Knowledge Sharing and Social Interaction: An Exploration of Individual Action through the Integral Role of the Habitus

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by

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Author’s Declaration

I hereby declare that the work documented in this thesis is original and was entirely conducted by myself under the direct supervision of Dr Steve Conway (first supervisor) and Professor Mike Bresnen (second supervisor). No part of this work has been submitted for another degree in this or any other University.

Signed

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Professor Mike Bresnen

Signed

Date
Dedication

Most importantly, I would like to dedicate this work to the glory of the Almighty God who has been my sustenance and without whom any achievement would be meaningless.

I also dedicate this work to the memory of my sister, Funke Ajulo (1969-2006).
There are a number of people who in one way or the other made meaningful contributions to the process of my achieving this doctorate, and to whom I cannot but express my gratitude.

To my ever-loving wife, Funmi, your encouragement and support have been overwhelming and I am so glad you are also my best friend. Toni, my gorgeous son, though you were born at the tail end of my writing this thesis, your birth itself was a major impetus for the completion of this work.

To my parents and all my siblings, thank you for all the moral support you gave me over the past four years.

I also wish to acknowledge the role played by my first supervisor, Dr Steve Conway. Someone once said getting a PhD is mostly about sustaining a good relationship with your supervisor. I was blessed with a very supportive supervisor! Thanks a lot Steve for all the extra hours you put into my work.

Finally, but by no means of least importance, Nceku (Q) Nyathi, Charlie Sanderson, Sverre Spoelstra, and Mark Tadajewski, you all contributed to making what might otherwise have been a laborious and boring process very interesting indeed.
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Abstract

With the rise in importance of technology to organizational life, a lot of attention has been given to the management of knowledge through technological applications (Chou and Lin, 2002). At the same time, a wide spectrum of social interactionist literature has argued for the importance of human agency in the creation, conversion and sharing of knowledge (cf Nonaka & Takeuchi, 1995; Brown and Duguid, 2001; Dixon, 2002 and Chiva and Alegre, 2005). Given the amount of research on the importance of social interaction to the management of individual and organizational knowledge, it becomes imperative to develop a clear understanding of the role of the individual in these social interaction processes. This research begins with first principles by exploring the dynamics of knowledge sharing in organizations from the perspective of individual agents, in order to gain insight into the reasoning behind the action of individuals in sharing their knowledge and expertise. In so doing, the research assumes that the knowledge transfer process is essentially a social process and entails an active involvement of individual actors in making decisions about the sharing process. The empirical setting for this research is a single case study of Construct Co., an organization in the construction industry. Primary data was collected by in-depth interviews of a sample population of 27 respondents with additional secondary data drawn from company annual reports and in-house survey. By taking a qualitative interpretive approach (Morgan, 1979; Morgan & Smircich, 1980) and drawing on a theoretical framework that centres on Bourdieu’s concepts of capital and *habitus* (Bourdieu, 1977, 1985, 1986), and the concept of communities of practice (Lave and Wenger, 1991; Brown and Duguid, 1991, 2001), this thesis not only provides an exploratory insight into the determinants which govern individual knowledge sharing decision processes but also contributes to research on the practical utility of the habitus as both a conceptual and analytical tool in understanding the dynamics governing individual knowledge sharing decisions.
Chapter One

1. Introduction

This chapter is divided into five main sections. In the first section I present an outline of what the research is about by identifying the general trend in the field of knowledge management and how this is shaping research in the field. This is followed by a more definite discussion of the research aims and the basis for embarking on this particular research. In so doing, the ontological and epistemological inclinations of the researcher that guide this research are introduced. In the third section, I set out the research parameters by considering the questions to be addressed in this study and the underlying basic assumptions which guide the research. This is followed by a brief section on the theoretical framework employed in executing the research, and finally a chapter by chapter outline of the work that is contained in this thesis.

1.1 About this Research

In the last two to three decades there has been an increased awareness among researchers and practitioners alike, of a paradigmatic shift in the central resource focus in organizations, from socio-economic and material labour resources to knowledge as a vital resource in the knowledge economy. This elevated importance of knowledge cuts across state institutions and private sector as well as pervading all industry sectors.

Along with the concurrent rise in the importance of technology to organizational life, a lot of attention has been given to the management of knowledge through technological applications such as data mining and groupware applications, as well as knowledge work systems and customer relationship management packages (Chou and Lin, 2002). At the same time, a wide spectrum of social interactionist literature has argued for the importance of human agency in the creation, conversion and sharing of knowledge (see Nonaka and Takeuchi, 1995; Brown and Duguid, 2001; Dixon, 2002 and Chiva and Alegre, 2005 for example). So on the one hand, advances in technology are providing more efficient tools with which organizations
can effectively manage their knowledge resources and on the other hand extensive research are being carried out to demonstrate the importance of social practice to knowledge management.

On a general note, this research follows after the tradition of the social interactionist perspective as it agrees with the established view that social practice is important to knowledge management processes. On a more specific note however, as a researcher, I hold the view that the role of the individual in these social processes is one that is of critical importance but that has received less attention than collective considerations. As will be discussed in the literature review chapters, this particular view is underscored by the amount of social interaction literature which focuses almost entirely on macro and meso level considerations. Hence the orientation taken in this research is towards understanding the role of the individual actor (i.e. the micro level) in these social processes and contributing to the existing body of literature.

1.2 *Basis for Research Interest and Research Aim*

My interest in the role of individual action in knowledge sharing stems from a more macro interest in employee relations in organizations. Based on personal observations from time spent in industry, I support the belief that effective knowledge sharing within specific social contexts is contingent upon human practices (see Crotty, 1998). As will be seen in subsequent chapters, much research has also been carried out which are indicative of this view (cf. Brown and Duguid, 1991, 2001; Davenport, 2002; Dixon, 2002) and whilst many of them contribute to this research, one has particularly played a more important role than the others, as an early indicator of the path this thesis was to take. This is the research by Hansen (2002) which centred on providing an explanation for effective knowledge sharing in multiunit companies through the consideration of knowledge networks.

One of Hansen's findings was that the extent and benefits of interunit knowledge sharing could be better explained through a joint consideration of related knowledge and lateral network relations. The implication of this is that in order to really
understand the extent to which individuals share knowledge, there is a need to put the knowledge being shared in context and also to consider the prevailing relationships among the individuals involved in the sharing process.

In addition, Hansen also recommended the incorporation of network relations in future research to provide insights into why knowledge sharing in multiunit firms leads to performance improvement. Whilst it may be argued that sharing of knowledge may not necessarily culminate in performance improvement as other political factors come into play in this regard, the recommendation by Hansen to incorporate network relations in this manner is one that had long been proposed by other researchers and which is indicative of the importance attached to network relationships in its contribution to knowledge sharing. Since individuals are the essential building blocks for such network relationships, insight into the individual knowledge sharing activities would significantly contribute to a better understanding of the dynamics that govern these activities.

If the amount of research detailing the importance of social interaction to the management of individual as well as organizational knowledge hold true (cf. Lave and Wenger, 1991; Brown and Duguid, 1998; Hansen, 1999; Lahti and Beyerlein, 2000; Davenport and Prusak, 2000; Davenport, 2002), it is imperative to develop a clear understanding of the role of the individual as the building block of these social interaction processes. Having said this, it is also important to emphasise that whilst the individual actors constitute the basic building blocks for social interaction processes, the fact that such actors operate and interact within the context of specific networks, is a testament to the significance of the context within which the individual actor is embedded. Indeed, and as is underscored throughout this thesis, both the actor and the network within which the actor is embedded are equally important to social interaction. However, the principal aim of this research is to begin with first principles by exploring the dynamics of knowledge sharing in organizations from the perspective of individual agents. This is done in order to gain insight to the reasoning behind the action of individuals on sharing their knowledge and expertise.
1.3 Theoretical Framework

Given that knowledge is classified as both an individual resource and a collective resource (Lave and Wenger, 1991; Drucker, 1993; Nonaka and Takeuchi, 1995; Skyrme, 1999), there was a need to establish a framework that would take into account any impact that the collective might have on the individual. As such, the theoretical framework for this research is based on Bourdieu’s concepts of Capital and habitus, and the concept of communities of practice. Each of these concepts plays a contributory role in understanding the factors that influence the knowledge sharing process for individuals within the organization. However, in developing this framework, the qualities of the habitus are particularly seen as allowing elements which constitute the other two groups of concepts, (i.e. capital and communities of practice), to be brought together and considered under one overarching concept (the individual roles of these concepts as well as the inter-relation between them is explored in greater detail in Chapter Three).

Bourdieu’s notion of capital extends beyond the Marxist view of economic capital to symbolic forms of capital such as social capital and cultural capital, both of which inherently relate to the social interaction of individuals and are embodied by the individual (Bourdieu, 1986). The concept of symbolic capital thus confers on individuals the capability to exist as embodiments of valued resources. Wenger’s conception of communities of practice on the other hand, draws from his theory of social participation as a learning process to establish the important role of active communities in enabling the generation of new knowledge and distribution of existing knowledge (Wenger, 2000).

The third concept employed in developing this framework is the habitus (Bourdieu, 1977; 1985; 1993a). Given Bourdieu’s studies of social actions, their effects at the level of the individual agent and the expression of the habitus as dispositions developed over time, the concept offers particular benefits as an investigative tool for establishing a theoretical framework. The habitus is actually a term employed by

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1 The concept of communities of practice is one which was coined by Lave and Wenger (1991) but which has since gained prominence and application in social learning through the continued work of Wenger and other researchers such as Brown and Duguid (1991, 2001).
Bourdieu to explain the cognitive capacity of actors and how their dispositions impact the field of practice in relation to the capital resources they possess (see Bourdieu, 1977). In this sense, and as shall be established in Chapter Three, the habitus exists both in the individual actor as well as among the collective. Furthermore, not only does the concept of the habitus allow for a chronological assessment of the impact of the sets of dispositions of individuals, it is able to engage the other concepts in the framework (i.e. social capital, cultural capital, and communities of practice), through their identifiable common constitutive elements. These concepts are thus believed to offer a concise theoretical approach for the study as they cover different theoretical parameters which can be investigated through the habitus as a result of their commonalities. It is noteworthy that in Chapter Three, the habitus is also considered in relation to other social theories (i.e. Structuration Theory, Actor-Network Theory and Activity Theory), which attempt to reconcile structure and agency, so as to establish a basis for the theoretical preference for the habitus. As a result, in relation to symbolic capitals and communities of practice, as well as other social theories, as a conceptual tool, the habitus was deemed to provide the most viable alternative to understanding the complexities of sharing knowledge among individuals.

1.4 Research Parameters

In order to address the research aim specified in section 1.2 above, this section outlines the guiding parameters for this research by addressing the basic assumptions, as well as the central research question, that inform the empirical work.

1.4.1 Research Assumptions

There are many perspectives which exist about knowledge, and the management and transfer of knowledge. Amongst others, these include sociological, technological and philosophical perspectives. The perspective taken in this research is of the sociological inclination and this invariably determined the underlying assumptions that guided the research. Firstly therefore, from this perspective and as we shall see
in the following chapter, because not all knowledge can be codified or made explicit due to the inherently tacit nature of knowledge, the process of knowledge transfer is considered to be a fundamentally social process. Secondly, amongst different mechanisms which exist for knowledge transfer, social interaction is assumed to constitute the primary mechanism for the transference of knowledge. Finally, a third assumption made in this research is that individual actors are actively involved in making definite decisions about the social processes that govern knowledge transfer, and as such the process of knowledge transfer both draws from the behavioural inclinations of individual actors as well as constitutes a decision-making/political process.

1.4.2 Research Question

The central question that is addressed in this research may be framed as follows: How do individual employees arrive at decisions whether to share or not to share their knowledge and expertise with other individuals within the organization?

Since the central research question is posed at the micro individual level and relates to a large extent to the personal experiences of individual actors, there was a need for a number of qualifying questions which would enable the central question to be effectively answered. These supporting questions cover both individual and collective experiences and include:

i) What extraneous factors influence individual knowledge sharing predispositions?
ii) Are there personal circumstances that come into effect in individuals’ inclinations to share their knowledge and expertise?
iii) Does direct and indirect involvement of the collective environment play any significant role in facilitating knowledge sharing?

