one...so actually having a bit of a forum here before we take it to the client'* (Owner-Manager, PR & Marketing Org)

These quotes demonstrate participants' recognition that knowledge sharing can enhance individual and organisational performance, produce a sense of community and involvement among employees, and can enhance individuals' confidence. The importance the practitioners place on knowledge sharing leads logically to the third enabler identified by our research – practitioners' motivation to practice and participate in knowledge sharing. Socio-cultural factors – such as trust issues (Davenport and Prusak, 1998; Holste and Fields, 2010), unhelpfulness (Cross et al., 2006), and conflict - can be an important barrier to knowledge sharing (Hislop, 2005). As such, the motivation for knowledge sharing that the practitioners espoused in our study bode well for knowledge sharing activities, and potentially transitioning to more organised knowledge sharing, within these three organisations.

The fourth knowledge sharing enabler we identified – close proximity and social relationships between practitioners – may also play a role in the knowledge sharing motivations of those within the organisations. The following interview extracts, provided in response to questions about

factors that supported knowledge sharing in their respective organisations, demonstrate the close social relationships between practitioners: -

*'apart from one I've known them all the six years...we're all likeminded characters'* (Architectural Technician, Architect Org)

*'we're all in the same room...we know each other...we have banter in the office'* (Company Manager, Training Org)

Holm and Poulfelt (2003) believe that due to knowing each other, individuals in SMEs can be more motivated to practice knowledge sharing. As such, the close proximity and social relationships we identified could be an important enabler to knowledge sharing in the organisations. Furthermore, this factor could also facilitate a transition to more organised knowledge sharing, since 'a unified culture can provide small firms with a strong foundation for change, such as implementing KM' (Wong and Aspinwall, 2004: 51).

### **3.3. Knowledge Sharing Barriers**

The main barrier affecting knowledge sharing in the three organisations was that opportunities to share knowledge were squeezed by time constraints. In short, participants were sometimes too busy with other tasks to engage in knowledge sharing.

*'the younger members of staff will ask the older ones but they are often constrained by the fact that they know people are busy and they've got deadlines to meet'* (Owner-Manager, Architecture Org)

*'barriers are time constraints, people not being together often enough...I think it's just that everybody has their own remit and they're all so busy doing that'* (Assessor / Administrator, Training Org)

*'time, that's the major one (barrier), it's my time and it's me, I've been the biggest barrier to knowledge sharing in this company'* (Owner-Manager, PR & Marketing Org)

This suggests that practitioners need to focus on important everyday operational tasks to safeguard the performance of their organisations, and that this at times overwhelmed efforts to

share knowledge. This seemingly represents a situation where knowledge sharing is ranked as a lower priority than these other tasks.

*'there's always bigger priorities in the company, you know, bringing a new contract in...and it kind of slips down the pecking order...it isn't one of the important things but it should be...but I think it's, you know, if you are fighting to get the contract in, you're thinking 'oh, you know, what are we going to do in three months', you know, it's not going to be top of your agenda'* (Owner-Manager, PR & Marketing Org)

Such a situation is somewhat paradoxical given the importance placed on sharing knowledge by all organisational members, and their recognition that effective knowledge sharing can have both individual and organisational benefits. Nevertheless, extant literature has also suggested that limited time availability can negatively impact knowledge management in smaller organisations (for example, Chan and Chao, 2008; Egbu et al., 2005; McAdam and Reid, 2001; Wong, 2005) and Lim and Klobas (2000: 423) have suggested that management in smaller organisations 'tend to focus on the core business of their organisations and pay less attention to other issues'.

The second and final barrier identified in Training Org and PR & Marketing Org was that at times the most senior manager within the organisation displayed an inability to fully appreciate the knowledge level and knowledge requirements of others within the organisation. This manager sometimes assumed that other individuals had a higher level of knowledge than was actually the case. This acted as a barrier, with some necessary and desired knowledge not being shared with others for the simple reason that the requirement to do so was not recognised.

