

## Sharing tacit knowledge in public sector: assessing local administrators' perspectives in Bangladesh

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### ABSTRACT

*Tacit knowledge – experiences, skills, judgment and even intuition of the employees – as organizational resource, has recently gained significant attention from the organizational researchers. While such knowledge is difficult to identify, exhibit and describe, it can often determine the manner in which public administrators implement public policies. Taking a qualitative strategy of enquiry, this paper aims at identifying the pattern of tacit knowledge sharing among the local government officials in Bangladesh. The key findings suggest that majority of the local government officials are aware of the significance of tacit knowledge. Trust, both cognition-based trust and affect-based trust, determine their knowledge sharing behaviour. The 'senior-junior' relationship within the hierarchal structure is perceived to be the key channel of tacit knowledge transfer. In the context of inadequate formal sharing channels, officials perceived trainings to be the key formal mechanism of tacit knowledge sharing within public sector organizations in Bangladesh.*

**Key words:** tacit knowledge, trust, public sector, local government, hierarchy

### INTRODUCTION

Sharing tacit knowledge in the context of public sector has started to gain attention from the knowledge management scholars more recently. This is largely due to the acknowledgement that public sector organizations are knowledge-intensive organizations, and effective knowledge sharing within and across departments is the prerequisite to better utilization of such resources (Willem & Buelens 2007). With the accelerated pace of globalization, interconnectedness and greater mobility of people and resources, public organizations have been increasingly facing complex challenges. The changing context has been giving way to novel opportunities and risks. It has heightened the bar of performance for the public sector organizations, and increased the risk of adverse public reaction as well. Public organizations are now expected to better utilize resources, both of tangible and intangible in nature. Public sector reforms have been emphasizing on knowledge sharing, as an integral part of knowledge management mechanism

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(Celino & Concilio 2006; Salleh et al. 2013; Kakabadse et al. 2001). However, due to lack of empirical evidences, application of knowledge management theories and frameworks in the context of public sector organizations is still not adequately understood (Riege & Lindsay 2006). Especially in the context of developing countries, relatively little information is available on public sector knowledge management practices (Syed-Ikhsan & Rowland 2004).

This paper seeks to investigate the pattern of tacit knowledge sharing within the local administration in Bangladesh. The primary objective is to understand how local government employees perceive tacit knowledge sharing practices within the organizational setting. The key questions that the paper seeks to answer are: a. how the local government employees in Bangladesh perceive tacit knowledge sharing?; and b. what, according to the local government employees in Bangladesh are the key determinants of sharing tacit knowledge among the local government officials?

The key premise in this paper is that public sector organizations are knowledge-based organizations and failure to acknowledge tacit knowledge may risk losing critical organization resource, affecting organizational performance adversely. Improving knowledge sharing practices, on the other hand, can significantly improve service provisions (Gorry 2008). In the context of developing countries, where ‘rules of the games’ are often untold and informal in nature, understanding of tacit knowledge is critical to aid better implementation of policies.

### **Knowledge, knowledge management and knowledge sharing**

The question of defining knowledge had occupied the minds of philosophers since the classical Greek era and led to many epistemological debates (Alavi & Leidner 2001). Knowledge has been viewed from different perspectives, ranging from abstract philosophical and religious concept to practical use (Asoh et al. 2002). The discussion in this paper draws on the notion of knowledge management that tends to be closer to the practical side of the continuum.

Knowledge is generally defined as personalized (or subjective) information, residing in the mind of an individual, related to facts, ideas, procedures, interpretations, concepts, observations, and judgments (Alavi & Leidner 1999). It is often conceptualized on the basis of the popular distinction among data, information, knowledge, and wisdom – the (DIKW) hierarchy suggested by Ackoff (1989). However, the conceptualization that there is a knowledge pyramid having data at the bottom, assembled knowledge and wisdom at the top and information bridging between them, is often contested. It is believed that this often-assumed hierarchy can actually be inverse, meaning that knowledge can be possessed by an individual even before the data were gathered and measured to form information (Tuomi 1999). In line with this view Alavi and Leidner (1999) posit that knowledge is created once information is processed in the mind of individuals and it can again become information for others when articulated and presented in the form of texts,

graphics, and symbols. Davenport and Prusak (1998:5) provide a more comprehensive definition of knowledge:

Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices, and norms.