In order to investigate these questions further, additional theory-driven questions were generated and these served as the basis for the schedule of questions generated to guide the empirical work (see appendix III).
1.5 Outline of Thesis Chapters

This thesis is structured as ten chapters inclusive of the introductory chapter. The other nine chapters are; two literature review chapters, a chapter on methodology, another chapter on the industry and organizational efforts at promoting KM initiatives, three chapters on findings and analysis, a discussion chapter, and a final chapter on reflections and conclusion.

In the first of the two literature review chapters (Chapter Two), I review the body of literature that relates to knowledge and knowing in practice. Firstly, the chapter examines the nature of knowledge and the fundamental distinctions between knowledge and knowing. By examining the SECI framework for knowledge creation and conversion, the introduction of ba to the framework, and the relative importance of practice to the process, the chapter establishes the relationship between knowledge and practice, and as such provides a basis for interpreting knowledge related activities through practice. In so doing, the chapter examines the distinction between ba and communities of practice, and identifies a basis for making use of communities of practice in the research.

The second literature review chapter (Chapter Three) develops the theoretical framework as it provides an extensive discussion of various social interaction concepts, identifying their constitutive elements and how these feature in the habitus. In opting for the habitus as an overarching concept, the chapter also makes a distinction between the habitus and other social theories that attempt to reconcile structure and agency. Because of the centrality of the habitus as a conceptual and an analytical tool to this research, the chapter also engages in a discussion of different critical perspectives on the habitus and efforts are made to put the various critiques into proper context in light of Bourdieu's original interpretation of the habitus. Furthermore, the chapter identifies instances of application of the habitus in research thereby not only establishing precedence for this particular research but also emphasising the novelty and uniqueness of the research.
Chapter Four is a discussion of the methodology and research methods employed in implementing the study. Because of the empirical orientation of the thesis, the chapter starts out by outlining how ontological and epistemological assumptions guide the choice of methods most suitable for specific research. To this end, the thesis draws on the works of a number of researchers including Morgan and Smircich (see Morgan, 1979; Morgan and Smircich, 1980) to present a case for the use of qualitative interpretive approach. The chapter also discusses the basis for choosing the construction industry and provides the context for the organization in which the research was carried out. Furthermore, the chapter provides justification for the use of a single case study approach and for the choice of in-depth interview as the data collection method over other viable concepts such as ethnography and observation techniques. In addition, the chapter provides a detailed account of field experiences from the process of seeking research access to the actual collection and reduction of research data. In elaborating the reduction process, the chapter explicitly addresses, how data codes were derived, and refined in order to generate the data upon which the findings of the thesis is written. Furthermore, the chapter demonstrates an internalization of the research methods literature by relating how documented accounts of research practices were taken into account in actual field experiences and adapted in the course of the research.

The fifth chapter employs the use of documentary evidence; to elaborate industry initiatives in facilitating knowledge sharing and best practices, as well as to demonstrate the case organization's efforts at developing knowledge management initiatives. Firstly, the chapter outlines how an economic downturn in the industry and subsequent government involvement, through the department of trade and industry (dti) gave rise to a reorientation towards the need for the industry to engage in sharing knowledge and best practice in order to progress. The catalysts noted for this reorientation were government-sponsored reports which further fuelled sector-led initiatives on knowledge management. The second aspect of the chapter focuses more on the case organization and the organizational activities in facilitating knowledge sharing. Evidence in support of these activities are drawn from secondary data but are corroborated by primary data from the research. However, through a comparative analysis of the primary data and secondary evidence, the
The chapter concludes by buttressing the importance of human agency to the knowledge sharing process and thereby providing support for the research direction.

In the three chapters that follow (Chapters Six, Seven and Eight), the collated data are presented as chronological snapshots which reflect on the individual past, present and future. The choice of data presentation in this format was in order to establish a consistent structure with the habitus as the unit for data analysis. In each chapter, the empirical findings are presented to demonstrate the number of respondents and the frequency of data items coded, with representative quotes to illustrate various themes and sub-themes. Each set of findings is followed by a thematic analysis section which engages the habitus as the lens for interpreting the data presented in the findings. This dual segmentation not only allows for a more objective assessment and interpretation of the data but also provides an indication of how data can be the subject of multiple interpretations dependent on the framework employed (McGillivary, 2003).

The ninth chapter is a discussion chapter which integrates the salient points from the three preceding chapters and relates these to the existing literature. The chapter also readdresses the critiques of the habitus in the context of the empirical research conducted in order to demonstrate that the critiques did not have any specific bearings on the research. This allowed for an emphasis of the applicability of the habitus both as a conceptual and an analytic tool, thereby providing a clear exposition of the precise contributions made by this research to knowledge. In addition, the chapter also addresses the empirical and theoretical limitations in the research. In so doing, the chapter positions the habitus in relation to other social theories in identifying the value of the concept.

The final chapter of the thesis is the reflections and conclusion chapter. This chapter begins with a reflection on the thematic discussions drawing out the salient learning points to demonstrate the relationship between theory and praxis of the habitus. This is followed by an explicit identification of the areas of theoretical and empirical contributions as well as the scope for future research as identified from the current study.
Chapter Two

2. Understanding Knowledge through Practice

Literary works that relate to the philosophy of knowledge date back to the time of early philosophers such as Plato and Aristotle, and the subject of knowledge is one that continues to be at the centre of many debates amongst philosophers, social theorists, and others. In choosing to write about knowledge therefore, one is immediately faced with the complex problem of ascribing an acceptable meaning to knowledge, a feat which has been tackled by many philosophers and researchers with little consensus on what is meant by knowledge (Calhoun and Starbuck, 2003). In addition there is a need to adequately establish the context in which a specific knowledge-related research is focused. Knowledge as a field of study has been extensively explored in the works of organization theorists. Amongst others, Ikujiro Nonaka and Hirotaka Takeuchi, who in The Knowledge-Creating Company provide an overview of philosophical debates from Plato to Aristotle, from Descartes to Locke, and also contributions from Kant, Hegel and Marx.

In this chapter however, the review of the knowledge literature focuses on knowledge and its management from a more sociological viewpoint. In distinguishing between the terms knowledge and knowing, I identify different takes on the knowledge management discourse and also introduce ‘practice’ as a relevant perspective to the discourse (see Gherardi, 2000). In so doing, the review outlines the specific relationship between the term knowledge and practice, through a consideration of the practice-based approach to knowing and learning. The chapter also looks at a framework that has been developed to explain the processes of creation and conversion of knowledge, and theories postulated to explain how individuals learn. In this regard, the SECI model for knowledge conversion is critically appraised, from which one identifies that its perceived shortcomings led to the introduction of the concept of ‘ba’, also discussed in this chapter. The sharing of knowledge is then reviewed from a community perspective with a focus on knowledge in communities of practice. This is done in order to better understand the

2 Knowledge is employed in this instance in its broad sense to encompass both knowledge and knowing.
dynamics of knowledge processes both at the organizational and the group levels and with a view to understanding the intricacies of knowledge sharing at the individual level. Finally, this chapter closes with a comparison of ba and communities of practice.

From both economics and organization management perspectives, the ongoing shift in the constituents of basic economic resources in the knowledge economy is such that more emphasis is being placed on knowledge than on traditionally established resources such as financial capital, natural resources, and labour (Drucker, 1993). This is believed to represent a paradigm shift which began around 1960 and is expected to continue for a couple of more decades (Skyrme, 1999). There are indications that knowledge has ceased to be viewed as just another resource but is rather now regarded as one of the most important and vital resource any firm may possess, which being represented in the form of intangible capital, embodies the economic and producing power of modern corporations (Drucker, 1993). From a sociological perspective therefore, the resultant implication of this is that the role of individuals and groups becomes increasingly central to the competitiveness and to competence development of organizations, with a great deal of attention being given to the transfer and sharing of knowledge both within organizations and across specified boundaries. Owing to the increased prominence of the role played by employees in the organization, and in relation to the development of organizational knowledge and capabilities, there is thus a need to understand what constitutes knowledge itself and more importantly what facilitates its exchange.

The emergence of knowledge management as a viable management concept and not just a management fad has been the subject of much debate. Notably, Scarbrough and Swan (2001) demonstrated that while aspects of knowledge management conform to the fashion model, this model only provides partial explanation for the diffusion of knowledge management in general. In spite of its possible failings as a management discourse, which include views that there is a lack of rigorous critiques of the literature (Jashapara, 2005), knowledge management is still believed to “provide an excellent vehicle for deconstructing its own diffusion” (Scarbrough and
Swan, 2001: 11). Furthermore, many researchers have proffered varying definitions for knowledge management in an attempt to articulate the concept but as with many other management techniques, a universally acceptable definition has proven to be elusive. However many of such definitions for knowledge management tend to be process and/or action oriented with a focus on the creation and active usage of knowledge (see Cross, 1998; Sarvray, 1999).

Lahti and Beyerlein (2000) described knowledge management as a multi-dimensional construct that comprises of four key interrelated components, which are; knowledge generation, knowledge representation, knowledge accessibility and knowledge transfer. Of these four components, Lahti and Beyerlein argue that knowledge transfer is the most important as it enhances collective performance. The explanation for this is that knowledge should have the capacity “to be shared, disseminated, and used on a company wide basis so that it becomes a potential asset” (Lahti and Beyerlein, 2000: 68) and as such offer performance enhancement potential. It is further argued that the importance of sharing knowledge for value creation is made more explicit as organizations should not only be able to identify what they know but also derive means of harnessing the knowledge that is existent in the organization (Tidd et al. 2001). This view on knowledge has however been identified as a critical issue in the execution of the knowledge management process. According to Scarbrough and Carter (2000), where knowledge is viewed as a readily transferable ‘object’ or ‘commodity’ which may be stored and exploited without human intervention, there is a resultant loss of the essential ingredients that help create and sustain its value. As will be discussed in the subsequent sections, knowledge exists in various forms which do not operate in isolation but offer the possibility for conversion from one form to the other thereby enhancing its value.

Although the above discussion implicitly presents a more managerialist view of knowledge, i.e. its management and the notion of it as having a value-creating (or

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3 See Scarbrough and Swan (2001) for a detailed consideration of the role of fashion in the diffusion of KM.
4 Knowledge transfer is described by Lahti and Beyerlein (2000: 69) as the diffusion and use of processed information, or the sharing of expertise to increase individual or organizational performance. In this review, the term knowledge transfer is exchanged for knowledge sharing, which embodies the transference and reception of knowledge.
value-adding) capability for the organization, this by no means represents the only perspective on the management of knowledge. Other researchers have taken a more critical and reflexive view of knowledge and its management, with a view to diminishing the 'hype' that has surrounded knowledge management (see Prichard et al, 2000). Some critical considerations of knowledge have been in terms of its ownership with the attendant influence and power relations, which results in politicking and raises the notion of knowledge as a commodity that can be traded (see Carter, A. P. 1989; Carter, C. 2000). Indeed, knowledge management is deemed to present an ethical dilemma as to the ownership of knowledge.

According to McInerney and LeFevre, "knowledge management is more than just technology or software. It is a sophisticated way for an organization to share intellectual assets" (2000: 14) and while explicit knowledge generated on the job may be regarded as belonging to the organization, many professionals such as physicians and professors with specialised knowledge face the dilemma of who owns the more tacit knowledge. Other research has focused on the nature of knowledge by critically considering its complexity (see Spender, 1996; Leonard and Sensiper, 1998 and Zack, 1999). And yet still, others have engaged in debates, presenting views and counterviews of knowledge based on their wide-ranging perspectives (see McAdam and McCreedy, 2000; Prichard et al, 2000; and Alvesson, 2001). However, implicit within these spectra of considerations of knowledge is an underlying denominator; which is the part played by human agency in knowledge management activities and hence the consideration in this thesis of the role of the individual actor in the knowledge sharing processes.

