

Beyond The Tacit-Explicit Dichotomy: Towards A Conceptual Framework For Mapping Knowledge Creation, Sharing & Networking

Farooq Mughal, COMSATS Institute of Information Technology, Pakistan

ABSTRACT:

The purpose of this paper is to critically analyze the knowledge sharing mechanisms at the individual-institutional levels which foster transfer of knowledge, resulting into the formation of knowledge networks. In particular, the paper develops an argument based on seven propositions to establish a roadmap for knowledge creation, sharing mechanisms and knowledge networks based on literature review. The basic premise of the argument revolves around the concepts of theorists (e.g. Cook & Brown, 1999; Cabrera & Cabrera, 2002; Boh, 2007) which provide four classifications of knowledge sharing mechanisms. In a theoretical discourse, the analysis suggests that knowledge sharing mechanisms under each classification gives rise to a certain type of knowledge network (based on the nature of knowledge created and mechanism used) during the transfer of knowledge. The author attempts to propose a conceptual framework to map the transfer of knowledge from creation to sharing and networking.

The paper is divided into three broad sections. The first section discusses the practices of knowledge management and provides a quick overview of the knowledge creation process. The second section explains the knowledge sharing mechanisms and provides an insight on the formation of knowledge networks. The last section, proposes a conceptual framework to map knowledge creation, sharing and networking based on the theoretical perspectives of researchers.

Keywords: *Knowledge transfer, Knowledge networks, Tacit, Explicit, Knowledge sharing mechanisms, Knowledge creation*

Introduction

Today, researchers have acknowledged the importance of knowledge as an intangible asset and a critical resource for sustaining innovative ideas and achieving competitive advantage (Drucker, 1993; Krebs, 1998; McManus et al. 2003; Pillania, 2007). Epistemologists have described this era as the 'knowledge age' and the globalized economy as the 'knowledge economy' (Berier, 2002, Pillania, 2007). In order to subsist in this hyper-competitive globalized economy, organizations and institutions must focus on producing 'knowledge workers' (Maclellan & Sodan, 2007; Godin, 2008; Murray & Greenes, 2007; Reich 1993). Knowledge workers are considered as key components in constructing and disseminating schemas of knowledge within an organization (Serrat, 2008). However, knowledge can be an expensive resource to many (Rozeff, 2005) but certainly it brings a higher ratio of return-on-investment (McManus et al. 2003).

Clarke (2001) has described the term 'knowledge' as a 'body of facts and principles'. Knowledge is considered to originate from the human mind as a cognitive interpretation (Grover & Davenport, 2001 & Nonaka, 1994). It is an intangible set of information having distinctive characteristics which is usually path-dependent and context specific (Caber'a, 2002; Grover & Davenport, 2001 & Nonaka, 1994). Research has suggested that knowledge can be produced by the interaction of people in communities, societies or networks etc. (Bosua & Scheepers, 2007; Wenger, 2001). Hence, the firms must focus on cultivating a culture which fosters sharing of knowledge among individuals, communities of interests and their associated networks to enhance organizational learning. In such a culture the knowledge workers are facilitated to form knowledge networks which provide basis for future communities of practice (Murray & Greenes, 2007).

The objective of this paper is to develop an argument based on the extensive review of the literature and propositions to understand underlying issues in knowledge creation, sharing and networking and provide a roadmap. In order to do so, concepts and ideas have been drawn from an extensive review of literature i.e. (i) the literature on creation of knowledge, (ii) the literature on knowledge sharing mechanisms and transference of knowledge, and (iii) literature on knowledge-networks and communities of practice. However, implementation of such propositions depends on issue of knowledge creation and situations where knowledge is path-dependent and acknowledged by others in a network. These networks share knowledge that is commonly understood and accepted by individuals who share such unique pieces of knowledge (tacit or explicit) (Agar, 1996).