Knowledge Management (KM) as a concept and practice has been popular more recently, both in the practical and academic spheres. Within organizational setting the necessity of knowledge management was realized because of the need for creating and mobilizing certain knowledge for certain purpose, such as gaining competitive advantage and greater efficiency (Quintas et al. 1997). Although it has been mostly the private sector organizations that considered knowledge management as a tool for business success, public and non-profit organizations also have started to realize the need for knowledge based organization. Despite the acknowledgement, public sector organizations are yet to commit to fully explore the benefits of knowledge management, compared to the private sector organizations (Jain 2009). Largely due to lack of clear strategy and aim knowledge management initiatives have remained challenging for public organizations (Kim & Lee 2004).

The tacit-explicit dimension of knowledge has been the key concern in the KM literature (Grant 2007). Tacit knowledge mainly refers to skills, judgment, and intuition that rest in people's mind and are often difficult to exhibit and describe (Dampney et al. 2002). Explicit knowledge on the other hand includes skills and facts that are easily understood, can be articulated in verbal or written manner and easily taught or transferred to others. The 'knower' converts tacit knowledge into explicit knowledge (Davies 2015).

The acknowledgement of the tacit-explicit dimension of knowledge, in the context of organization, can largely be attributed to the writings of Nonaka (1994) and colleagues. Drawing on Polanyi's (1966) conceptualization of tacit knowledge Nonaka (1994) and colleagues have developed and continually reviewed the socialization, externalization, combination and internalization (SECI) model – the model of strategic knowledge creation (e.g. Nonaka et al. 2000; Nonaka & Toyama 2005; Nonaka et al. 2014).

While there have been debates on whether tacit knowledge is more valuable or explicit knowledge (Bohn 1994; Spender 1996), the key focus of knowledge management literature has been on explicit knowledge, because it can be expanded to more people and organizations. Knowledge management mechanism thus emphasizes on the needs to identify and facilitate the utilization of tacit knowledge that is likely to be useful when made explicit (Shin et al. 2001).

### ***Knowledge Sharing***

Knowledge sharing is critical to knowledge management, and knowledge management systems are expected to facilitate sharing of knowledge within and across organizations (King 2009). Knowledge sharing emphasizes on individuals to explicate, encode and communicate knowledge to other individuals, groups and organizations, through personal exchange or a system (King 2009). Sharing behaviour of tacit knowledge and explicit knowledge may vary. People perceive the ownership of tacit and explicit knowledge differently. Their perception of the ownership of knowledge and the process involved in the creation of it may determine whether they would be willing to share it or not. In their experiments Constant et al. (1994) found that attitudes about information sharing depend on the process of its formation. They found that individuals are likely to consider explicit knowledge such as reports and memos as owned by the organization, as it is produced by the organization, and tacit knowledge as owned by them, as it resides in their minds (Constant et al. 1994).

Mechanism of sharing of tacit knowledge can be formal such as training events, conferences and taskforces, or informal such as informal networks and interactions (Marquardt 1996). The primary means of sharing such knowledge has been face-to-face interaction (Grover 2001; Nonaka & Takeuchi 1995; Spender & Grant 1996; Teece 2000). Other means include observation, imitation, practice, experience sharing, and highly interactive conversation and storytelling (Scott 2000).

Key to both formal and informal tacit knowledge transfer is the willingness and capacity of the individuals to share their knowledge and use their learning (Foos et al. 2006; O'Dell et al. 1998). While greater self interest reduces support for sharing, belief in the organizational ownership of the work favours knowledge sharing practices (Constant et al. 1994). Culture also plays an important role in the success of knowledge management efforts (McDermott & O'Dell 2001; Suppiah et al. 2011). A well-designed knowledge management process may fail because of people's perception of the knowledge sharing culture. Formal organizational policies such as using rewards for knowledge sharing can motivate individuals in doing so (Hamid et al 2001). Thus, it is imperative that organizations take measures to increase the knowledge awareness and establish its significance within its values and culture (Jantz 2001).

The most critical determinant of sharing tacit knowledge within the organizational setting is trust – the extent to which co-workers are believed to be the trusted sources and trusted recipients of knowledge (Adler 2002; De Long & Fahey 2000; Lucas 2005; McAllister 1995; Scott 2000; Smedlund 2008). Interpersonal relationships and long-standing relationships among employees may determine knowledge sharing behaviour where reciprocity among the co-workers is an established norm (Smedlund 2008). Having a trusting relationship reduces the risks and uncertainty associated with sharing tacit knowledge (Foos et al. 2006).