2.1 The Nature of Knowledge

This section outlines how knowledge may be classified; from the simplistic distinction between tacit knowledge and explicit knowledge to a more complex classification of knowledge. In classifying knowledge in the case of the latter, the section provides a review of varying definitions of knowledge based on its several and varied attributions, and from this, one is presented with a critical appraisal of knowledge. Furthermore, in elaborating on the nature of knowledge, a review of the
The distinction between knowledge and knowing is carried out thereby setting the premise for consideration of the practice-based approach in a subsequent section of the chapter.

2.1.1 Tacit and Explicit Knowledge

The tacit and explicit dimension of knowledge is perhaps the most common means of classification, which was originally made popular by Polanyi in his early works, and later received revived interest due to Nonaka and Takeuchi's *The Knowledge-creating Company*. Johnson and Scholes (2002) refer to tacit knowledge as personal, context-specific and therefore hard to formalise and communicate while explicit knowledge is regarded as being codified; 'objective' knowledge that is transmitted in formal systemic language. Codification, as a systemic means of articulating knowledge has been used to a large extent to expand on the tacit and explicit knowledge types. Hansen (1999:87) described codification as "the degree to which knowledge is fully documented or expressed in writing at the time of transfer between a subunit and the receiving project team in another subunit". In this sense, he identifies knowledge with a low level of codification as that which corresponds with the concept of tacit knowledge – hard to articulate and can only be acquired through experience – and conversely knowledge with a high level of codification corresponds to explicit knowledge. Zander and Kogut (1995) also employed the term 'codifiability' in order to express the degree to which knowledge can be captured and encoded. Dependent on the extent to which knowledge may be articulated therefore, such knowledge can exist in four different forms; codified or non-codified, and codifiable or non-codifiable forms.

The distinctions made between tacit and explicit knowledge often arise from their sources and modes of transfer. Purvis et al. (2001) noted that explicit knowledge is easy to communicate and transfer because it can be codified, while tacit knowledge is more difficult to transfer and communicate because it is inextricably woven with the experiences and situational contexts within which it is generated. With respect to the medium of transfer, Lahti and Beyerlein (2000) further expressed the view that

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5 This is considered in greater detail in the following section.
explicit knowledge can be transferred through such media as books, archives, databases and groupware technology while tacit knowledge is best transferred through personnel movement and the collaboration of individuals. As tacit knowledge is also regarded in terms of 'know-how', the extraction or elicitation process requires direct interaction with the knowledge source, and by its very nature, such know-how is an increasingly important differentiator and source of competitive advantage for firms (Hansen, 2002; Teece, 2000).

The possibility for codification of explicit knowledge implies that there would be less difficulty in communicating such knowledge as this may be done through documentation. The sharing of tacit knowledge on the other hand is accompanied by difficulties, which are not simply as a consequence of the tacit nature of the knowledge but the degree of tacitness and the way in which it is formed, structured and utilised (Lam, 1997). Although tacit knowledge poses difficulties with regards to its transference, it is this very attribute that makes it a source of competitive advantage. Such advantage may be viewed from two perspectives; on the one hand, the tacit dimensions of individual knowledge are not publicly available except as embodied in people to be hired, and on the other hand, the tacit dimensions of collective knowledge are woven into the very fabric of an organization and are not easily imitated (Leonard and Sensiper, 1998). For the individual actor, it would be expected that where exchange of explicit knowledge is concerned, less personal interaction may be involved due to the availability of manuals and other forms of documentation detailing the knowledge in codified form. However with regards to more tacit knowledge, for knowledge exchange to occur, there would be a need for a high and conscious degree of involvement from the actor.

While the above discussion represents a simple classification of knowledge, by elaborating on the dynamics between the tacit and explicit forms of knowledge, I establish the preliminary step required to understand individual action in relation to the sharing of knowledge, and at the same time establish the basis by which Nonaka and Takeuchi's knowledge conversion model is interpreted.
2.1.2 *Defining Knowledge*

Beyond the classification of knowledge into tacit and explicit forms, the complexity presented in the study of knowledge arises from the several and varied definitions ascribed to knowledge. Amongst others, knowledge has been defined as:

Information that is relevant, actionable and based at least partially on experience. (Leonard and Sensiper, 1998: 113)

Information plus the causal links that help to make sense of this information. (Sarvary, 1999: 96)

Knowledge has also been described as an awareness, consciousness or familiarity gained from experience or learning by Johnson and Scholes (2002). In considering the role of human agency and taking into account collective understandings, Tsoukas and Vladimirou (2001:979) define knowledge as “the individual ability to draw distinctions within a collective domain of action, based on an appreciation of context or theory, or both”. By reviewing the meanings connoted by knowledge to different researchers, Blackler (1993:865) was however able to present an array of suggestions which are viewed as emphasizing the complexity of tacit skills, and hence knowledge as being regarded as: “– socially constructed (Berger and Luckmann, 1996), – often tacit (Polanyi, 1967), – a function of the play of other meanings (Derrida, 1978), – enacted (Weick, 1979), – distributed (Hutchins, 1983), – situated (Suchman, 1987), – material, as well as mental and social (Latour, 1987), – resilient, but provisional and developing (Unger, 1987), – public and rhetorical (Vattimo, 1988), and – acquired through participation within communities of practice (Lave and Wenger, 1991)”.

These attributes can be grouped according to three broad themes vis-à-vis (i) the materiality of knowledge (ii) knowledge as a social phenomenon, and (iii) the consideration of knowledge as an abstract concept. An indication of the material nature of knowledge is obtained in the ascription of attributes such as knowledge being ‘enacted’, ‘material’, and ‘situated’. While knowledge has generally been
considered in abstract terms, as will be discussed subsequently, the increased consideration of knowledge as both an intellectual and material resource has resulted in its attempted commodification in many quarters. Indeed, knowledge is not just seen as a productive force in organization, according to Cuff et al. (1998), it has increasingly become a commodity in the sense that it may be generated for the exclusive purpose of sale. A critical look at the notion of production and exchange of knowledge for transaction purposes also shows that individuals are often willing to share their knowledge to achieve personal objectives or enhance flows through their networks by way of expected reciprocation (Von Krogh, 1998; Conway, 1994).

In considering knowledge as a social phenomenon, emphasis is laid on the implications of its acquisition through social exchange and participation in enabling communities. The notion of communities of practice is one which is credited to Lave and Wenger (1991) who argue that the process of learning is essentially a social process and not just an individual action. Knowledge in this sense is therefore obtained through a synthesis process arising from interactions between individuals or groups, to the extent that individuals may acquire new knowledge when they tap into the knowledge base of other individuals and imbibe such new knowledge to enrich their own knowledge base. Invariably what Lave and Wenger (1991) and other researchers like Brown and Duguid (1991) achieve is to present the learning (or the sharing) process as an act involving both individual action and collective action for its enactment. Chiva and Alegre (2005) described this process of social learning as an integral part of an integrative approach to organizational learning and organizational knowledge, in which individual knowledge contributes towards the generation of collective knowledge. It is the individual action in the sharing process that constitutes the exploratory subject of interest in this thesis. In this regard, by studying the dynamics of individual action, this thesis constitutes a departure from the much discussed collective social impact on knowledge sharing and provides new insights to understanding the knowledge sharing process.

The third of the three themes under which the attributes of knowledge can be classified is its ability to exist in abstraction. According to Michael Polanyi (1967), the attribution of knowledge as an abstract concept fundamentally draws from its
tacit nature. Polanyi's thesis extensively dealt with the *tacitness* of knowledge in the sense of knowledge existing as know-how that is possessed by individuals or groups, and which the possessors have varying capacities to articulate and express, thus determining the degree to which such knowledge remains an abstraction or tacit. As will be discussed in subsequent sections, further attempts have been made to distinguish between tacit knowledge as non-codified knowledge and other forms of codified or explicit knowledge, and also, to distinguish between knowing as a process-based phenomenon and knowledge as an abstraction.

The seminal work by Polanyi on knowledge centred on the existence of knowledge as know-how, which varies among individuals in the extent to which it is tacit, i.e. the 'tacitness' of knowledge. This work has since been the source of many debates on the possible dimensions in which knowledge can exist. While some researchers view knowledge as existing in a spectrum, at one end of which knowledge is almost wholly tacit and at the other end knowledge is almost wholly explicit, others argue that knowledge exists as a dichotomy or duality and not in a spectrum. The proposition that knowledge exists in a spectrum is supported by the works of both Leonard and Sensiper (1998) and Lahti and Beyerlein (2000). For example, Leonard and Sensiper (1998: 113), argue that at the one end, knowledge is "almost completely tacit, that is semiconscious and unconscious knowledge held in peoples' heads and bodies" and at the other end of the spectrum, knowledge is almost completely explicit or codified, structured and accessible to people other than the individuals originating it" (1998:113). The argument for knowledge existing as a spectrum thus advocates the possibility of possessing both tacit and explicit knowledge in varying amounts and the possibility for inter-convertibility of these two forms of knowledge. This proposition is also the underlying principle behind the knowledge creation framework (Nonaka, 1994), which was further developed in *The Knowledge-creating Company*. Spender (1996) also adduces to this inter-convertibility in his exploration of the interaction between the tacit and explicit knowledge on the one hand and the individual/collective dimension on the other.

Cook and Brown (1999) and Hildreth and Kimble (2002) are among the proponents of knowledge as a dichotomy. Cook and Brown argue that explicit knowledge and
tacit knowledge are two distinct forms of knowledge and not variants of one another, as each does the work the other cannot. They also maintain that one form of knowledge cannot be made out of or changed into the other but rather, “each form of knowledge can often be used as an aid in acquiring the other” (1999:385). Hildreth and Kimble (2002) on the other hand view knowledge as being ‘hard’ or ‘soft’ knowledge, in which case the former is “codifiable while the latter refers to knowledge that is less quantifiable, not easily captured and stored”. They however share the same views with Cook and Brown as they regard both forms of knowledge as existing in duality “with the implication that all knowledge is to some degree both hard and soft: it is simply that the balance between the two varies” (Hildreth and Kimble, 2002). Tsoukas (2003: 425) further lends voice to the duality debate in stating that “tacit and explicit knowledge are not the two ends of a continuum but the two sides of the same coin” but also advocates for a need to desist from talk of tacit knowledge conversion and engage in creating awareness amongst individuals, through social interaction, on how things are done to inform praxis.

The assertion by proponents of knowledge as existing in duality is based on the premise that tacit knowledge is non-articulable and they maintain that there is the existence of a clear distinction between explicit and tacit knowledge. As such, the possibility for conversion of one form of knowledge to the other is non-existent (Hildreth and Kimble 2002, Cook and Brown, 1999). According to Hildreth and Kimble (2002), “If we accept Polanyi’s view of tacit (implicit) knowledge as being inexpressible, it cannot be converted into explicit knowledge because it can never be externalised and written down in an explicit form”. Going by this argument, that which is implicit can never be made explicit. However, the argument of the proponents of the notion of knowledge as existing in a spectrum is exactly this, that the implicitly held knowledge can be made explicit and vice versa (Nonaka and Takeuchi, 1995). Furthermore, Zack’s (1999) classification of procedural knowledge as ‘know-how’, which refers to an understanding of sequences of events required to achieve a desired outcome would imply a possibility for such understanding to be expressed and hence transmitted. This procedural knowledge or know-how is effectively tacit knowledge and the ability to document such knowledge in writing
through codification strongly supports the tacit-explicit knowledge conversion process (Hansen, 1999).