Understanding The Knowledge Management Phenomenon

Tiwana (2000) suggests that "knowledge drives strategy and strategy drives knowledge management". This proposes that knowledge is a key component and understanding the management of knowledge is the means for managers to route their firms towards success. Davenport et al. (1998) describes knowledge management as a set of management practices intended to 'create, store, disseminate and exploit organizational knowledge'. Many investigations and researches have been carried out to understand the nature of knowledge and the knowledge management phenomena (Davenport et al. 1998; Schultze, 1999; Tuomi, 1999; Hedesstrom & Whitley, 2000; Alavi & Leidner, 2001). Moreover, organizations are investing heavily in knowledge management (systems, practices and initiatives) to improve business performance (Lindgren et al., 2002). This articulates the fact that knowledge management has been a significant area of research that holds promising prospects for firms to succeed in the market.

Conventional philosophy on knowledge management argues that there are two types of knowledge i.e. tacit and explicit knowledge (Hislop, 2005). The explicit knowledge is easy to understand and share, as it can be encoded and expressed (Klein, 2008) while tacit knowledge according to Nonaka & Takeuchi (1995) is subject based, intricate in nature, hidden, inexpressible and difficult to share. Although Nonaka's understanding is based on Polanyi's (1967) idea of tacit knowledge. However, Wilson (2002) criticizes Polanyi's (1967) idea of tacit knowledge and emphasizes that non-explicit knowledge can be referred as to implicit knowledge. This

set of knowledge can be better understood with different efforts or mechanisms which may facilitate the sharing of knowledge and may be converted into expressible and understandable information (Klein, 2008). The traditional view of epistemology suggests that tacit knowledge is impossible to convert into explicit, understandable and ready to share knowledge (Gourlay, 2006). However, Nonaka and Takeuchi's (1995) SECI model depicts efforts towards the transformations between tacit and explicit knowledge. Klein (2008) suggests that tacit knowledge is the true knowledge and individuals must develop such knowledge through personal development. He further adds that to individuals can learn-by-doing, experience, action or involvement. In order to develop such expertise, organizations must turn to this challenge by promoting transformation, may be through sharing of knowledge.

Proposition 1: Tacit knowledge is the most effective type of knowledge for an organization in terms of both value and utilization (i.e. subject-based, within a specific domain, gained through experience etc.). However, organizations need to ensure that the tacit knowledge must be transformed into explicit, expressible, and easy to understand knowledge before transferring it.

Creation Of Knowledge By Individuals And Groups

A review of the literature which relates to the understanding of knowledge as a phenomenon created by individuals and groups is discussed, to formulate a basis for understanding knowledge sharing mechanisms (e.g. Bosua & Scheepers, 2007). Individuals are responsible for generating knowledge through the use of their cognitive ability (Klein, 2008). Furthermore, these individuals collectively form groups or communities which are a basic source of knowledge creation (Wenger, 1998; Cook & Brown, 1999; Wenger & Snyder, 2000). Here an understanding of the nature of knowledge created and context will be vital to strengthen our argument for employing effective sharing mechanisms. Klein (2008) suggests that sharing of knowledge is deeply interconnected with the underlying issue of how the knowledge has been created. The knowledge creation process shall be a premise of knowledge sharing mechanisms in our discussion, as knowledge sharing mechanisms and knowledge networks are dependent on the type of knowledge being transferred and shared.

Perspectives On The Creation Of Knowledge

Nonaka & Takeuchi (1995) argues that organizational knowledge can be created through a set of processes, what he calls the 'SECI' (Socialization, Externalization, Combination, Internalization) processes. He further states that knowledge is created through transformations between tacit and explicit knowledge (Klein, 2008). The conversion between tacit and explicit knowledge can be facilitated through the SECI processes. Klein (2008) describes Nonaka's transformations through SECI as:

- **Socialization:** *The sharing of experiences with individuals provides a basis for the conversion of tacit knowledge.*
- **Externalization:** *Once the tacit knowledge is converted into expressible and explicit knowledge, it is ready to be shared with others*
- **Combination:** *After the knowledge has been shared, it provides a basis for creation of new knowledge. Now, individuals combine chunks of explicit knowledge and create more "complex explicit knowledge".*
- **Internalization:** Here, the explicit knowledge is converted back into tacit knowledge