McAllister (1995) found two distinct forms of trust, the affect-based trust and the cognition-based trust, that determine knowledge sharing behaviour. The affect-based trust is grounded in mutual care and concern between workers, whereas the cognition-based trust is grounded in co-worker's reliability and competence (McAllister, 1995). Lucas (2005) also found that interpersonal trust between co-workers and reputation of the co-workers can have distinct effects on knowledge sharing within organizations. If the source of knowledge is not perceived to be trustworthy, such knowledge is likely to be challenged and resisted more openly (Szulanski 1995).

While most studies investigated the affect of trust on knowledge transfer in general, Holste and Fields (2010) studied the affect of trust on tacit knowledge sharing. They found that both affect-based trust and cognition-based trust influence the extent to which organizational members are willing to share and use tacit knowledge. Affect-based trust has greater effect on the willingness to share tacit knowledge, and cognition-based trust affects the willingness to use tacit knowledge (Holste & Fields 2010).

There can be factors that can negatively influence tacit knowledge sharing behaviour. The key hindrances to tacit knowledge sharing include lack of willingness to share, limited awareness of possessing tacit knowledge, difficulty in articulating it, and difficulty of relating context-specific tacit knowledge to other contexts (Fahey & Prusak 1998; Nidumolu et al. 2001; Nonaka & Takeuchi 1995; Stenmark 2000). Due to the complex hierarchical structural nature, public sector organizational culture may not favour knowledge sharing (Amayah 2013, Parker & Bradley 2000) and there can be a tendency towards "knowledge hoarding" (Syed-Ikhsan & Rowland 2004). However, in a recent study by McEvoy et al. (2018), no strong evidence of negative bureaucratic dominance on knowledge sharing was found. Instead, they found that power game has stronger negative effect on knowledge sharing. In terms of the formal processes, inadequacy of information technology and lack of management's recognition may also impede effective knowledge sharing in the public sector (Denner & Blackman 2013).

## **METHODOLOGY**

This study follows a qualitative strategy of enquiry in the phenomenological tradition. The approach is found suitable for the research as it seeks to understand, explore and describe the process (Punch, 2009), of knowledge sharing. The main research tool used in the study was semi-structured interviews, combined with story-telling. The respondents were thirteen Upazila level local government officials from the Madaripur Sadar Upazila and Kalkini Upazila of Madaripur District in Bangladesh. The semi-structured interview was expected to allow identifying patterns in the data gathered from the interviews (Zhang & Wildemuth 2009) and provide understanding of the cultural context of a particular behaviour (Seidman 1991), knowledge sharing in this case.

The process involved flexible and pleasant conversations with the respondents, having focus on the topic of the study. Participants were asked questions on acquiring knowledge and skills in the organizational setting, role of 'personal' knowledge in their day-to-day functioning and share from their memory a story where they were able to exchange knowledge in order to successfully accomplish an office task. The discussions were transcribed to find meaning units. An interpretive analysis was conducted to convert meanings into themes (Strauss & Corbin 1990; Tutty et al. 1996).

## **FINDINGS**

On an average, the respondents had eleven years of experience working in the local administration in Bangladesh. The key themes that emerged from the interviews were: i) awareness of tacit knowledge, ii) channels of sharing tacit knowledge, iii) facilitating factors, and vi) restraining factors in tacit knowledge sharing.

### **Awareness of tacit knowledge:**

Majority of the respondents (61%) recognized the significance of tacit knowledge in their day-to-day functioning as well as in achieving results. Some of them (30%) were of the opinion that tacit knowledge is more important than explicit knowledge. However, 30% of them also emphasized that in public offices formal rules and regulations are key and prioritized in performing the functions. About 8% said that government orders and rules are adequate in carrying out functions and tacit knowledge is not required in this context.

### **Channels of sharing tacit knowledge: hierarchy and training**

#### ***Hierarchy***

About 76% of the respondents mentioned that their senior officers in the hierarchy have been their key source of tacit knowledge. 30% informed that they extend support to their 'juniors' in the hierarchy when necessary and help them in solving problems.

“Sharing with co-workers, especially the seniors can teach you a lot. After promotion or transfer our colleagues and office staff in the new office help us in understanding the new work environment.”