In the above discussion, I have attempted to group the multifarious interpretations given to knowledge under three broad themes. From the discussion of the various attributions of knowledge, what is evident, are the complications that arise in attempting to establish a unified understanding of knowledge. The third of the three themes, knowledge as an abstraction, is fundamental to the considerations of knowledge in terms of its existence as a spectrum or a duality. As the arguments presented above have shown so far, by considering knowledge as that which is inherently intangible, the issue then becomes whether this can be expressed in a codified form or whether that which is codified represents an entirely different type of knowledge. I am in agreement with the school of thought that knowledge exists in varying proportions as a spectrum between two extremes of explicit and tacit forms. However, as Tsoukas (2003) noted, the knowledge discourse needs to move on from the debate on its convertibility and focus more on how knowledge in its entirety can inform praxis. As demonstrated in Table 2.1, the different categorisations of knowledge would have varying implications for the individual.
<table>
<thead>
<tr>
<th>Thematic Categorisation</th>
<th>Description</th>
<th>Implication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Materiality</td>
<td>Knowledge exists as a material commodity that is subject to production</td>
<td>Individuals have a tendency to share and/or exchange knowledge in order to achieve personal goals and enhance their networks.</td>
</tr>
<tr>
<td>of Knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge as a Social</td>
<td>Knowledge is acquired through social exchange and participation in formal and</td>
<td>Individual knowledge is key to the generation and exchange of knowledge as it constitutes an essential part of the integrative approach in which individual knowledge contributes to generation of collective knowledge.</td>
</tr>
<tr>
<td>phenomenon</td>
<td>informal communities.</td>
<td></td>
</tr>
<tr>
<td>Knowledge as Abstraction</td>
<td>Knowledge exists in implicitly abstract/tacit form which holders have varying capacities to articulate and express.</td>
<td>Codifiability of knowledge determines the existence in wholly tacit or explicit forms or as residing along the tacit-explicit spectrum.</td>
</tr>
</tbody>
</table>

Table 2.1  Categorisation of Knowledge based on Attributes

2.1.3  *Distinction between Knowledge and Knowing*

In reviewing the various definitions of knowledge and carrying out a thematic classification of identified attributes, one observes that different characteristics are associated to the term knowledge by different researchers. These characteristics as previously discussed, range from the ability of knowledge to exist as an abstract concept that implicitly resides in the intellect (Polanyi, 1967), to the description of knowledge as that which involves experience and is gained through a learning process (Leonard and Sensiper, 1998; Johnson and Scholes, 2002) and which may involve acquisition through active participation in communities (Lave and Wenger, 1991; Brown and Duguid, 1991). The attribution of an action orientation to knowledge, in which instance knowledge is considered to be process-based, is
commonly termed as knowing and is distinguishable from knowledge. This section is aimed at drawing out the distinction between knowledge on the one hand and knowing on the other.

Blackler (1995: 1035) employs the use of Activity theory to distinguish between the two terms and opines that “rather than talking of knowledge, with its connotations of abstraction, progress, permanency and mentalism, it is more helpful to talk about the process of knowing”. Evident in this statement is a basic categorization of knowledge as an abstract concept and knowing as being process driven. Similar views are expressed by Cook and Brown (1999:387) who describe knowledge as “something we use in action but not...understood to be action” and the term knowing as referring to the epistemological dimension of action itself. Orlikowski (2002) further described knowing as being action-centred and emergent from a series of interrelationships and thus occurring through a social process. Knowledge can thus be viewed as a tool for action. It should be noted here that tacit knowledge is construed to be closely related to knowing and as such, according to Cook and Brown (1999), can commonly but erroneously be equated to knowing. They argue that there exists a clear distinction between these two, pointing out that; “knowing should not be confused with “tacit knowledge”...a tool or an aid to action, not part of the action itself” (1999: 388). That is, tacit knowledge is inherently a form of knowledge and is considered in this regard to aid action while not constituting the action, as is the case with knowing which is action-centred. Other researchers have however expressed alternative views to Cook and Brown’s assertion. For instance, in making a case for knowing in practice⁶, Orlikowski (2002: 251) opines that contrary to the view that tacit knowledge is distinct and separable from knowing and action, tacit knowledge is actually a “form of “knowing” and thus inseparable from action because it is constituted through such action.”

Cook and Brown (1999) further describe knowing as ‘epistemic work’ – a term understood as part of concrete, dynamic human action and used to refer to the work people must do to acquire, confirm, deploy or modify what needs to be known in order for them to do what they do. That which needs to be known in this sense forms

⁶ This notion of knowing in practice is given more consideration later in this chapter.
the body of knowledge acquired by individuals and the acquisition process which is activity driven is expressed as knowing. Blackler (1995) considers knowing as a multidimensional process that can be mediated, situated, provisional, pragmatic, and contested – adjectives which implicitly connote involvement of human agency. This position is also expressed by Tsoukas and Vladimirou (2001:982) who view knowing as consisting of “three elements: subsidiary particulars, a focal target, and crucially, a person who links the two”.

Although it is said that all learning takes place inside individual human heads (see Simon, 1991), Cook and Brown (1999:388) note that knowing “does not focus on what we possess in our heads” but “focuses on our interactions with the things of the social and physical world”. This view is shared by Wenger (2004: 1) who sees knowing as “not merely an individual experience, but one of exchanging and contributing to the knowledge of the community”. The point being that knowing entails forms of interactions and is about relations, which are indicative of action. As such, the individual agent is key to the process of knowing because when the knowledge that is embodied in the individual is socialized, it possesses the potential to enhance the knowledge of the collective. One therefore observes, especially in the context of Cook and Brown’s (1999) ‘epistemic work’, the involvement of human agency in bringing about the process of knowing, which occurs as a part of action at both individual and group levels. Whilst I have endeavoured to establish the distinction between knowledge and knowing, it is crucial to note that these two should not be construed as existing in mutual exclusivity of one another but rather, as Cook and Brown (1999) point out, both knowledge and knowing should be seen as “mutually enabling” and engaging in a “generative dance”, which is an interplay resulting in the generation of new knowledge, new ways of knowing, and consequently constituting a source of innovation.

2.2 Framework for Knowledge Creation and Conversion

Having considered how the nature ascribed to knowledge can determine its classification and also highlighting the distinction between knowledge, which is described as a tool for action and knowing as an action phenomenon (Cook and
Brown, 1999), in this section I focus on the interactivity of knowledge by discussing its possible creation and conversion as a social process. To achieve this, the section elaborates on the framework proposed by Nonaka and Takeuchi (1995).

Nonaka and Takeuchi (1995) proposed a dynamic model of knowledge creation, which is anchored on the critical assumption that human knowledge is created and expanded through social interaction between tacit and explicit knowledge. This implies that for knowledge to be created or developed there has to be in existence, some form of codified (codifiable) knowledge coupled with individual experience and an interaction between individuals culminating in the exchange of what is known by the parties involved. Although Nonaka and Takeuchi’s model for knowledge conversion is descriptive of knowledge conversion at the meso organizational level, it holds strong implications for the knowledge conversion mechanism at the micro individual level. A conscientious review of this framework leads to the identification of possible gaps, more so as they relate to individual actors, and attempts made by Nonaka and colleagues to address these issues.

The Nonaka and Takeuchi framework contains two dimensions; the epistemological and the ontological dimensions, with the latter based on the premise that an organization cannot create knowledge without individuals. They argue that the creation of organizational knowledge is to be “understood as a process that “organizationally” amplifies the knowledge created by individuals and crystallizes it as part of the knowledge network of the organization” (1995: 59). They further state that this process takes place within an expanding ‘community of interaction’. While this premise identifies the contribution of both social influence and individual action on knowledge creation at the meso organizational level, the role of human agency itself as a factor in individual knowledge creation and conversion is only given a fleeting recognition. Rather, the creation and expansion of human knowledge is attributed to “social interaction between tacit knowledge and explicit knowledge” (p.61). The epistemological dimension of the framework draws on the tacit-explicit knowledge distinction discussed in the previous section. For Nonaka and Takeuchi, however, tacit knowledge is viewed to encompass both a cognitive element and a technical element. While the cognitive element refers to “an individual’s images of
reality and visions for the future”, the technical element includes “concrete know-
how, crafts, and skills” possessed by the individual (p.60). In essence, this technical
element of tacit knowledge is that which is developed through praxis and the
cognitive element draws on the perceptions and dispositions of the individual.

Based on the assumption that knowledge is created through interaction between tacit
and explicit knowledge, Nonaka and Takeuchi proposed four modes of knowledge
conversion: socialization, externalization, combination and internalization. Socialization is regarded as a process of sharing experiences that arise from tacit to
tacit interaction and thus “creating tacit knowledge such as shared mental models
and technical skills” (p.62). In this mode of conversion, tacit knowledge is said to be
acquired through the existence of common experience as the process does not
require any language medium but principally derives from observation, imitation
and practice. Externalization, on the other hand is described as the “process of
articulating tacit knowledge into explicit concepts” (p.64). The justification for the
externalization process by Nonaka and Takeuchi, rests heavily on the citing of
Nisbet’s (1969) interpretation of Polanyi’s tacit knowledge stating that “much of
what Michael Polanyi has called ‘tacit knowledge’ is expressible – in so far as it is
expressible at all – in metaphor” (1995:66). Thus, the possibility for tacit–explicit
knowledge conversion is established on the basis that once thoughts and images are
expressed as metaphors, analogies can be drawn to create a better understanding and
thus bridge existing gaps between mental images and a logical model.

Combination is described as the “process of systemizing concepts into a knowledge
system” (p.67). It is a mode of knowledge conversion that involves the interaction of
different forms of explicit knowledge through a variety of media ranging from
written to oral communication. In this regard, codified knowledge is generally
reconfigured to generate new knowledge. The final mode of knowledge conversion,
described as internalization, is a process whereby explicit knowledge is embodied
into tacit knowledge; it is said to be “closely related to ‘learning by doing’” (p.69) as
the experiences garnered through other forms of conversion are internalised and thus
become a valuable resource to the individual.
The modes of knowledge conversion identified by Nonaka and Takeuchi (1995) have different knowledge contents, which do not exist in isolation but interact with one another by virtue of several ‘triggers’ to give rise to a knowledge spiral that results in organizational knowledge creation. The knowledge spiral is generated by the four modes of knowledge conversion. It commences with the development of a field of interaction which facilitates sharing of experience and is aided from one stage to the next by means of the four distinct triggers identified as; field building, dialogue (collective reflection), networking and learning by doing (figure 2.1). However, while these triggers serve as useful tools in explaining the movement up the spiral process and the ensuing generation of knowledge, the model fails to effectively address how these triggers function and also fails to identify the underlying factors that determine the functioning of the triggers.

The knowledge spiral as described above, explicitly demonstrates the involvement of social action in knowledge conversion, but what is implicit in this process is the role of individual actors. This role is best explained by drawing on an example of
how the triggers function to enable knowledge conversion. For instance, the socialization stage involves exchange of tacit knowledge through shared experiences to generate a form of "sympathized knowledge" that entails "shared mental models and technical skills" (1995: 71). The socialization stage is said to be triggered when actors actively engage in social interaction, but for this to occur there has to be an enabling environment in existence, that is, a context which is perceived by the actors to be conducive for knowledge sharing and which includes dispositions of potential knowledge transferors and recipients as well as their physical/structured environment.

2.2.1 *The Knowledge Creation Theory and Ba*

Although Nonaka and Takeuchi's knowledge conversion model still remains one of the most referenced in knowledge management literature, in its original conception, the SECI model is often criticized for perceived shortcomings which include critiques to the effect that the model is overly simplistic (Zhu, 2006), incoherent in some of the conversion modes, and lacking adequate supportive evidence for establishing the framework (Gourlay, 2006). However, later works by Nonaka and colleagues are indicative of the fact that these researchers are not oblivious of these shortcomings. Their subsequent works have sort to clarify and facilitate a better understanding of the knowledge creation process in organizations through a refinement of the theory of knowledge creation by the introduction of the concept of *ba* along with the notion of knowledge assets in explaining the elements that make possible the dynamic creation of knowledge (Nonaka and Konno, 1998; Nonaka et al, 2001; Nonaka and Toyama, 2003; Nonaka et al, 2006).

Whilst the term knowledge assets was introduced into the newly proposed model to encompass "the inputs, outputs and moderators of the knowledge-creating process" (Nonaka et al, 2001), i.e. resources which are specific to organizations and which facilitate the process of knowledge creation and contribute to the firms' competitiveness, the introduction of *ba* to the knowledge creation model is particularly significant as it provides a context for social praxis. In this regard, as
shall be examined subsequently, one observes certain distinctive comparative and contrasting features between ba and communities of practice.