*'my problem was the things that I see as being natural...some people don't, so communication or thinking about how this sounded or smiling, you know, when you see someone, you know, like basic things that I found basic, other people don't necessarily find those to be basic, so we came up with a PR & Marketing Org rulebook'* (Owner-Manager, PR & Marketing Org)

*'she (the Company Manager) has so much knowledge and she knows so much about everything that she deals with, that it's all matter of fact to her and she doesn't register the fact that maybe I know nothing about that...knowing absolutely nothing about it she gives me that little bit of information and it means nothing'* (Assessor / Administrator, Training Org)

This factor could be detrimental where organisations seek to transition to more organised knowledge sharing approaches; a transition that, as mentioned above, appears to be desired by a number of managers in the three organisations we conducted research in. If such organised approaches are not fully informed by accurate understanding of the knowledge levels and requirements of practitioners within the organisations then they may be inappropriately designed, thus hindering rather than aiding knowledge sharing. Nevertheless, in PR & Marketing Org the owner-manager's recognition of her misunderstanding of others' knowledge requirements was seemingly helpful in facilitating such a transition in that it actually prompted the creation of an organisational rulebook; an externalisation (Nonaka and Konno, 1998) and codification of knowledge (Hansen et al, 1999) that could then be used as part of formal knowledge sharing practice.

Within this section we have sought to address the first two research objectives set out at the beginning of this chapter. The first objective was achieved by providing insights into knowledge sharing within one small and two micro-organisations. In summary, knowledge sharing practices tended to be unorganised, ad hoc, and face-to-face, although there were some formal personalisation and codification practices (Hansen et al., 1999) undertaken. The second objective was achieved through our identification and analysis of a number of enablers of, and barriers to, knowledge sharing in the organisations. Knowledge sharing enablers included managerial desires to transition to more organised knowledge sharing, practitioners' recognition of the importance of knowledge sharing, their motivations to participate in knowledge sharing, and close social relationships. Knowledge sharing was inhibited by a lack of time and a focus on other tasks and in some cases knowledge sharing was also inhibited by top management not understanding the knowledge needs of others.

#### **4. Discussion**

Our first two research objectives were satisfied by gaining these in-depth understandings of knowledge sharing practices, barriers and enablers within one small and two micro-organisations. We now address the third objective by further embedding the insights from our empirical research within wider knowledge management literature. In so doing, we will focus particularly upon whether the barriers and enablers identified within our study are really unique to small and micro-organisations or whether they mirror barriers and enablers found in larger organisations.

#### **4.1. Are Barriers and Enablers in Small and Micro-Organisations Really Different to those in Larger Organisations?**

Knowledge management research has traditionally focussed on larger organisations, and yet scholars such as Kelliher and Reinl (2009: 522) highlight that micro-organisations are unique and that distinctive elements of these organisations 'render many of the theories derived from studies of larger businesses inappropriate when applied to micro-firms'. However, *prima facie our research suggests* there are few differences between the enablers and barriers described within our research and those found within the general knowledge management literature.

The first enabler we identified – the desire to formalise knowledge sharing – is supported within the general knowledge management literature. It is well recognised that strong support from organisational leadership positively influences knowledge sharing (Park et al., 2015; Seba et al., 2012). More specifically, researchers have demonstrated the importance of having a vision of knowledge management that orients action and inspires and enthruses participation (De Loo, 2006; Nonaka, et al., 2000; O'Dell and Grayson, 1998; O'Neil and Adya, 2007; Pan and Scarborough, 1999; Viitala, 2004). Indeed, Nonaka et al (2000) state that: -

'It is top managements' role to articulate the knowledge vision and communicate it...the knowledge vision defines what kind of knowledge the company should create...the knowledge vision gives a direction'.

(Nonaka et al, 2000: 23)

Further, the demonstration of the organisation's commitment to knowledge sharing amongst all relevant stakeholders helps to clarify the organisation's expectations of knowledge sharing (O'Neil and Adya, 2007), and the promotion of the vision can be undertaken at all organisational levels (O'Dell and Grayson, 1998).

Our study also identified that practitioners' recognition of the importance of knowledge sharing and their motivation to practice and participate in knowledge sharing are important enablers of knowledge sharing in the organisations we conducted research in. Nevertheless, the general knowledge management literature has also found that an individual's recognition of the importance of knowledge sharing can be an important enabler for motivating knowledge sharing.

For example, researchers have found that individuals will often share knowledge with others because they believe it to be in the public good and have a moral obligation to help their organisations and professional communities (Ardichvili et al., 2003). Indeed, Ardichvili et al's (2003) study of virtual communities of practice at the US firm Caterpillar Inc revealed that individuals often did not share knowledge with others if they were concerned that the knowledge may lack value for the recipient or perceived that it may mislead others.