“Tacit knowledge is primarily gained through seniors. But this office does not require that much of tacit knowledge.”

“Often, junior officers, whom I know personally, call me when they face difficulties in performing a task.”

“Actually, the chair (position) will teach you everything.”

“My colleagues at my present workplace helped me to understand the (new) social context. I personally call my seniors from my previous work place when I face difficulties in carrying out a function.”

“Colleagues help in understanding new work environment when we are transferred to a new place.”

About 62% of the respondents stated that they share knowledge in the form of experience and stories with their co-workers, within the same department and in other departments. 38% stated that local office staff helped them in understanding the local socio-economic-political context when they were transferred or promoted to a new work area.

### ***Training***

About 85% of the respondents agreed that there is no formal mechanism yet, to document tacit knowledge. 23% of the respondents thought that tacit knowledge is shared through official trainings and conferences. 15% thought farewell programmes to be one of the key mechanisms through which retired officers share their knowledge to rest of the officials. Only one respondent mentioned that they have formal forums for sharing field experiences.

“There is no formal mechanism to document our knowledge. We share it during our farewell programmes.”

“We have conference day with field staff where we share our field experiences.”

“There is no scope for tacit knowledge documentation, and I don’t think there is any need of it. Engineers’ work is not court’s order that it will be applicable to similar cases!”

Only 38% of the respondents thought that retired officials could play a role after retirement, in sharing their knowledge through training. 23% of them believed that retired officials do not possess the physical and mental capacity to be involved in training of any sort for sharing tacit knowledge.

### **Facilitating factors**

Majority of the officials (69%) believed that informal relation and group belongingness are critical to tacit knowledge sharing. 15% believed that informal relations are more effective than formal relations in sharing knowledge.

“Informal relation is necessary in this type of knowledge sharing. Even for having a conversation you would always find someone that you can trust.”

“Informal relation is the first condition for sharing knowledge; it is often more important than formal relation.”

About 15% of the respondents believed that trust is not a determinant factor in knowledge sharing. They believed that sharing knowledge takes place as part of performing the job. Only one official mentioned of need of official benefits and rewards as a determinant for sharing knowledge.

### **Restraining factors**

Most of the respondents avoided to report any factor that they thought to be restraining factor in tacit knowledge sharing. Two of the respondents thought that local politics is barrier to effective knowledge sharing. One of them added corruption, no transfer of the local officials and lack of ownerships of the office as restraining factors in tacit knowledge sharing.

## **DISCUSSIONS**

The findings in the study suggest that most of the respondents acknowledged and recognized the significance of tacit knowledge in the organizational setting. Majority of them believed that tacit knowledge is as important, if not more, as explicit knowledge, in carrying out public sector interventions. However, as expected in a bureaucratic setting, they have also emphasized on the importance of formal rules and regulations such as office orders, in carrying out day to day activities at the local level. Officials who were required to be involved in field services were found to have emphasized on tacit knowledge more than the officials involved in routine and technical tasks.

It was found from the responses of the officials that both affect-based trust and cognition-based trust influence sharing tacit knowledge among the local level officials. However, majority of them have emphasized more on the cognition-based trust. For instance, they considered their superior officers - 'seniors', with more years of experience in the service, as the key source of their learning. They have also mentioned about their informal relationship with co-workers as determinant of knowledge sharing within the organizational setting. At the field level, co-workers within the department and from other departments shared experiences among themselves. This is perhaps because they share a common physical space for office making communication easier.

As the responses show, two of the respondents thought that trust is not a pre-condition for sharing knowledge. Such responses may have been based on the concern of legitimacy and ethical dilemma of acknowledging informality within bureaucratic structure. Similar assumption can be made also in the case of the respondents' tendency to skip the topic of restraining factors in knowledge sharing. Within a formal setting it is often difficult to share the insider story with an outsider, especially because the relation is not based on trust and reliability. Two of the respondents felt that local politics hinders knowledge sharing. This complies with the previous research that power game can have strong negative relation with knowledge sharing.



Most of the respondents have recognized the absence of any formal mechanism to transfer tacit knowledge in the public sector in Bangladesh. Like many other developing countries, there has not been any strategic knowledge management mechanism established yet. The respondents thought that training is the key forum through which knowledge is shared among the public sector employees in Bangladesh. Other sharing mechanisms according to them were conference day and experience sharing during farewell programmes of the retiring officers. There has been mixed reaction on the proposal of involving retired officials in transferring tacit knowledge in the organization. Most of the respondents appeared to have been sceptical in terms of the physical and mental capacity of the retired officials to be part of tacit knowledge transfer process.