Ba is a Japanese word that is roughly equated to the word ‘place’. The concept, originally proposed by the Japanese philosopher Kitaro Nishida, was adapted by Nonaka and Konno (1998) in elaborating their model for knowledge creation. Ba is defined as “a shared context in motion, in which knowledge is shared, created, and utilized” (Nonaka and Toyama, 2003: 6). As a concept, ba can also be thought of as shared physical or mental space for emerging relationships, that is, according to Nonaka and Toyama “ba should be understood as a multiple interacting mechanism explaining tendencies for interactions that occur at a specific time and space” (2003: 6). According to Nonaka et al (2001), it is this temporal and spatial attribute of ba that allows for the shared context to continuously evolve thereby facilitating interaction among participants in time and space with the resultant effect of knowledge creation.

Nonaka and Konno (1998) identified four types of ba, each of which is said to “correspond to the four stages of the SECI model”, and each offering support “platforms for specific steps in the knowledge spiral process” thereby speeding up the process of knowledge creation (1998: 45). These are; the originating ba (socialization), interacting ba (externalization), cyber ba (combination), and exercising ba (internalization). In this regard, ba can be seen as not only facilitating knowledge creation by providing a shared context, but also serving as a catalyst for the process. Furthermore, in establishing the role of ba, Nonaka et al (2001) introduced the notion of dialectic thinking to the knowledge creation theory, with the explanation that “knowledge is created through the spiral that goes through pairs of seemingly antithetical concepts such as order and chaos, micro and macro, part and whole, mind and body, tacit and explicit, self and other...”(2001:14). Nonaka and Toyama (2003: 7) also argue that dialectic thinking is the key to the entire process as it allows for the transcendence and synthesis of these seeming contradictions thereby creating a “good ba” in order to “provide energy” for the performance of knowledge conversion and movement along the knowledge spiral.

2 Two of these (interacting ba and cyber ba) are also referred to as dialoguing ba and systematizing ba respectively and maintain the same functionalities (cf. Nonaka et al, 2001).
However, the ba thus created is itself still dependent on participants to have multi-viewpoints to foster the shared context.

Although the introduction of ba to the knowledge management literature is geared towards providing a basis for the articulation of the knowledge conversion process as social praxis, its application also raises a couple of issues regarding the inherent value ba brings to the theory as well as the actual constitutive nature of ba. Firstly, in stating that “ba is a continuously created generative mechanism that explains the potentialities and tendencies that either hinder or stimulate knowledge creative activities” (Nonaka and Toyama, 2003: 6), one observes that ba may not be wholly beneficial to the creation and conversion of knowledge. Indeed, the possibility for ba to constitute a hindrance to creating new knowledge is particularly identified by Nonaka et al (2006: 1187), with respect to two forms of ba, in the comment: “whereas, the interacting and originating bas support the diffusion and embedding of skills and routine behaviour, they could foster group-think, stifle creativity and limit the participation of outsiders with new mental models and skills”. Secondly, the notion of ba introduces additional complexity to the theory, given the alternate reference to ba as an enabling mechanism, as in the comment above, and as a ‘context’ or ‘space’ for activities, which is echoed in all the works by Nonaka and colleagues.

In essence, the concept of ba can be construed as providing a solution for one set of problems (relating to the SECI model) in that it helps to set the context for knowledge conversion. But due to the complex conceptualisation of ba, the concept itself raises additional questions as to its theoretical validity. As a result of this, and possibly to justify their use of the concept, Nonaka and colleagues recognise the existing relationship between ba and other theories such as structuration theory and communities of practice (Nonaka et al, 2001; Nonaka and Toyama, 2003). Subsequently in this chapter, the particular relationship between ba and communities of practice is further examined.
2.3 The Practice Based Approach to Knowing and Learning

Having established the basic distinction between knowledge and knowing and identified the interactive creation/conversion of knowledge as a social process in the preceding sections, it becomes expedient to discuss the notion of practice for two reasons. The first is due to the increased emphasis, particularly in organization studies literature, on its relevance to the discourse on the management of knowledge (cf Gherardi, 2000, Orlikowski, 2002; Nicolini et al, 2003; Newell and Galliers, 2006). Secondly, a consideration of knowing and practice not only provides insight into interaction within communities, but also facilitates the contextualization of knowledge in the community, as will be discussed in subsequent sections.

According to Nicolini et al, the practice based view of knowing and learning in organizations is based on the premise that "knowing precedes knowledge, both logically and chronologically" as the latter is regarded as "always institutionalized in the former" (2003: 3). This view is also supported by Newell and Galliers (2006: 442) who regard knowledge not as a resource that can simply be transferred but as emergent from recurrent interaction among people "in the context of established routines and procedures" or practice.

Orlikowski also contributes to the practice discourse by presenting a perspective on organizational knowing in which knowing is viewed as 'necessarily provisional' and 'an enacted capability'. In this regard, knowing in practice or what she terms "knowledgeability...is continually enacted through people's everyday activity" thereby making it "an ongoing social accomplishment, constituted and reconstituted as actors engage the world in practice" (2002: 252). A similar view is expressed by Newell and Galliers (2006: 442) in relation to the occurrence of knowing in practice, in which regards knowledgeability is viewed as produced "not only by forming mental representations of an artifact or a concept but also through embodied participation in a particular social practice". In assuming this perspective on knowing, Orlikowski further argues for a reorientation in the perceived role of human agency in accomplishing 'knowledgeable work', from a peripheral role to being essential. As such, it becomes possible to regard core competencies as being
"constituted everyday in the ongoing and situated practices of the organization's members" rather than in fixed properties or as embodied in human resources (Orlikowski, 2002: 270).

Another key contributor to the practice based approach to knowing is Gherardi (see Gherardi, 2000, 2001; Gherardi and Nicolini, 2002). Gherardi makes a case for knowing in practice by identifying three perspectives that are important in the knowledge management discourse. The first of these is as highlighted in section 2.1.3 above; that knowledge resides in the heads of people. The second perspective is deemed to stem from the identification of knowledge as a factor of economic production, which thus allows it to be defined as 'strategic and inherent' within the management set up of organizations. And thirdly, is practice, which is viewed as articulating “knowledge in and about organizing as practical accomplishment, rather than as a transcendental account of decontextualized reality” (Gherardi, 2000: 217).

In support of this view, Nicolini et al opine that exploration of the implications of the notion that knowledge and learning as predominantly social and cultural phenomena has resulted in interest in the thesis that organizational knowledge and learning “must be viewed as forms of social expertise, that is, as knowledge in action situated in the historical, social, and cultural context” (2003: 3).

Furthermore, in outlining the value of practice, Gherardi (2000) makes the distinction between propositional knowledge and practical knowledge, which entails knowing. While propositional knowledge is described as “knowledge acquired through the practical understanding of an operation”, practical knowledge is said to be “kept within the habitus, which as the historical product of previous individual and collective practices, produces historical ‘anchors’ and ensures the correctness of practices and their constancy over time” (2000: 216). Although one would be quite right in criticizing the ascribed value of the habitus as ensuring ‘correctness of practices’, due to its subjective nature as individual and/or collective predispositions, Gherardi does give a meaningful interpretation of the role of the habitus in knowing and practice, which is as a result of the accumulation of experiences by the habitus over time. Interestingly, recent developments in research

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8 The concept of habitus is discussed extensively in Chapter Three of this thesis.
on knowing-in-practice seek to further address the bodily involvement of individual actors in learning through practice by taking into account, 'sensible knowledge', which is concerned with knowledge 'perceived', 'judged', 'produced', and 'reproduced' through the senses (Strati, 2007). The notion of sensible knowledge in practice-based learning thus provides further possibility for relating the functioning of the habitus, through perceptions and experiences, to knowing in practice.

Gherardi further identifies the value of practice as residing in the possibility for the concept to articulate 'spatiality' and 'facticity' or 'fabrication' of knowledge. In the case of the former, knowledge is said to reside in social relations whereby the "locus of knowledge and learning is situated in practice" (2000: 217). On the basis of this spatial articulation by practice, Gherardi (2001) argues that knowing does not exist as a separate activity from practice, rather it exists in concert with practice. As such, in articulating the 'how' of knowledge, practice is viewed as connecting 'knowing' with 'doing' by conveying the "contingent conditions and materiality of the world into knowledge" (Gherardi, 2001: 136).

In essence, practice is seen to contribute to the thematization of "the richness and importance of what is tacit, what is taken for granted, [and] what is familiar" as well as constituting an "agile tool" for understanding the "complexities of the modern organizational world" (Nicolini et al, 2003: 28). This is particularly the case as discourse among communities is itself considered a "specific practice" that aims to develop "understanding and/or to produce collective action" as well as to "foster learning by comparison with the perspectives of all the co-participants in a practice" (Gherardi and Nicolini, 2002: 420).

2.4 Knowledge and the Community Perspective

Going by a very broad description of culture as an all-encompassing social construct that pervades the thoughts, beliefs, values and patterns of behaviour common to a group of people and differentiates them from others (Schermershorn 2002), and given the various citations by knowledge management scholars of the role of the collective in the sharing and transfer of knowledge, one gains insight into how the notion of
‘communities’ plays an important role in the knowledge sharing process. Furthermore, by engaging with recent debates concerning the ‘community perspective’ this section underscores the importance that is attached to the role of the community in sharing and learning processes. Indeed, it can be argued that there is an overemphasis on the role of the collective in sharing processes while the role of the individual actor is under-emphasised. As such, the ensuing discussion is not only based on knowledge and the community perspective, but also, critically, identifies the importance of the individual in the sharing and learning processes.

Community initiatives are now a common feature within organizations, whereby employees are encouraged in active social participation for the purpose of developing good working relationships and ultimately develop organizational competences (see Swan et al. 2002). Although Nonaka and Takeuchi (1995), as was noted in section 2.2, failed to address the determining factors for their ‘triggers’, their work does reveal a link between knowledge and the culture within communities. This is evidenced in their epistemological model for knowledge creation for the organization, in which knowledge creation becomes a part of the organization culture through the knowledge spiral that occurs over time.

As the following discussion indicates, other researchers have also adduced to the existing relationship between knowledge and culture. Blackler (1995: 1024) described a form of knowledge as ‘encultured’ knowledge, a term said to refer to “the process of achieving shared understandings”. He further stated that such understandings are “likely to be dependent on languages, and hence...socially constructed and open to negotiation”. From this viewpoint therefore, one immediately observes that knowledge in the ‘encultured’ form occurs over the process of time and involves social interaction, which leads to its construction and/or development. The involvement of time and a process of social interaction in knowledge development are further attested to by Tsoukas and Vladimirou (2001:976) who view organizational knowledge as a capability that is developed by organization members “by enacting sets of generalizations whose application depends on historically evolved collective understandings”. The terminology such as ‘encultured’ and ‘collective understandings’ employed by knowledge researchers are
indicative of a culture dimension to the processes of knowledge creation and conversion, and this is classically demonstrated by the 'knowledge spiral'. According to Nonaka and Takeuchi (1995), in order to promote the knowledge spiral at the organization level, five conditions are required to be met; intention, autonomy, fluctuation and creative chaos, redundancy, and requisite variety.

The first of these conditions, 'Intention', is defined as an "organization's aspiration to its goals" (p.74). This is achieved through strategy, with the most crucial element being conceptualization of the type of knowledge to be developed and means of operationalisation. Autonomy on the other hand is viewed to increase the possibility "that individuals will motivate themselves to create new knowledge" (p.75). The ability of the individual actor to self-motivate is believed to stem from the fact that "original ideas emanate from autonomous individuals" in which "the self-organizing individual assumes a position that may be seen as analogous to the core of a series of nested Russian dolls" (p.76). This analogy presupposes the existence of a specific context and other enabling factors that would allow for the core of the 'nested Russian dolls' to be exposed. In this instance, the context and the enabling factors are summed up in the environment provided by the organization to facilitate the knowledge sharing process.