Given the deeply embedded human nature of knowledge (Polanyi, 1966), the sharing of knowledge cannot be considered automatic and may not happen unwillingly (Ehin, 2008), and is influenced by attitudes and feelings of individuals (Barachini, 2009; Ehin, 2008). It has been well established that knowledge sharing only occurs willingly (Barachini, 2009; Bock and Kim, 2002; Ehin, 2008). Thus, the motivation of practitioners to share knowledge is a crucial enabler of knowledge sharing in organisations of all sizes; not only small and micro-organisations.

The final enabler – close social relationships – is also often reported within the literature. It has been found that affect-based interpersonal trust (characterised by warm personal relationships (McAllister, 1995)) is positively related to knowledge sharing in a number of contexts (Chowdhury, 2005; Holste and Fields, 2010; Lucas, 2005; Seba et al., 2012). In terms of the principal barrier we identified – lack of time to engage in knowledge sharing due to pressing operational requirements and an over-riding necessity to ensure the viability of the business – a lack of time has been found to be a barrier in other studies as well (Hislop, 2009; Riege, 2005; Seba et al., 2012).

While the foregoing discussions suggest that the barriers and enablers of knowledge sharing may be similar irrespective of organisational size, we refuse to go further. To interpret the above similarities as implying that the barriers and enablers are the same as those within medium and large organisations is too strong a conclusion. Our contention, supported by our findings and a review of the literature, is that it is not that the relevant enablers and barriers are different in micro and small organisations but that *they have an enhanced significance* within this context. We will now discuss this in section 4.2.

#### **4.2. The Enhanced Significance of Enablers and Barriers in Small and Micro-Organisations**

As we can see from our research findings, managers in the participating organisations are central to many of the enablers of knowledge sharing. For example, managers generally desired a

transition towards greater formalisation and organisation of knowledge sharing and also recognised the importance of knowledge sharing. Whilst the important role that leaders can play in knowledge sharing has been acknowledged in the extant literature (Park et al., 2015; Seba et al., 2012) and whilst managers in larger organisations can also undoubtedly be important enablers of knowledge sharing in their organisations, we would argue that in small and micro-organisations individual managers are generally likely to constitute a more significant enabler of knowledge sharing due to the exaggerated level of control and power that they typically have. Indeed, it is widely acknowledged that owner-managers of small organisations often have a uniquely strong degree of control over their organisations (Burns, 2007; Schlemmer and Webb, 2008) when compared to managers of larger organisations. This is also the case in micro-organisations (Devins et al., 2005; Kelliher and Reinl, 2009), although arguably such control may well be even further exaggerated in micro-organisations and very small organisations, given the greater centrality of the owner-manager to such organisations. Kelliher and Reinl (2009: 523), for example, note that ‘the owner [of a micro organization] plays a pivotal role in the organization’s focus and ultimate success’ with Devins et al (2005: 541) also highlighting that ‘managers within micro enterprises are particularly well placed to influence the development of their organisations’. Therefore, if individual managers and owner-managers of such organisations do not recognise the importance of knowledge sharing and are not keen to organise knowledge sharing in their organisations, then these individual managers have the power and control to significantly diminish the potential for knowledge sharing to flourish in their organisations. In larger organisations individual managers generally form part of a larger management group, which potentially reduces the possibility for any one individual manager or any small number of managers wielding enough power to significantly influence the knowledge sharing trajectory of the organisation.

If individual managers in small and micro-organisations can be crucial enablers of knowledge sharing within their organisations, then it stands to reason that they could also act as significant barriers to it. Our data sheds some insight into this; for example, the problems caused by owner-managers’ incorrect assumptions about the knowledge base and knowledge requirements of those to whom they were transferring knowledge. Upper echelons theory (Hambrick and Mason, 1984; Hambrick, 2007) provides a helpful lens through which to analyse this barrier in order to appreciate the potentially severe implications of such errors of judgement. At the core of upper echelons theory is the notion that managers’ perceptions of the world affect their strategic actions (Hambrick and Mason, 1984; Hambrick, 2007). Transitioning to more formalised and organised

knowledge sharing, as is desired by a number of the managers involved in our research, is likely to constitute a significant strategic action in a very small or micro-organisation. Therefore, if owner-managers wrongly perceive the knowledge requirements of others in their organisation then this could wrongly inform their actions when it comes to developing more formalised knowledge sharing and this could lead to wasted time and resources that small and micro-organisations can ill afford. We are certainly not arguing that misperceptions amongst top managers in large organisations are insignificant influencers of strategic action but we would contend that there is arguably more potential that these misperceptions can be mitigated by insights provided to these managers by other members of their larger management team. As such, we suggest that managers' misperceptions of the knowledge requirements of others could constitute a more significant barrier to knowledge sharing in small and micro-organisations than may be the case in larger organisations.