The key implication of the findings is that hierarchy can play a critical role in tacit knowledge sharing within public organizations. It sits in contrast to the popular perception that bureaucracy and rigid hierarchy impede knowledge sharing. Majority of the respondents agreed that they received knowledge from their superior officers and they provide support to their junior officers if and when needed. This makes it evident that within public organizations, local government in this case, an unwritten form of mentoring process is in place and it is highly accepted by the officials. The role of local staff (permanent) also found to be critical in supporting newly transferred officials to understand the local context.

While the findings confirm the role of informal relationships in sharing tacit knowledge, opportunity exists for future research on tacit knowledge sharing within public sector organizations in Bangladesh to further investigate the relationship between hierarchy and knowledge sharing. This creates a scope to explore the pattern of knowledge sharing in other local government offices in Bangladesh as well.

Based on the findings it can be recommended that a uniform Knowledge Management Strategy should be in place to ensure long-run knowledge utilization in public sector organizations in Bangladesh. Local level offices where actual implementation of policy takes place should be the primary unit in knowledge sharing and utilization practices. Existing formal and informal networks should be kept in mind during developing the knowledge management strategies. Hierarchy should not be considered as necessarily an impediment to knowledge management initiatives. As informal knowledge sharing and mentoring have already been in place at the local level administration, recognizing the process as legitimate, useful and necessary for the organization is likely to encourage formal acceptance of knowledge sharing. It should be kept in consideration that both hierarchy and informal relationship can prove to be beneficial to knowledge management practices in public organizations.

Although a large number of officials did not feel that retired officials can support their knowledge gaining process, a network of retired officials can build ownership of the existing knowledge sharing practices; acknowledging

someone's knowledge as critical resources for the organization can create a culture of knowledge transfer among the existing employees. While only one of the officials mentioned that reward and incentives are required for knowledge sharing, it is critical that adequate reward and incentives are provided to mainstream knowledge management practices within public organizations.

## CONCLUSIONS

Like many other developing countries public sector organizations in Bangladesh are yet to establish any strategic knowledge management mechanism. Despite the absence of a formal system, informal networks and relationships continue to support in sharing knowledge among the members of the organization. While it is popularly believed that departmentalization and hierarchy hinder knowledge sharing, this study found that the superior-subordinate or the 'senior-junior' relationship within the hierarchy has been the most functional mechanism for sharing tacit knowledge within the organization. While this study was an attempt to understand how tacit knowledge is perceived and shared in public sector organizations in Bangladesh, it acknowledges need for further in-depth analysis for adequate understanding of the process. Unless sharing of tacit knowledge is recognized and rewarded, public sector organizations are at risk of losing valuable knowledge resources when employees exit the organizations.

## REFERENCES

- Ackoff, RL 1989, 'From data to wisdom', *Journal of applied systems analysis*, vol. 16, no. 1, pp. 3-9.
- Adler, P 2002, 'Market, hierarchy, and trust', *The Strategic Management of Intellectual Capital and Organizational Knowledge*, vol. 23, no. 1, pp.21-54.
- Alavi, M & Leidner, D 1999, 'Knowledge management systems: issues, challenges, and benefits', *Communications of the Association for Information systems*, vol. 1, no. 1, p.7.
- Alavi, M & Leidner, DE 2001, 'Knowledge management and knowledge management systems: Conceptual foundations and research issues', *MIS quarterly*, pp.107-136.
- Amayah, AT 2013, 'Determinants of knowledge sharing in a public sector organization', *Journal of knowledge management*. pp. 454-471
- Asoh, D, Belardo, S & Neilson, R 2002. 'Knowledge management: issues, challenges and opportunities for governments in the new economy', In: *Proceedings of the 35th Annual Hawaii International Conference on System Sciences* (pp. 1745-1754). IEEE.
- Bohn, RE 1994, Measuring and managing technological knowledge, *Sloan Mgt. Rev*, Fall.