The third set of conditions to be met for the knowledge spiral to be effected is described as 'fluctuation and creative chaos'. The essential difference between fluctuation and creative chaos is the artificial orchestration and introduction of the latter to increase tension within the organization as opposed to the natural occurrence of fluctuation. However, there is a caveat attached to this set of conditions as the benefits that can be derived from both fluctuation and creative chaos arise through an exercise of reflexivity on the part of individuals subjected to the conditions. Nonaka and Takeuchi (1995:79) opine that the inability to reflect would remove the benefit of "creative chaos" and the naturally occurring fluctuation would tend towards "destructive" chaos, in which instance the introduction of interruptions to the status quo in the organization would have negative consequences. The fourth and fifth conditions, redundancy and requisite variety, are conditions vaguely discussed by the authors. For instance, redundancy refers to an
intentional overlapping of information and it is believed that this “sharing of redundant information promotes sharing of tacit knowledge” (p.81). While it is pointed out that redundancy could lead to information overload, there is however no explanation as to how redundant\(^9\) information could promote the sharing of tacit knowledge. The movement of individual members between units has however been identified as contributing to the transfer of both tacit and explicit knowledge, along with characteristics of the units and previous experiences in sharing knowledge (Argote and Ophir, 2002).

The nature of the environment provided by an organization to facilitate the knowledge sharing process raises the issue of care in the organization. In his consideration of organizational knowledge creation, Georg von Krogh (1998) emphasised the role played by social relationships in exploring the human disposition to the creation process. By examining the role of ‘care’\(^10\) in the creation of organization knowledge, von Krogh identified four dispositions to which any individual in an organization may subscribe. These four dispositions; ‘capturing’, ‘transacting’, ‘bestowing’, and ‘indwelling’ are determined by the nature of the care relationship within organizations. Von Krogh (1998: 138) views care as accomplishing the “sharing of positive and negative emotions through active empathy”. In this regard, an individual’s disposition is dependent on the level of ‘care’ demonstrated. For instance, where care is low, an individual may choose not to share his knowledge (capturing – at the individual level) or to trade it (transacting – at the social level). On the other hand, where there is a high level of demonstration of care and display of empathy, the individual willingly shares his knowledge (bestowing – at the individual level) and displays a commitment to the common cause (indwelling). Although care occurs at the individual level, it has important ramifications for the manner in which knowledge is managed, and its creation enabled, at the organizational level as demonstrated by empirical studies, which show that care “quite satisfactorily describes relations that have a positive impact on knowledge creation” (Von Krogh et al., 2000: 47).

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\(^9\) By its very nature, the term redundant may be described as an excess or needless content over and above that which is required or desired.

\(^10\) According to Von Krogh (1998: 137), “To care for someone is to help her to learn, to help her to increase her awareness of important events and their consequences, and to help nurture her personal knowledge creation while sharing her insights”. See also Von Krogh et al. (2000).
The link between what an individual knows and what is known at the group level is essentially fostered by socialization among communities. Nonaka and Takeuchi (1995) also expressed this need for a sharing of emotions, feelings and mental models\(^\text{11}\) to build mutual trust in order for socialization to take place, and emphasised the need for collective commitment in order to realise effective creation and conversion of knowledge. Such collective commitment is viewed as enabling the organization to reorient the thinking and behaviours of its members by a constant interaction with all members of the collective. Von Krogh (1998: 141) described this interaction, in the existence of a high level of care, as mutual bestowing, which "provides fertile ground for a distinct process of creating social knowledge in a team". The importance of effective interaction is stressed by Quintas (2002: 11) who highlights the context-based nature of the knowledge creation process and the need to "understand the context within which it was created in order to reinterpret it's meaning and decontextualize for a new context". Therefore, in order to effectively share knowledge, in addition to a willingness to share, there has to be an understanding of the context within which the knowledge exists, which implies that the recipient would possess related knowledge, which is sometimes referred to as an absorptive capacity (Davenport and Prusak, 2000; Dixon, 2002).

2.4.1 Knowledge in Communities of Practice

One of the main proponents of 'communities of practice' is Etienne Wenger. For him, social participation is a process of learning, which is characterised by the interconnected components; meaning, practice, community, and identity. Of these four components 'community' and 'practice' are particularly interesting for special consideration due to their significance to socialization. While practice is seen as "a way of talking about shared history, social resources, frameworks, and perspectives

\(^{11}\) The role of Peter Senge's five disciplines for the learning organization have been reviewed in knowledge management terms by Skyrme and Amidon (2002), who view mental models as geared towards the individual and considered as tacit knowledge in personal cognitive maps. Similarly, personal mastery is related to the articulation of self knowledge, i.e. being explicit. The other three disciplines are geared towards the collectivity such that; shared vision entails knowledge sharing – transcending personal knowledge to organizational knowledge, as is the case with team learning which reflects that diffusion of individual knowledge to collective knowledge, and systems thinking, which also relates to the development of knowledge through expansion at the macro level.
that can sustain mutual engagement in action”, community is regarded as “a way of talking about the social configurations in which our enterprises are defined as worth pursuing and our participation is recognizable as competence” (Wenger, 1999: 31).

Three prominent features are identifiable in Wenger’s description of community and practice, which are essential to an understanding of the concept of ‘community of practice’; these are sustained mutual engagement, a common cause, and competence recognition. Communities of practice enable group interaction as they provide a basis for identity and are regarded as constituting an integral part of daily living (Wenger, 1999). Furthermore, common identification with the group’s expertise along with ‘passion’ and commitment are viewed as the factors that hold the community together (Wenger and Snyder, 2000). Swan et al. have also expressed similar views on Wenger’s conception of communities-of-practice as an integral part of everyday life and encouraging a ‘familiar experience’:

The notion of community of practice...has played a crucial role in highlighting the extent to which knowledge and learning are situated in work practices and has provided an important counterpoint to alternative views focusing, more narrowly on the role of cognition. (2002: 477)

The notion of communities of practice evidently encourages a broader consideration of knowledge and learning through practice and as such through social interaction, than would be afforded by merely considering the cognitive acquisition of individuals. ‘Familiar experience’ may be constituted by any aspect of everyday life in which one interacts with other individuals and engages in pursuing a justifiable cause of action – be it learning or active work, that will ultimately result in a recognition of competence. Recognisable competence, on the other hand, may be viewed from two perspectives such that while individual actors must have a self-awareness of the knowledge capabilities and competences they possess, other actors in the community should also be able to acknowledge the contributions made by these individual actors and express appreciation where required. The existence of these two perspectives in consonance would result in an emotive display and
demonstration of empathy, which encourages knowledge sharing in the organization (von Krogh, 1998).

Wenger aptly described the importance of communities of practice to the organization setup by stating that for organizations, "learning means sustaining the interconnected communities of practice through which an organization knows what it knows and thus becomes effective and valuable as an organization" (1999: 32). Interconnected communities of practice are indicative of the existence of communities as multiplex systems where individuals are bound together to create an avenue through which an intense community life is established (Portes, 1998) and hence the increased possibilities for knowledge sharing. Indeed, Brown and Duguid (2001: 204) consider this deduction to be reasonable, as they expressed the viewpoint that "if people share a practice, then they will share know how, or tacit knowledge".

The role of the community in the sharing of knowledge is further emphasised by Brown and Duguid (2001: 202) who noted that, "a community's knowledge is not held equally by all but shared differentially across the community as a whole, though it is made available to all". The differential possession of knowledge thus reduces the tendency for isolation and increases an organization's competitive advantage by promoting the aggregation of employee knowledge through formal and informal ties (Anand et al. 2002). Furthermore, by dwelling within a community of practice, individuals benefit from an environment with the possibility of self-expression and appreciation. Both of these provide the opportunity for individuals within a community to accumulate knowledge as a form of capital. Brown and Duguid (1991) provide support for this view as they believe that learning is fostered by fostering access to a community of practice, and by encouraging membership in the target community of practice. Hence, the more one feels a part of a group, the more the culture of the group is acceptable and the greater the likelihood of social interaction. In essence, such group or community culture in its embedded form creates an appreciation of the values existing in a group and thereby encourages the sense of belonging in individual actors and the development of both individual knowledge and a community-based knowledge pool.
As with many other social concepts, 'communities of practice' is not without its criticisms. An evident criticism is one provided by Contu and Willmott (2003). For them, following Lave and Wenger's (1991) situated learning theory, the trend in subsequent conceptualizations of 'community' has been "to assume, or imply, coherence and consensus in its practices", a usage that tends to gloss over "a fractured, dynamic process of formation and reproduction in which there are often schisms and precarious alignments that are held together and papered over by unreflexive invocations of hegemonic notions" (2003: 287). For this reason, Contu and Willmott advocate that any further development of the situated learning theory should emphasise the idea of 'practice' as opposed to 'community'.

By presenting communities as the context for harmonic practice, Contu and Willmott (2003: 283) argue that "elements of situated learning theory have been selectively adopted to fertilize or extend the established terrain of organizational learning" in popularized versions of situated learning theory, contrary to the appreciation given by Lave and Wenger to power relations. As such, they revisit the theory, using the works of Brown and Duguid (1991) and Orr's widely cited study of copier technicians to demonstrate the role of power relations in learning theory.

Contu and Willmott further re-evaluate examples cited in Lave and Wenger's *Situated Learning* to demonstrate how power relations might come to play in the situated learning theory. As such, whilst in agreement with the view that social practices comprise elements of 'conflict' and 'consensus', they question the interpretation given to the term 'consensus' by popularizers of the theory. For Contu and Willmott therefore, "the issue at stake is: how is "consensus" interpreted? Is it an expression of unforced agreement, or is it a hegemonically stabilized outcome of a power play of social forces?" (2003: 292).

In addition to its perceived neglect of power relations, another critique of communities of practice is the manner in which social learning researchers engage other concepts in explaining communities of practice thereby generating tensions
between original conceptualisations of these explanatory concepts and their
application in communities of practice. One such instance of tension is identified by
Mutch (2003) between communities of practice and the concept of habitus. This
tension is deemed to stem from a lack of recognition of the main characteristics of
Bourdieu's use of the term habitus. Mutch further explains that whilst habitus is
regarded as "structure that conditions practice", the focus of communities of practice
is on structures that "emerge from practice" (2003: 283 original emphasis). In this
regard, the concept of communities of practice is seen as not giving due
consideration to the temporal influence of the habitus brought about by changing
experience. It is also interesting to note that in both the critique by Contu and
Willmott (2003) and Mutch (2003), the subject of critique is not the concept itself,
rather the critiques relate to applications and subsequent articulation of the concept.

2.5 Ba and Communities of Practice

Having undertaken a discussion of the concept of communities of practice, in this
section, attention is now turned to the relationship between ba and communities of
practice. As mentioned in section 2.2.1, in justifying their introduction of ba to the
knowledge creation theory, and articulating its uniqueness, the proponents identified
definite relationships between ba and other concepts such as communities of
practice. According to Nonaka and colleagues, the most significant similarity that
can be identified between the two concepts is that in both instances, learning occurs
by participation (Lave and Wenger, 1991; Wenger, 1998; Nonaka et al, 2001;
Nonaka and Toyama, 2003). However, from the literature on ba, one gets the sense
of a need by the proponents to make a clear distinction between the two concepts.
As such they identified a number of features which are believed to distinguish ba
and communities of practice. This is outlined in Table 2.2.
<table>
<thead>
<tr>
<th>Ba</th>
<th>Communities of Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place for creation of new knowledge</td>
<td>Place for learning knowledge embedded in community</td>
</tr>
<tr>
<td>Emphasis is on knowledge generation</td>
<td>Emphasis is placed on learning and knowledge sharing</td>
</tr>
<tr>
<td>Boundary is fluid, can be quickly changed and is set by participants</td>
<td>Boundary is firmly set by task, culture, and history of community</td>
</tr>
<tr>
<td>Membership is not fixed but dynamic as participants come and go</td>
<td>Membership is fairly stable with participants taking time to be fully integrated</td>
</tr>
<tr>
<td>Participants relate to the ba</td>
<td>Members belong to the community</td>
</tr>
<tr>
<td>Ba requires energy to become an active site for knowledge creation</td>
<td>Learning occurs in any community of practice</td>
</tr>
<tr>
<td>Changes take place at both micro and macro levels</td>
<td>Changes take place at the micro (individual) level</td>
</tr>
</tbody>
</table>

Table 2.2: Distinction between Ba and Communities of Practice (Adapted from Nonaka et al, 2001; Nonaka and Toyama, 2003)

At first glance, it appears that the distinction between ba and communities of practice is clear cut. However, a careful examination of some of these distinctions would suggest otherwise. For instance, according to the proponents of ba, while the community of practice represents a place for learning knowledge that is 'embedded' in the community, ba is an active site for creating knowledge. Rather than clarifying the difference between the two, this particular point marks a deviation from the notion that "knowledge is embedded in ba...where it is then acquired through one's own experiences or reflections on the experiences of others" (Nonaka and Konno, 1998: 40), a point also reiterated by Nonaka et al (2006:1185). In view of the fact that knowledge is deemed to be embedded in ba and acquired through experience (which can be regarded as being borne of practice), this particular 'distinction' seems to point to a similarity rather than a contrasting feature.