The SECI processes above describe the transformations of tacit to explicit knowledge in order to share the knowledge and its conversion back tacit knowledge. However, Nonaka's argument remains inconsistent on providing the kind of knowledge being transferred (Cook & Brown, 1999). Cook & Brown (1999) argue that research in the field of epistemology considered knowledge to be of one kind. They further indicate that the research in this field tends to focus more on 'individual' rather than 'group' and 'explicit' over 'implicit' knowledge, considering 'tacit-explicit' as the variation of one kind of knowledge. Furthermore in Nonaka's argument, the process of externalization depicts the conversion of tacit into explicit, while theorists contend that 'organizational routines' (referring to procedural memory) and 'higher order pattern for interrelated activities' (referring to group work) are associated with individuals (Cohen & Bacdayan, 1994; Weick & Roberts, 1993). Hence, individual cognitive capabilities are essential to outline the cognitive properties of groups, social networks or communities (Hutchins, 1991a, 1991b). However, this paper addresses the issues of the type of knowledge shared and formulation networks, clarifying the underlying ambiguities of individualism and collectivism dimension.

Proposition 2(a): Tacit and explicit knowledge are two different types of knowledge having their distinctive features. However, such types of knowledge depend upon the source of generation i.e. individuals' or group. This defines a boundary for sharing such knowledge to a particular individual or group to minimize effort, time and wastage of knowledge.

Proposition 2(b): Individual cognitive capabilities are at the core of group cognition.

Importance Of Knowledge Creation In The Process Of Knowledge Sharing

Here I tend to argue, to what extent is it useful to understand the creation of knowledge in the process of knowledge sharing and identify the strategic element that links creation of knowledge to knowledge sharing. Further to the discussion above, Nonaka (1995) emphasizes on the context in which the knowledge has been created, transferred and shared. Klein (2008) has reiterated Nonaka and Konno's (1998) research where they have referred to physical context as 'Ba'. 'Ba' provides an insight on the energy, quality and place where the knowledge has been shared. Their research further suggests that there are four types of 'Ba': originating, dialoguing, exercising, and systemizing. According to Nonaka et al. (2000a, 2000b), the four 'Ba's' correlate on two dimensions which are (i) the type of interaction (e.g. individual or collective) and (ii) medium of interaction (e.g. internet, personalized dialogue etc.). Thompson & Walsham (2004) have laid great emphasis upon the 'context' in which the knowledge has shared. Klein (2008) interprets their work by saying, "Knowledge without context is meaningless". He further adds that it is not a context that is important but a "shared context" is required for the transference of knowledge between individuals or groups. This

supports our argument that it is important to know the nature of knowledge created, as it will provide a basis for establishing mechanisms required for its transference.

Proposition 3: The transfer of knowledge depends upon the context in which the knowledge has been created and shared. In order to increase the level of applicability of the knowledge transferred, it must be ascertained that it is not only the context ('Ba'), but a shared context (shared 'Ba') is required which facilitates the transfer of knowledge and increasing the level of learning.

Knowledge Sharing Mechanisms In Organizations

According to Goh (2002), organizations' today are focusing on effective means for the transfer of knowledge to sustain competitive advantage and increase performance. He further suggests that transfer of knowledge is a significantly important area of research. Grover & Davenport (2001) as cited by Bosua & Scheepers (2007) define knowledge transfer as, "movement of knowledge between its origin and destination within a specific context". In contrast to knowledge transfer, knowledge sharing is a slightly different concept and has been defined by Bosua & Scheepers (2007) as, "a dual process of enquiring and contributing to knowledge through activities such as learning-by-observation, listening and asking, sharing ideas, giving advice, recognizing cues, and adopting patterns of behavior". Knowledge sharing involves the creation and interaction of new ideas with intent in a certain contextual manner (Damsgaard & Scheepers, 2001; Polanyi, 1967; Nonaka & Takeuchi, 1995). However, the terms knowledge sharing and transfer have been used interchangeably in the epistemological literature on knowledge management.

Effective sharing of knowledge requires means through which individuals and groups can transfer knowledge (Boh, 2007). According to Boh (2007), knowledge sharing mechanisms are defined as, "the formal and informal mechanisms for sharing, integrating, interpreting and applying know-what, know-how, and know-why embedded in individuals and groups to aid their performance". In accordance with the purpose of this paper, the knowledge sharing mechanisms will help classify the types of networks formulated on the basis of the type of knowledge created. Furthermore, it is proposed that the network will be dependent on the type of mechanism used for the transfer to take place. The type of knowledge created could be related to propositions 1, 2(a) & (b) and 3 while the sharing mechanisms are yet to be ascertained. However, an increasing literature on knowledge management has identified the necessity to recognize knowledge sharing mechanisms as means of enhancing organizational learning (Crossan, Lane & White, 1999). Unfortunately, previous literature on sharing mechanisms only provides a single dimension i.e. personalization versus codification (Boh, 2007). It is inevitable to rule out the degree of aggregation which differentiates individual and collective forms of knowledge.