- Constant, D, Kiesler, S & Sproull, L 1994, 'What's mine is ours, or is it? A study of attitudes about information sharing', *Information systems research*, vol. 5, no. 4, pp.400-421.
- Dampney, K, Busch, P & Richards, D 2002, 'The meaning of tacit knowledge', *Australasian Journal of Information Systems*, vol. 10, no. 1.
- Davenport, TH & Prusak, L 1998, *Working knowledge: How organizations manage what they know*, Harvard Business Press.
- Davies, M 2015, 'Knowledge—Explicit, implicit and tacit: Philosophical aspects', *International encyclopedia of the social & behavioral sciences*, pp.74-90.
- De Long, DW & Fahey, L 2000, 'Diagnosing cultural barriers to knowledge management', *Academy of Management Perspectives*, vol. 14, no. 4, pp.113-127.
- Denner, L & Blackman, T 2013, 'Knowledge management in the public sector: an online presence as a tool for capture and sharing', *Studies and Perspectives Series (The Caribbean)*, No. 20: United Nations Publications
- Fahey, L & Prusak, L 1998, 'The eleven deadliest sins of knowledge management', *California management review*, vol. 40, no. 3, pp.265-276.
- Foos, T, Schum, G & Rothenberg, S 2006, 'Tacit knowledge transfer and the knowledge disconnect', *Journal of knowledge management*, vol. 10 no. 1, pp. 6-18.
- Gorry, GA 2008, 'Sharing knowledge in the public sector: two case studies', *Knowledge Management Research & Practice*, vol. 6, no. 2, pp. 105-111.
- Grant, KA 2007, 'Tacit knowledge revisited—we can still learn from Polanyi', *The Electronic Journal of Knowledge Management*, vol. 5, no. 2, pp. 173-180.
- Grover, V & Davenport, TH 2001, 'General perspectives on knowledge management: Fostering a research agenda', *Journal of management information systems*, vol. 18, no. 1, pp. 5-21.
- Hamid, S, Nayan, JM, Bakar, ZA & Norman, AA 2007, *Knowledge management adoption and implementation readiness: a case study of the National Library of Malaysia*, Library & Information Science Unit, Faculty of Computer Science & Information Technology, University of Malaya.
- Holste, JS & Fields, D 2010, 'Trust and tacit knowledge sharing and use', *Journal of knowledge management*, vol. 14, no. 1, pp. 128-140.
- Jain, P 2009, 'Knowledge management for 21st century information professionals', *Journal of knowledge management practice*, vol. 10, no. 2, pp.1-12.
- Jantz, R 2001, 'Knowledge management in academic libraries: special tools and processes to support information professionals', *Reference Services Review*, vol. 29, no. 1, pp. 33-39.

- Kim, S & Lee, H 2004, 'Organizational factors affecting knowledge sharing capabilities in e-government: An empirical study', In: Wimmer MA (Eds.) *Knowledge Management in Electronic Government*. (pp. 281-293). Springer, Berlin, Heidelberg.
- King, WR 2009, 'Knowledge management and organizational learning', In: King W. (Eds.) *Knowledge Management and Organizational Learning*. Annals of Information Systems, vol. 4, (pp. 3-13). Springer, Boston, MA.
- Korac-Kakabadse, N, Kouzmin, A & Kakabadse, A 2002, 'Knowledge management: strategic change capacity or the attempted routinization of professionals?', *Strategic Change*, vol. 11, no. 2, pp. 59.
- Lucas, LM 2005, 'The impact of trust and reputation on the transfer of best practices', *Journal of Knowledge Management*, vol. 9, no. 4, pp. 87-101.
- Marquardt, MJ 1996, *Building the learning organization: A systems approach to quantum improvement and global success*. McGraw-Hill Companies.
- McDermott, R & O'dell, C 2001, 'Overcoming cultural barriers to sharing knowledge', *Journal of knowledge management*, vol. 5, no. 1, pp. 76-85.
- McAllister, DJ 1995, 'Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations', *Academy of management journal*, vol. 38, no. 1, pp.24-59.
- Mc Evoy, PJ Ragab, MA & Arisha, A 2019, 'The effectiveness of knowledge management in the public sector', *Knowledge Management Research & Practice*, vol. 17, no. 1, pp.39-51.
- Nidumolu, SR, Subramani, M & Aldrich, A 2001, 'Situated learning and the situated knowledge web: Exploring the ground beneath knowledge management', *Journal of management information systems*, vol. 18, no. 1, pp.115-150.
- Nonaka, I 1994, 'A dynamic theory of organizational knowledge creation', *Organization science*, vol. 5, no. 1, pp.14-37.
- Nonaka, I & Takeuchi, H 1995, *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford university press.
- Nonaka, I, Toyama, R & Konno, N 2000, 'SECI, Ba and leadership: a unified model of dynamic knowledge creation', *Long range planning*, vol. 33, no. 1, pp.5-34.
- Nonaka, I, & Toyama, R 2005, 'The theory of the knowledge-creating firm: subjectivity, objectivity and synthesis', *Industrial and corporate change*, vol. 14, no. 3, pp. 419-436.
- Nonaka, I Kodama, M, Hirose, A & Kohlbacher, F 2014, 'Dynamic fractal organizations for promoting knowledge-based transformation—A new paradigm for organizational theory', *European Management Journal*, Vol.32, no. 1, pp. 137-146.
- O'Dell, C.S O'dell, C Grayson, C.J. and Essaides, N 1998. *If only we knew what we know: The transfer of internal knowledge and best practice*. Simon and Schuster.