Furthermore, communities of practice are viewed to have firmly set boundaries and fixed membership while the boundary of ba is "fluid and can be changed quickly", with participants able to "come and go" (Nonaka et al, 2001: 24). This fluidity...
associated with ba is such that whereas members of a community of practice belong to the community, “participants of ba relate to the ba” (Nonaka and Toyama, 2003: 7). However, if communities of practice were to be considered in light of the existence of multiplex systems (Portes, 1998), one observes that the existence of multiplex communities of practice (Brown and Duguid, 1998) allows for overlapping and interdependence of communities which encourages dynamic movement across communities by the members. The possibility for this would then suggest that rather than being limited to micro level changes, as is suggested by Nonaka and Toyama (2003), interdependence in multiplex communities of practice may also allow for changes at meso as well as macro levels.

From the above discussion, it is apparent that the similarity between ba and communities of practice goes beyond the broad categorisation of both concepts as subscribing to learning by participation. One particular distinction that appears vague is the treatment of ‘context’ in the notion of ba, which communities of practice, brings to the fore. In ba, context is constantly represented as the space within which processes occur; this appears to be the continued focus of the concept as Nonaka et al (2006: 1197) point out that the concept is “empirically under-explored” and they suggest that studies be carried out to “explore ba as an aesthetic space”. However, based on preceding discussions and as Contu and Willmott (2003) aptly point out, the concept of communities of practice creates a broader scope for consideration of ‘context’ as this is not limited to ‘place’ of learning but also includes treatment of the impact of different contexts such as political, economic etc. It is also evident that whilst ba is more focused on the contextual environment for knowledge creation, communities of practice are concerned with the interactions that take place among members in enabling learning and sharing. From the foregoing therefore, communities of practice appears better suited as a concept for studying individual participation in social practice due to the inherent association of the actor with the practice context and the possibility for a larger scope of consideration.
2.6 Conclusion

In this chapter, I have engaged in a detailed consideration of knowledge; its plausible definitions, a thematic classification of its attributes and the distinction between knowledge and knowing, stating that the latter is action-centred and occurring through a social process that involves concerted effort from individual actors (Orlikowski, 2002), and thereby highlighting the significance of practice to knowing. I also considered the process of knowledge generation through Nonaka and Takeuchi's (1995) knowledge spiral and the role of certain triggers in the generation process, in which instance, the triggers themselves were said to require an enabling context that is perceived by individual actors to be conducive for knowledge sharing. By further examining the concept of 'ba' as proposed by Nonaka and colleagues, ba is identified as providing this enabling context within which actors are able to create and convert knowledge. This context is also observed in considerations of knowledge from a collective perspective whereby organizational as well as individual dispositions determine whether or not knowledge is shared (Von Krogh, 1998).

Finally, by looking at knowledge in communities of practice, one not only observes the wider implications of social action in enabling knowledge sharing but identifies that individual actors must have a self-awareness of their knowledge capabilities and have favourable dispositions both from and towards the community in order for knowledge sharing to take place (Von Krogh, 1998; Wenger, 1999; Brown and Duguid, 2001; Swan et al. 2002). In so doing, I have demonstrated that whilst it is widely acknowledged that knowledge sharing is a socially embedded process, there exists an alternative approach to understanding the process of knowledge sharing. This approach is one constituted by the predispositions and actions of individuals, which forms a perspective that co-exists with the social process perspective and is the subject of discussion in the following chapter.
Chapter Three

3. Social Interaction and Knowledge Sharing: From Individuals to the Collective

In the preceding chapter, it was established that the processes of knowledge conversion and exchange involve both the individual and the collective. Whilst on the one hand, knowledge sharing is construed as a socially embedded process, it was argued on the other hand that the process of knowledge sharing is predicated on the involvement of individual agents acting as primary determinants. In this chapter, I continue the development of the argument for the critical role of the individual as a prime factor in undertaking knowledge sharing decisions at micro and meso levels of social interaction. In order to achieve this, the concepts of social capital and cultural capital are reviewed as social interaction concepts, along with communities of practice which was discussed in the previous chapter, with a view to establishing individual involvement in these social processes. Since capital is a resource for the possessor, both social capital and cultural capital (also regarded as symbolic capitals) are resources that are available to actors and that may be embodied in such individuals. As such, these resources constitute assets which are always present with the individual agent and which are developed with time and with continued interaction.

Furthermore, it was identified in the preceding chapter that key research on communities of practice have shown that active involvement of actors in practice and subsequent collective responses serve to mutually determine knowledge sharing (see Wenger, 1999, 2000, 2004; Lave and Wenger, 1991; Brown and Duguid, 1991, 2001), but little is said of the dynamics which govern the inclinations of individual actors on whether to share knowledge or not to share knowledge. The works of these researchers are based on the premise that learning is fostered by individual involvement in community activities, with an emphasis on the role of the community. However, the individual agent offers an alternate perspective through which the intricacies of knowledge sharing and hence learning can be understood.
To gain insight into the perspective of individual actors, this review explores how the three identified concepts can be actioned and also the possible interaction between them. This is achieved by considering the constitutive elements of each concept to establish areas of commonalities. The concept of the habitus is then introduced due to its ability to serve as an overarching framework for understanding this individual perspective. This concept exists in individual and social/group forms and as such possesses traits which allow it to pervade the three other concepts, thereby making it a suitable framework for representing the individual-centred approach to understanding the dynamics of knowledge sharing. The suitability of the habitus is not limited to its ability to serve as a theoretical framework, but as I shall subsequently establish, because of its inherent characteristics, it can also serve as an analytic tool for interpreting data and is thus employed in this research. With the habitus, one is thus able to review the role of individual action in social interaction and demonstrate the complementarity of individual and collective actions in ensuring knowledge exchange.

3.1 Forms of Capital

Bourdieu's works reveal that much of his efforts focused around establishing the concepts of habitus, field and capital, the first of which will be addressed in a subsequent section. In this section however, the notion of capital is reviewed with particular focus on the various forms in which it exists. The relationship between 'field' and capital is such that "a capital does not exist and function except in relation to a field" (Bourdieu, 1992: 101, emphasis in original). Implicit in this statement is the contextualisation of capital, that is, a form of capital is valid within the context of a specific field or environment, outside of which it ceases to exist and loses its appropriated value. Going by Bourdieu's (1992) description of 'field' as competitive arenas where individuals operate, the 'field' can be constituted in environments ranging from the family setup to the more complex community or organization setup.

Bourdieu's work emphasises the existence of various forms of capital, for example; social, cultural, and economic capital. In The Forms of Capital, Bourdieu expresses his view on the importance of capital, in its different forms to the social world thus:
It is in fact impossible to account for the structure and functioning of the social world unless one reintroduces capital in all its forms and not solely in one form recognised by economic theory. (Bourdieu, 1986: 242)

Here, the emphasis is laid on the impossibility of understanding a social environment, in which resources are exchanged and traded, by concentrating solely on the economic theory of capital. In a sense, it is possible to draw on the analogy of 'a square peg in a round hole' in order to explain the use of purely economic concepts to understand capital. Such incompatibility is made evident in consideration of the works of researchers from the field of economics. For instance, in _Rereading Capital_, Fine and Harris (1979) acknowledge that capital is a social relation involved in the self-expansion of value, however little else is said of the import of this relational perspective to capital. Other researchers such as Granovetter (1985) have however paid greater attention to the particular role played by social relation in economic life.

For example, in the embeddedness argument, Granovetter stresses "the role of concrete personal relations and structures (or "networks") of such relations in generating trust and discouraging malfeasance" (1985: 490). This would imply that the more established the social relation among individuals, the more likely it would be for such individuals to trust and defer to one another. In this regard, Granovetter explains that, given the option, individuals would not settle for generalised information but would rather seek information from trusted individuals within their networks and better still, rely on personal experiences in making decisions. In terms of economic viability therefore, social relations act as a necessary condition for "trust and trustworthy behaviour" but is not a guarantee for favourable outcomes as the existence of trust within relations may also allow for misconduct and wrongdoings (p.491). Hence, the exploitation of the value of capital through social relation is specifically related to how the relation is structured and is a factor of such relations.

Bourdieu’s interpretation of the law of exchange contributes in part to understanding the embeddedness of social relations at the family level. As expressed by him, “the
closer individuals or groups are in the genealogy, the easier it is to make agreements, the more frequent they are, and the more completely they are entrusted to good faith” (1977:173). This logic as it applies to the family ties is also applicable to friendship ties and formal ties where mutual association is expected of individuals. In this regard, the closer individuals in specific fields or environments are (irrespective of the complexity), the easier it would be for them to have common understandings, which enable social interaction. Bourdieu further argued that; “as the relationship becomes more impersonal... so a transaction is less likely to occur at all, but it can become and increasingly does become purely economic in character” (1977: 173).

Bourdieu’s use of the phrase ‘purely economic’ in the context above denotes a closer (but not absolute) move towards economic realities of impersonal transactions, in which an actor treats the exchange process as a pure act of transaction whereby there is a definite return to the actor in exchange for the knowledge that is disseminated (cf. Von Krogh, 1998). The occurrence of an exchange in the first instance is predicated on the existence of some form of social interaction. Therefore, the lack of probability of occurrence of a social transaction, coupled with an increased probability of economic transaction is as a result of diminished social interaction. This thus presents the possibility of capital existing in different forms owing to the structure and context which shape the social relation. For Bourdieu, these other forms of capital had long been “abandoned” due to a lack of “interest” and/or lack of adequate “theoretical tools” to facilitate their comprehension (Bourdieu, 1993a: 32), but invariably these other forms are still constituents of capital in its entirety and exist in convertible forms along with economic capital:

Capital can present itself in three fundamental guises: as economic capital, which is immediately and directly convertible into money and may be institutionalised in the form of property rights; as cultural capital, which is convertible, on certain conditions, into economic capital and may be institutionalised in the form of educational qualifications; and as social capital, made up of social obligations (“connections”), which is convertible, in certain
conditions, into economic capital and may be institutionalised in the form of a title of nobility. (Bourdieu, 1986: 243, emphasis in original)

There is an emphasis by Bourdieu on the convertible nature of the various forms of capital. Indeed, these identified forms of capital exhibit signs of complementarity but can also be contrasted in specific instances. Bourdieu lends credence to this seemingly paradoxical statement in *The Field of Cultural Production*, where he points out the existence of what may be termed an opposing relationship between art which is symbolised by cultural capital and money which is symbolised by economic capital. He stated that “the intellectuals, rich in cultural capital and (relatively) poor in economic capital and the owners of industry and business, rich in economic capital and (relatively) poor in cultural capital, are in opposition” (1993b: 185). In relation to literary and artistic works, whilst it is possible for actors endowed with cultural capital to act in opposition to individuals rich in economic capital but lacking an appreciation of literary and artistic works, it is also possible to have the existence of congruity whereby an actor is endowed with both forms of capital. This for instance would allow such an actor to patronise expensive artistic works.