Boh (2007) argues that single dimension of personalization versus codification (i.e. tacit versus explicit) is insufficient to explain the wholeness of the sharing mechanisms. Cabrera & Cabrera (2002) suggest that the addition of another dimension degree of aggregation i.e. individualization versus institutionalization (i.e. individuals versus groups) shall formulate mechanisms which enhance organizational learning. This concept has also been supported by Cook & Brown (1999) as the 'epistemology of possession'. They suggest that on a matrix of tacit-explicit knowledge versus individual-group produces 'unique' and 'irreducible' type of knowledge. From the first dimension (i.e. personalization versus codification), personalization mechanisms are usually informal and inexpressible, as also referred to mechanisms for tacit knowledge while codified mechanisms are formal and expressibly embedded in the databases or repositories, as also interchangeably referred to mechanisms for explicit knowledge (Spender, 1996; Lam 2000; Nonaka, 1994; Cowan et al. 2000 have been cited by Boh, 2007). From the second dimension (i.e. individualization versus institutionalization), individualization mechanisms facilitate the sharing of knowledge at an individual level while institutionalization mechanisms facilitate knowledge sharing at a group/s level (Boh, 2007).

Proposition 4(a): Knowledge sharing mechanisms acts as enablers which facilitate the transfer of knowledge within an organization. Knowledge sharing mechanisms help distinguish the type of knowledge to be transferred from one point to another. Hence, it can be said that knowledge sharing means to share knowledge with individuals or groups with intent in a specific context while knowledge transfer means to transfer knowledge from the point of origination to its destination.

Proposition 4(b): Organizations require effective knowledge sharing mechanisms which enhance the capability of the firms to learn and innovate effectively. This can happen when meaningful information reaches the right individual or group in the organization.

Proposition 4(c): Effective knowledge sharing mechanisms constitute of broad two dimensions consisting of personalized versus codified and individualized versus institutionalized mechanisms which facilitate the transfer of knowledge.

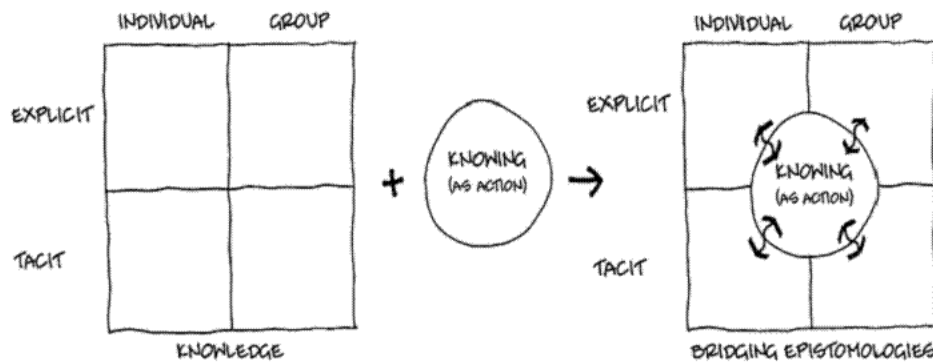
Building Upon Knowledge Sharing Mechanisms

This section of the paper develops an argument based on propositions 4(a), (b) & (c) for designing a conceptual framework for knowledge sharing mechanisms and its expansion to knowledge networks. Theoretical discourse of previous theories, literature and concepts is used as a methodology to develop a conceptual framework. The discourse takes into account the theories of Cabrera & Cabrera (2002), Boh (2007) and Cook & Brown (1999) which identify the core dimensions of knowledge sharing mechanisms and mechanisms for bridging epistemologies. The discussion in the earlier sections provides a basis for the development of the conceptual framework, which is the core idea of the paper. The discourse has been made due to the interrelated ideas of measuring knowledge on a common matrix by these theorists. In order to carry forward the discussion to the next level, Boh (2007) interacts the two dimensions i.e. personalization versus codification and individualization versus institutionalization (See Figure – 1) (Boh, 2007). This interaction results in the production of four classifications of knowledge sharing mechanisms based on the concept of sharing of four different types of knowledge (Spender 1996). Cook & Brown (1999) have indicated the interaction of the two dimensions i.e. tacit/explicit and individual/group as a 'generative phenomenon' which provides a vigorous explanation of these epistemologies (See Figure – 2). These classifications according to Boh are:

Figure 1: Framework of knowledge-sharing mechanisms (Source: Boh, 2007)

	Individualized	Institutionalized
Personalization	Quadrant 1: Individualized – Personalization Mechanisms	Quadrant 4: Institutionalized - Personalization Mechanisms
Codification	Quadrant 2: Individualized – Codification Mechanisms	Quadrant 3: Institutionalized - Codification Mechanisms

Figure 2: Knowledge And Knowing (Adopted: Cook, S. D. & Brown J. S., 1999)



Individualized – Personalization Mechanisms:

These mechanisms facilitate the sharing of tacit knowledge on an individual basis where employees can access. This mechanism refers to the social networks created by a person-person exchange of ideas and knowledge, which remains one important aspect of storing and retrieving experiential knowledge and facilitate learning individually. (Krackhardt, 1992; Allen, 1977; O'Reilly 1982; Moreland & Myaskovsky, 2000, Boh, 2007)

Individualized – Codified Mechanisms:

These mechanisms refer to the organizational knowledge stored in the databases or knowledge repositories in form of artifacts which can be accessible by individuals in an informal way. These artifacts are the experiences and lessons learned in terms of documents, manuals, policies, procedures, organizational archives which constitute the organizations memory. The codified mechanisms share such knowledge which facilitates the transfer of knowledge between an individual to knowledge bases. (Hargadon & Sutton, 1997; Boh, 2007)

Institutionalized –Codified Mechanisms:

These mechanisms facilitate knowledge by capturing individual or group knowledge and converting it into knowledge that is accessible to a wider segment of employees. The knowledge shared is specialists in nature which is embedded in the routines and structure of the organization learned/gained over a period of time. (Earl, 2001; Boh, 2007)

Institutionalized – Personalization Mechanisms:

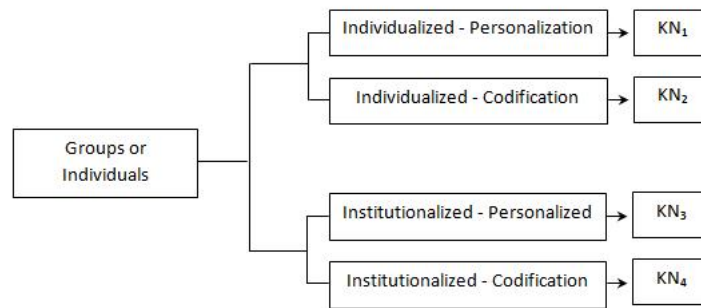
Instead of institutionalizing codified knowledge embedded in the routines and structure of the organization, firms are now shifting focus towards installing mechanisms which facilitate the exchange of personalized (tacit) knowledge. These mechanisms facilitate the transfer of knowledge possessed by experience, learned individuals and transferred through structured or unstructured routines to less experienced individuals over a period of time. Hence, this mechanism can help retain tacit knowledge within a firm. (Boh, 2007)

Proposition 5: It can be inferred that the interaction of two dimensions i.e. personalization – codification and individualization – institutionalization lead to four classes of knowledge sharing mechanisms. Each class represents a significant social network (individual – individual, individual – group, group – individual and group – group) which shares a particular type of knowledge (explicit – explicit, explicit – tacit, tacit – tacit or tacit – explicit) depending upon the

knowledge created and context in which it is shared. These mechanisms transfer not only knowledge but provide an identity to a particular network of individuals or group.