Roxas et al (2014: 445) argue that 'although a small firm may have other employees, the owner-manager plays a major and dominant role in terms of KM within the firm'. Whilst we do not disagree with this sentiment, we do caution against naively negating the role of employees in knowledge management within such organisations. Whilst managers are likely to have more control than their employees, the uniquely small number of employees in such organisations ultimately means that individual employees also wield significant power over the knowledge sharing dynamics within small and micro-organisations. For example, an unwillingness to undertake knowledge sharing on the part of just one employee in PR & Marketing Org would mean that 25% of individuals in that organisation were disrupting effective knowledge sharing. Clearly, this would have a significant disruptive influence on effective knowledge sharing in that organisation. This highlights the importance of one of the enablers of knowledge sharing we found in our study, which was a willingness amongst practitioners in the organisations to participate in knowledge sharing. Whilst we also acknowledge that such willingness is important in organisations of all sizes, we would argue that it becomes more significant in small and micro-organisations since the small number of employees in these organisations enhances the severity of the effect that each individual employee can have on knowledge sharing.

The small number of employees in small and micro-organisations also suggests that close proximity and social relationships between organisational members – the fourth enabler of knowledge sharing we identified – may also be more likely to be found in such organisations.

Therefore, this enabler could potentially have a greater role and significance for effective knowledge sharing in small and micro-organisations when compared to larger organisations.

According to upper echelons theory 'executives act on the basis of their personalized interpretations of the strategic situations they face, and...these personalized construals are a function of the executives' experiences, values, and personalities' (Hambrick, 2007: 334). The role attributed to values here is insightful for considering a potential underlying contributor to lack of time and busyness interfering with knowledge sharing in the organisations featured in our study. At the core of the time barrier within these organisations appears to be the prioritisation, amongst individuals within the organisations, of business survival, financial performance and / or the effective completion of their specific job / remit. This prioritisation could be seen to be a reflection of the values of those individuals. Indeed, the values held by individuals reflect what they see to be desirable (Athos and Coffey, 1968; Parks and Guay, 2009; Rokeach, 1973; Schwartz, 1994; Watson and Barone, 1976). Kluckhohn (1951: 395) expresses this when he suggests that a value is 'a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection from available modes, means, and ends of action'. From our research findings it would appear that at least some individuals in the organisations valued business survival, financial performance and / or completion of their own job more strongly than they valued effective knowledge sharing in their organisations. Like Hambrick (2007), other scholars have highlighted the effect that individuals' values can have on strategic actions in organisations (for example, Guth and Tagiuri, 1965; Lichtenstein and Dade, 2007; Sousa et al., 2010). As such, when evaluating the underlying mechanisms underpinning the time barrier to knowledge sharing, it could be that individuals' values can act as an important enabler or barrier of knowledge sharing. The effect of individuals' values could arguably be stronger in small and micro-organisations, given the small number of people influencing strategic actions within those organisations. Indeed, small and micro-organisations are often seen to be closely intertwined with the values of owner-managers, with the organisations commonly reflecting those values (Dawson et al., 2002; Greenbank, 2000; Holt, 2012; Kelliher and Reinl, 2009; Olson and Curie, 1992). Furthermore, small and micro-organisations typically face resource constraints, including time constraints (Bridge and O'Neill, 2013; Wong, 2005), which may make the time barrier more significant in such organisations.