- Parker, R. and Bradley, L 2000. 'Organisational culture in the public sector: evidence from six organisations', *International Journal of Public Sector Management*. pp. 125-141.
- Polanyi, M 1966, 'The logic of tacit inference', *Philosophy*, vol. 41, no. 155, pp. 1-18.
- Quintas, P, Lefrere, P & Jones, G 1997, 'Knowledge management: a strategic agenda', *Long range planning*, vol. 30, no. 3, pp.385-391.
- Riege, A & Lindsay, N 2006, 'Knowledge management in the public sector: stakeholder partnerships in the public policy development', *Journal of knowledge management*, vol. 10, no. 3, pp. 24-39.
- Salleh, K, Chong, SC, Ahmad, SNS & Ikhsan, SOSSI 2013, 'The extent of influence of learning factors on tacit knowledge sharing among public sector accountants', *VINE: The journal of information and knowledge management systems*, Vol. 43, no. 4, pp. 424-441.
- Scott, JE 2000, 'Facilitating interorganizational learning with information technology'. *Journal of Management information systems*, vol. 17, no. 2, pp.81-113.
- Seidman, IE 1991, *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Science*. New York: Teachers College Press, 1991.
- Shin, M, Holden, T & Schmidt, RA 2001, 'From knowledge theory to management practice: towards an integrated approach. *Information processing & management*', vol. 37, no. 2, pp. 335-355.
- Smedlund, A 2008, 'The knowledge system of a firm: social capital for explicit, tacit and potential knowledge', *Journal of knowledge management*.
- Spender, JC 1996, 'Organizational knowledge, learning and memory: three concepts in search of a theory', *Journal of organizational change management*
- Spender, JC & Grant, RM 1996, 'Knowledge and the firm: Overview', *Strategic management journal*, vol. 17, no. S2, pp. 5-9.
- Strauss, A & Corbin, J 1994, 'Grounded theory methodology: An overview', In: NK Denzin & YS Lincoln (Eds.), *Handbook of qualitative research* (p. 273–285). Sage Publications.
- Stenmark, D 2000, 'Leveraging tacit organizational knowledge. *Journal of management information systems*', vol.17, no. 3, pp. 9-24.
- Suppiah, V & Sandhu, MS 2011, 'Organisational culture's influence on tacit knowledge-sharing behaviour', *Journal of knowledge management*.
- Syed-Ikhsan, SOS & Rowland, F 2004, '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..
- Teece, DJ 2000, 'Strategies for managing knowledge assets: the role of firm structure and industrial context', *Long range planning*, Vol. 33, no. 1, pp. 35-54.

- Tuomi, I 1999, 'Data is more than knowledge: Implications of the reversed knowledge hierarchy for knowledge management and organizational memory' In: *Proceedings of the 32nd Annual Hawaii International Conference on Systems Sciences. 1999. HICSS-32*. Tutty, LM, Rothery, MA & Grinnell, RM 1996, *Qualitative research for social workers: Phases, steps, & tasks*. Allyn and Bacon.
- Willem, A & Buelens, M 2007, 'Knowledge sharing in public sector organizations: The effect of organizational characteristics on interdepartmental knowledge sharing', *Journal of public administration research and theory*, vol. 17, no. 4, pp. 581-606.
- Zhang, Y & Wildemuth, BM 2009, *Qualitative analysis of content, USA, Libraries Unlimited Inc.*



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