The multiple perspectives gained from the discourse have given an in-depth analysis of the dimensions and classes of knowledge sharing mechanisms. According to proposition 5, each mechanism gives rise to a certain type of knowledge-network which shares common knowledge and uses a common type of language, interest or practice (Brown & Duguid, 1991). Keeping in view the comparative approach and proposition 5, we can now start conceptualizing the process of knowledge sharing and the emergence of knowledge networks due to the nature of process. The conceptualization is a combination of various approaches discussed earlier in the literature. The conceptualization shows that individuals or group generate knowledge due to interactions which gives rise to four classes of sharing mechanisms. Each sharing mechanism yields a specific network which shares a certain type of knowledge called a knowledge network (KN). Although this is an abstract conceptualization of the actual framework, the framework is still in its development phase, the first modular concept of the framework is placed below:

Figure 3: Modular Concept Of The Framework In Its Development Phase (Highlights The Four Classes Of Knowledge Sharing Mechanisms And Knowledge-Networks)



Towards The Emergence Of Knowledge Networks (KN)

Traditionally, the organizational chart developed by the Human Resource departments have had played a vital role in determining ‘who works where’, ‘who reports to whom’, ‘composition of employees in a department, section, unit’, and ‘hierarchical structures’ etc. (Krebs, 1998). However, in this ever changing environment such structures may lack to provide information on the flow of knowledge among communities within an organization. These communities may share knowledge and formulate networks which can be vital for managing knowledge and learning within the firm. Creech (2001) has suggested a model on knowledge management practices that focuses on networks which use knowledge for decision-making processes, known as the model on ‘Internal Knowledge Management Networks’. He further comments on the emergence of such networks as, “... these networks evolve through thematic mapping of expertise within an organization, combined with the creation of appropriate environments for knowledge sharing”. Here we can deduce that knowledge sharing mechanisms lay the basis for development of such internal networks and formulate a ‘shared-context’ (i.e. the ‘appropriate environment’) which facilitates the transfer of knowledge. The concept of Creech (2001) can be used to define knowledge networks as, ‘group(s) of experts working on a common goal by facilitating communication through sharing of knowledge bases’. Clark (1998) has identified a set of seven characteristics for such knowledge networks which clarify their existence within an organization, for example, the purpose of such networks is to create and disseminate knowledge, their structure is designed to facilitate the creation of knowledge, communication channels are well developed etc.

Proposition 6: Knowledge networks are internal networks of an organization which emerge due to the thematic mapping of expertise in a shared contextual environment during the process of knowledge sharing. These knowledge networks are well-defined, structured, channeled, purpose-oriented and formal agglomeration of people which share common practices, language, interest and goal.

Knowledge Networks (Kns) As Potential Sources For Communities Of Practice (Cops)

The Communities of Practice (CoPs) have been around for several years now, but it was first identified by Lave & Wenger in 1991 during their study on situated learning (Hildreth & Kimble, 2004). In their study Lave & Wenger (1991) described the acquisition of knowledge as a ‘social process’ where individuals can participate and share knowledge while learning through working practices. They further explain that communities of practice are social networks where individuals engage in common practices, having a common goal with overlapping intentions. Lave & Wenger’s (1991) study on communities of practice attracted a lot of researchers to research on this phenomenon in the knowledge management context (Hildreth & Kimble, 2004). Furthermore, the literature on knowledge management recognizes the CoP approach in knowledge creation, facilitation, sharing and maintenance (Hislop, 2005). However, proposition 5 & 6 suggest that KNs are independent groups having their own identity. Hence Knowledge Networks are not CoPs but a potential source of CoPs

Brown & Duguid (2000) have proposed that communities of practices are networks consisting of network representatives who have stronger link within and weaker links outside the organization. These links show the flow of knowledge amongst the network reps or actors that is gathered from the surroundings (Brown & Duguid, 2000). The concept of Networks of Practice (NoPs) is an extended version of communities of practice proposed by Brown & Duguid (2000), which proposes the assimilation and diffusion of knowledge over a group of networks. Wenger (1998) proposed on the basis of their previous studies that an organization is not just one community, but a combination of different communities or networks. This provides a premise for our argument that

knowledge networks can be potential sources of communities of practice. Moreover, in one of the literatures on CoP has suggested that CoP at times cannot be distinguished but remain embedded as a network / group of people (Engestrom, 2001).