## 5. Conclusions and Implications

While the arguably logical notion that 'the larger the organization, the greater the potential challenges to some of the key knowledge processes such as knowledge sharing' (Hutchinson and Quintas, 2008: 135) may have some truth, this is not a sufficient reason to avoid seeking understanding of knowledge sharing in small and micro-organisations. Our preceding discussions contribute to debates on knowledge management by suggesting that the particular characteristics of small and micro firms – such as the high level of control of owner-managers (Burns, 2007; Devins et al., 2005; Kelliher and Reinl, 2009; Schlemmer and Webb, 2008), small number of individuals (Muller et al., 2015), and resource scarcity (Bridge and O'Neill, 2013; Wong, 2005) – may mean that the significance of some enablers and barriers to knowledge sharing are increased in such organisations. Therefore, small and micro-organisations face important challenges to effective knowledge sharing that must be acknowledged and addressed. The importance of knowledge sharing and knowledge management to organisations (Becerra-Fernandez & Sabherwal, 2014; Hislop, 2005; Jackson et al., 2006; Goh, 2002; Nonaka and Takeuchi, 1995) is well established and so too is the fundamental importance of micro and small firms to global economies (Department for Business Innovation and Skills, 2015; Muller et al., 2015). Therefore, developing and determining methods of enhancing knowledge sharing within this context may have significant economic benefits. As such, we argue that researchers may fruitfully explore knowledge sharing and other knowledge management processes within small and micro-organisations. This is particularly salient given that there is a dearth of literature on the management of knowledge in such organizations (Durst and Edvardsson, 2012; Zieba et al., 2016).

Having established this stance we finish by addressing the final part of the third objective of this chapter, by considering the implications of our findings for practitioners and policy makers: -

- There is a broad acceptance that effective knowledge management will create competitive advantage for firms (Bogner and Bansal, 2007). Nevertheless, a number of participants in our study reported not having time to engage in knowledge sharing and a need to prioritise other core business activities. Prioritisation of such core business activities is understandable and can be pervasive in such organisations since time constraints are commonly found in small and micro-organisations and the lack of resources such organisations often have can leave little scope for a downturn in business (Lim and Klobas, 2000). Despite this we believe that policy initiatives and those responsible for training

managers and employees in small and micro-organisations should seek to raise awareness and understanding of the relationship between knowledge management practice and organisational success. Sparrow (2005: 137) argues that SMEs think 'only in terms of what is tangible – cashflow, market share, etc.' and that this can be detrimental to the development of knowledge management. The participants in our study did believe in the importance of knowledge sharing for individual and organisational success, with management often keen to develop more organised approaches to knowledge sharing. Nevertheless, we would suggest that these beliefs could be harnessed and built upon to further enhance managers' and employees' awareness of the importance of knowledge sharing. If those in smaller organisations do think 'only in terms of what is tangible' (Sparrow, 2005: 137), then perhaps case studies that expose the financial successes reaped by other organisations' knowledge sharing practices could help to further increase the desirability of knowledge sharing, and particularly organised knowledge sharing, amongst practitioners in small and micro-organisations. This could help equalise the prioritisation given to both core business activities and knowledge sharing within organisations. In essence, managers and employees may come to see knowledge sharing, and particularly organised knowledge sharing, as a core business activity in its own right.

- We do acknowledge, however, that it is perhaps idealistic to assume that the time barriers in small and micro-organisations can be overcome simply by further educating practitioners in these organisations about the importance of knowledge sharing and its potential links to organisational success. Transitioning to more organised knowledge sharing practices could be resource and time intensive in the short-term and where this conflicts with the time constraints in small and micro-organisations then such transitions may need to be undertaken on a very gradual basis. Furthermore, we also advocate the development of knowledge sharing solutions that can be adopted by small and micro-organisations within minimal time frames. Another option is to enhance the informal, unplanned sharing of knowledge in these organisations. It is accepted that communication between individuals is necessary for the successful externalisation of tacit knowledge between individuals (Nonaka and Takeuchi, 1995; Nonaka and Konno, 1998; Politis, 2003). Thus, enhancing the communication skills and abilities of those that work in small and micro-organisations may enhance such unorganised and informal knowledge sharing practices.

- In two of the organisations in our study a barrier to effective knowledge sharing was the potential for managers to not appropriately identify the knowledge levels and requirements of others within their organisations. Managers in small and micro-organisations need to be cognisant of this and one avenue to enhancing their awareness of the knowledge requirements of others is through undertaking effective two way knowledge sharing. Indeed, adequate two way communication could help to ensure that all employees' knowledge needs are known. It is important, however, not to put the onus for this solely on the shoulders of managers. Employees too have a responsibility to effectively communicate their knowledge requirements to management in order to facilitate an exchange of knowledge pitched at a level that is appropriate for those employees. The close proximity of practitioners within small and micro-organisations is conducive to enabling this two way communication to flourish. To achieve this would require careful management of the relationships between managers and employees, something that is more important given the general closeness of managers and employees in small and micro-organisations.

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