In one study on CoP, Klein et al. (2005) identified two dimensions of CoP. The first dimension is ‘degree of stratification’ – the level knowledge expertise and the second is ‘degree of activity’ – the level of knowledge activity. However, keeping in view these dimensions, a comparison of the characteristics of knowledge networks and CoP reveal similarities. Clark (1998) proposed a set of seven characteristics and Hildreth & Kimble (2004) defines three characteristics for a CoP. A comparison of these characteristics reveals similarities in a knowledge network and a CoP (See Table – 1).

S#	Characteristics of a CoP (Hildreth & Kimble, 2004)	Characteristics of a Knowledge Network (Clark, 1998)
1.	Body of common knowledge & practice	Their main purpose is to create and disseminate knowledge for use beyond the membership of the network
2.	Sensed of shared identity	Their structure and operation are designed to maximize the rate of knowledge creation
3.	Sense of common or overlapping values	The network must provide recognizable direct benefits to all participants
4.		The structure of a network is (formally) well-defined
5.		Participation is based on invitation or assessment on a criteria of similarity in knowledge
6.		Well developed communication channels
7.		Outreach of knowledge to certain boundaries from one network to another

Table 1: A Comparison Of Characteristics Of KN & Cop

Proposition 7: From the literature and discussion, it can be assumed that knowledge networks based on their characteristics formulate small social networks which are a source of communities of practice. Although knowledge networks may not be as road to a common practice, but certainly lead to and hold a premise for being transformed into communities of practice.

The Conceptual Framework

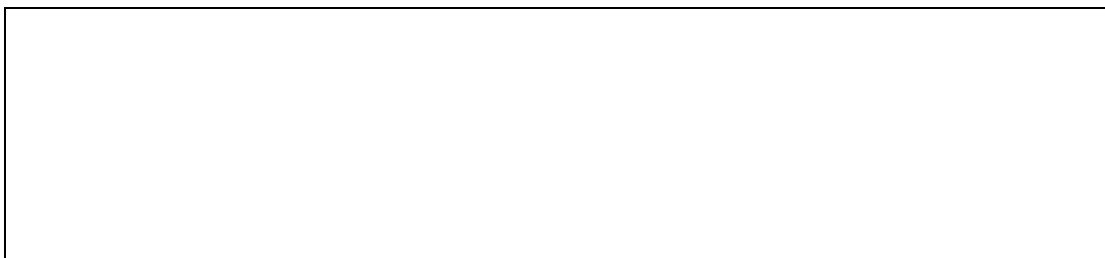
Based on propositions 1 to 7, a conceptual framework (roadmap) is developed to map the process of knowledge creation, sharing and networking. The conceptual framework proposed here is divided into three phases. Each phase highlights a certain aspect of the knowledge transfer process. Every phase in the framework is based on certain theories and propositions discussed in the earlier sections. The conceptual framework could be seen at Figure – 4, which is a developed form of the modular conceptualization presented in figure – 3. The phases are described below:

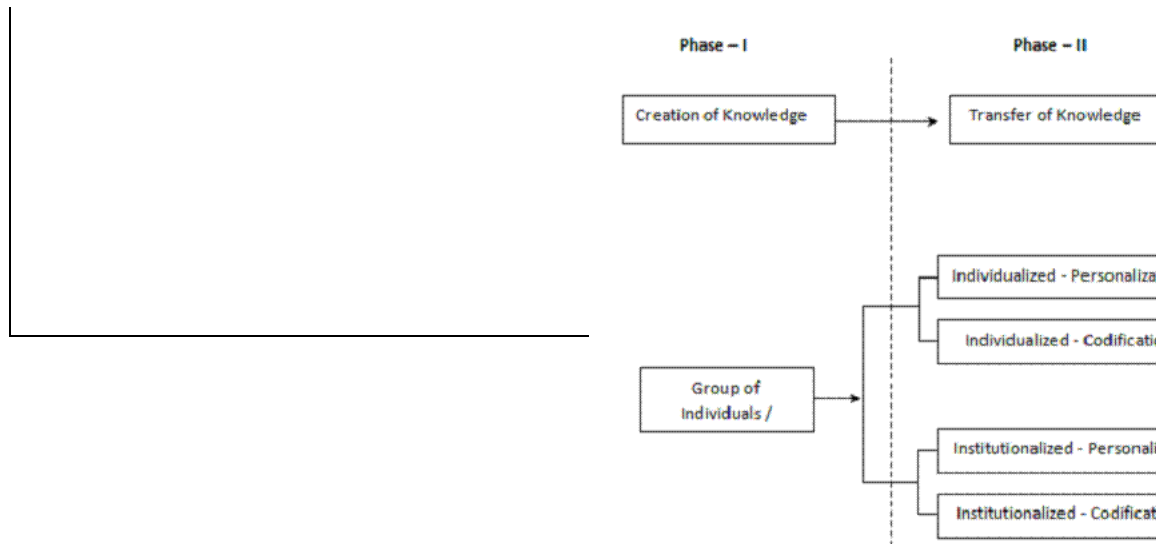
Phase – I: The phase – I focuses of the formulation of groups (individuals) which act as a source for generation knowledge through social interactions (Cook & Brown, 1999). However, CoP theory by Lave & Wenger (1991, 1998) has tried to identify the formation of social groups with new employees being recruited or with experience or existing employees. Through the interactions of individuals different types of knowledge is generated. In order to share such knowledge among people, we tend to identify the mechanisms which facilitate the transfer in the next phase.

Phase – II: The phase – II focuses on the knowledge sharing mechanisms i.e. personalization versus codification mechanisms and individualized to institutionalized mechanisms. These according to Boh (2007) and Cook & Brown (1999) have been interacted. The resultant is the formation of four classes which are: Individualized – Personalized Mechanisms, Individualized – Codified Mechanisms, Institutionalized – Personalized Mechanisms and Institutionalized – Codified Mechanisms. Each of the mechanism generates a specific type of knowledge. Each mechanism while sharing such knowledge give rise to a certain type of network based on the type of sharing mechanism used. The next phase identified the different types of networks evolved during this process.

Phase – III: In this phase, the emergence of knowledge networks is highlighted. Each knowledge network (KN) is generated by its knowledge sharing mechanisms. For example Individualized – Personalized Mechanisms gives rise to Knowledge Network (KN1) which share specific knowledge. The framework further in this phase depicts that knowledge networks are potential communities of practice.

Figure 4: The Conceptual Framework Of Knowledge Sharing And Networking





Implications Of Research

The conceptual framework has three significant limitations which demands further investigation. The first limitation is the basic assumption of all organizations being the same. The organizations may be small and large depending upon the nature of their business, which may pose a question to the implementation of the framework in more complex environments. Secondly, the framework is based on propositions which have been building upon theoretical perspectives from the literature on the subject. This questions the practical applicability of the framework and may require empirical or evidence based research to justify the propositions. Lastly, the framework is an abstract conceptualization of the author which is perception dependent. The framework requires a more firm theoretical framework, discussion on socio-cultural elements and a consolidated research design.

Conclusion

This paper contributes to the research in organizational learning and knowledge management practices by trying to identify critical issues in knowledge creation, knowledge sharing and transference and knowledge networking. The paper structured in a process-flow is based on theoretical perspectives of Nonaka & Takeuchi, Cook & Brown, Klein, Bosua & Schepeers, Cabrera & Cabrera and Boh. In a knowledge intensive world, organizations must develop their understanding for sharing of knowledge and utilization of networks to achieve a competitive advantage. During the paper we have argued that once a specific type of knowledge has been created, it requires a shared-context to retain and transfer such knowledge. The transference and maximum utilization of knowledge requires knowledge sharing mechanisms which we have identified as Individualized – Personalized Mechanisms, Individualized – Codified Mechanisms, Institutionalized – Personalized Mechanisms and Institutionalized – Codified Mechanisms. These mechanisms give rise to certain types of knowledge networks which are dependent on the mechanism. This is incorporated in the conceptual framework proposed in the paper, which is intended to help map the transfer of knowledge within the organization.

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Contact the Author:

Farooq Mughal^{1,2}

¹Lecturer of Human Resource Management (HRM)
Department of Management Sciences, COMSATS Institute of Information Technology, (CIIT) Pakistan
Contact Author: farooq_mughal@comsats.edu.pk

²On-Study Leave for Postgraduate Studies
Department of Management Learning & Leadership, Lancaster University, UK
Contact Author: f.mughal@lancaster.ac.uk