Although Bourdieu’s example here is in reference to the ‘bourgeois’ and the field of power, this relationship between cultural capital and economic capital finds a wider field of application, not least of which is within the organization. In the organization context, any of the three forms of capital can take a symbolic form when it is “grasped through categories of perception that recognize its specific logic or... misrecognize the arbitrariness of its possession and accumulation” (Bourdieu and Wacquant, 1992: 119). The recognition or awareness of where the symbolic capital is situated can thus serve as the impetus for its usage. This is particularly the case with cultural capital and social capital whereby the transmission and acquisition are often disguised thus resulting in their not being recognised as capital in the economic sense but possibly recognised as “legitimate competence” (Bourdieu, 1986: 245). The perception of the specific logic of symbolic capital in essence leads to a realisation of its inherent value. The sublimation of social and cultural capital into ‘legitimate competence’ therefore present the bearers with a form of advantage.
over those lacking them and for those recognising its presence, it presents an opportunity for them to avail themselves of a potentially value-adding resource.

3.1.1 Social Capital

Needless to say that social capital as a concept can no longer be regarded as "abandoned" as originally expressed by Bourdieu (1993a: 32). The concept has now gained relative prominence within sociological and managerial circles with an increasing number of studies being conducted by researchers to gain a better conceptual understanding of its practicability, in particular, and the possible impact on organization practice (see Nahapiet and Ghoshal, 1998; Tsai and Ghoshal, 1998; Edelman et al. 2004; Edwards, 2004; Winter, 2000 and Adler and Kwon, 2002). While social capital and its effective utilisation are seen as a source of competitive advantage, it is not always beneficial. For instance, Nahapiet and Ghoshal (1998: 245) state that "The strong norms and mutual identification that may exert a powerful positive influence on group performance can, at the same time, limit its openness to information and to alternative ways of doing things". Adler and Kwon (2002) further identify inherent risks of social capital as including possible tradeoffs in benefits and inclusionary or exclusionary tendencies, which may result in isolation of actors and their ideas as reflected in the 'Not Invented Here' (NIH) syndrome or in the fragmentation of a subgroup from a whole.

3.1.1.1 Defining Social Capital

Aside from Bourdieu, other prime contributors to the social capital literature in recent times have been James Coleman and Robert Putnam. These three respectively exemplify three different schools of thought, vis-à-vis social capital as i) "a set of resources that are linked to membership of a particular social group", ii) "a resource that arises out of people's family relationships" leading to increased human capital and consequently enabling access to greater economic reward, and iii) that which stresses "trust and reciprocity between people that facilitates collective action in terms of economic and political development at regional and national levels" (Edwards, 2004: 81). While Putnam's use of the concept occurs predominantly at the macro institutional level with specific focus on regions and national implications (see Putnam, 1995; 2000), Coleman's interests include how social capital in family and community networks serves as a resource for the development of human capital
and he argues that social capital is inherent in "the structure of relations between actors and among actors" (Coleman, 1988: S98), to which ends, he identifies social capital as inhering the structure of relation between actors and among actors, but not lodged within the actors.

Bourdieu's consideration of social capital is however within a broader context as has already been established. His view is on social capital as constituting a form of capital, which along with economic, cultural and symbolic capitals can be elaborated to explain "the mechanisms of preservation of the social stratification system and the legitimization of dominant class reproduction strategy" (Adam and Rončević, 2003: 159). This in essence explains why Bourdieu is described as arguably having provided the most theoretically refined analysis of social capital, among those who have introduced the concept to sociological discourse (see Portes, 1998; Adam and Rončević, 2003). From the three identified strands, it is thus observed that social capital, as a concept, transcends all levels from the micro individual level through the meso family/community level as demonstrated in Bourdieu's and Coleman's work, to the macro institutional level as demonstrated by Putnam's work.

According to Edwards (2004) social capital is not only integrally related to other forms of capital but is able to impact on the social, political and economic nature of the society. This perhaps explains why within these strands, theorists and researchers still give an array of meanings to social capital. Social capital has been variously described as knowledge accessible through organization stakeholders (Anand et al. 2002), and as comprising of both a structural perspective (Portes, 1998) and a relational perspective (Burt, 1992). It may also be classified in two forms; on the one hand, it is conceptualised by social theorists as a private good for the actors concerned (Burt, 1992) and as an asset 'spent' by individuals in bettering their situations (Leana and Van Buren, 1999). On the other hand, social capital is seen as a public good or collective resource, in which sense, it is available and may potentially benefit both the creator(s) and other group members at large (Kostova and Roth, 2003).
Inkpen and Tsang (2005) lend voice to the existence of social capital in an individual form (or private good) and also in a collective form (or public good). Their argument is based on the view that social capital originates from an individual’s network of relationships and is distinct from the organizational social capital which derives from the organization’s network of relationships. Social capital can however be argued to transcend both the individual and the collective levels. Kilduff and Tsai (2003: 28), further view the social capital concept as summarising the importance of social relationships and as being applicable at both the individual and organization levels. They view social capital as a benefit accruing to the collectivity by virtue of positive relationships maintained by individual actors who invariably do not have unilateral control over their social capital.

Adler and Kwon (2002: 19), argue that although the definitions of social capital as proposed by different researchers are broadly similar, they exhibit nuances which make them distinguishable dependent on “whether they focus on the substance, the sources or the effects... [and] whether their focus is primarily on (1) the relations an actor maintains with other actors, (2) the structure of the relations among actors within a collectivity, or (3) both types of linkages”. This view is in concert with the notion that the source of social capital lies within the social structure that the actor is located, thus allowing for social capital to exist in structural, relational and cognitive dimensions (Nahapiet and Ghoshal, 1998).

3.1.1.2 Structural, Relational and Cognitive Dimensions of Social Capital

Although much discussion on social capital has focused on the structural and relational dimensions, Nahapiet and Ghoshal (1998) introduced a third dimension, termed the cognitive dimension, in order to fill a perceived void existing in the mainstream literature. Portes (1998) exemplified the structural perspective by arguing that the ability of actors to secure benefit resides in their membership of social networks or other social structures. Others have also suggested that it is the social structure itself that provides value (see Baker, 1990 for example). Lin (2001) makes a similar argument in support of the structural perspective of social capital and also views social capital as a socio-economic resource. Such resource is said to be embedded in structural positions and inherently distinct from resources possessed by individual actors. The term structural used here is best explained by borrowing
from Nahapiet and Ghoshal’s usage, as that which describes “impersonal configuration of linkages between people or units” (1998: 244). In this sense, one observes similarities between Lin’s views and that expressed by Coleman (1988) in which social capital is viewed to inhere the structure of relations. Lin further states that, “both collectivities and individual actors take action for two primary motives; to protect existing valued resources and to gain additional ones” (2001: 45). This view is based on the assumption that actions can be both relational and motivated to maintain or gain valued resources in order to survive and persist. However, the resource motive, as expressed by Lin does not suffice as an exclusive explanation for what primarily motivates individual actors to engage in social networking. Indeed, Conway (1994) identifies a plausible motive for an individual engaging with social networks as a desire for social exchange, in which instance, the desire for social exchange becomes the sole basis for interaction.

The relational dimension of social capital on the other hand views the concept in terms of occurrences within network relationships. Nahapiet and Ghoshal attempt to distinguish between this and the structural dimension by drawing on the term ‘relational embeddedness’, a concept described as focusing on “the particular relations people have, such as respect and friendship, that influences behaviour” (Nahapiet and Ghoshal, 1998: 244). It is this embeddedness attribute of the relational dimension of social capital that allows for individuals with similar sets of resources and ‘network configurations’ to have differing actions towards members of their networks or social group, dependent on the relationship held with these members.

The central proposition of Bourdieu’s (1986) social capital theory as comprising of durable networks providing its members access to collectively held resources, along with the notion that respect and friendship can influence behavioural action, suggests that exchange decisions are not just a factor of the network of assets that constitute the social capital but also of the actors ability to share within the networks. This ability in itself is considered to be a major characteristic of the intellect (Quinn et al, 1997)\(^{12}\), and is described by the cognitive dimension, which

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\(^{12}\) See also Burt (1992) on the downplaying of the individual actor in social/intellectual capital work.
provides "shared representations, interpretations, and systems of meanings among parties" (Nahapiet and Ghoshal, 1998:244).

In identifying a cognitive dimension to social capital, Nahapiet and Ghoshal introduced to the sociological literature, an extensively researched and key feature of psychology, that is, human cognition. Whilst a review of human cognition is outside the scope of this study, as noted in the following instances, it does provide an insight into how individuals may choose to operate within their networks. For instance, for Bandura's argument to be held valid that "the opinions and behaviour of those who possess status and prestige are likely to have greater impact on what spreads through a social network than activities modelled by peripheral members" (1986: 151), at the very least, there must exist a positive relation among members along with a perceived greater value attached to the contributions of such 'highly placed' individuals. As Kostova and Roth (2003: 305) further argue, the efficacy of an interaction is an important determinant of the relationship of social actors; efficacy being reflective of "the perceived utility of past interactions". Such perceptions may be individual or collective and could influence individual actors' orientation towards the transfer or reception of resources. From the foregoing discussion, it becomes evident therefore, that the three dimensions of social capital do not operate in isolation but are highly interrelated (Nahapiet and Ghoshal, 1998). They collectively contribute to the characteristic elements of the concept and demonstrate that for social capital to be a valid resource, not only would appropriate structures be required to be in place, but there should also be good relational norms and the right mindsets among network members.

3.1.1.3 Networks and Social Capital

The discussion so far has centred on what constitutes social capital. In this section, I examine the relationship between networks and social capital, as the former plays a defining role in creating and sustaining social capital. Furthermore, by exploring this relationship, additional insight is given to dynamic involvement of individual actors in the creation and sustenance of social capital. That networks play an important role in the functioning of social capital is evident in Nahapiet and Ghoshal's description
of social capital as comprising of “both the network and the assets that may be mobilised through that network” (1998: 243, emphasis added).

Furthermore, Bourdieu (1986: 249) views the network of relationships of actors as a product of strategies that could be “individual or collective” and may be “consciously or unconsciously aimed at establishing or reproducing social relationships” that hold value for the actor(s) both in the short term and/or long term. Thus by networking, actors are able to build relationships, which serve as a store of resource that may be drawn upon for immediate or future use. In addition, the fact that network relationships could arise as a result of a conscious or unconscious act suggests that actors could be endowed with social capital through the networks they belong to, without actually realising the extent of value inherent in such networks. A network of relationships therefore possesses the capacity to act as repositories for resources which are available to the actor.

The notion that a network of relationships results from conscious or unconscious strategies would suggest that in addition to the network being determined by the structure of relationships, both the cognitive and relational elements of social capital are key to the networking process as they determine the action dynamics within the networks. Indeed, the term network does not refer exclusively to the structure but also refers to the components that comprise networks. As Conway et al. (2001) noted, networks have three essential components; the actors, the links and the flows. Flows are said to specifically refer to the network content, that is, the elements that are conveyed through the network linkages. Thus knowledge is not just a resource possessed by actors, but from the network perspective, it is also a content that flows through the network. The effectiveness of such flow enables the harnessing of social capital and is enhanced, amongst other factors, by an ability to develop an appropriate prior level of knowledge (Anand et al. 2002). As Ghoshal and Bartlett (1990) further noted, the success or failure of any network is dependent on the effective sharing of expertise. This would effectively not only require a prior level of knowledge but also an understanding of what prospective recipients know (Dixon, 2002).
As collective social capital derives from individually developed social networks, by taking the network approach it is possible to understand the relationship between micro and macro level interactions that contribute to the development of such social capital. Indeed, the network approach is a basis for establishing micro-macro linkages and is believed to contribute to the manner in which "individuals affect institutional outcomes and how larger social structures affect individuals" (Kilduff and Tsai, 2003: 23). In essence, the network approach allows for multilevel analyses by facilitating research into different forms of relationships both within and across organizational boundaries. In particularly, the focus of network research at the micro and meso levels of analysis has been with a view to understanding the impact of dyadic, triadic and clique relationships on organizations.

Kilduff and Tsai (2003) identified several concepts as characterising social networks, two of which are reciprocity and transitivity. Both reciprocity and transitivity are two important elements of the 'Balance theory'; while the former denotes responses by individual actors towards the actions of others towards them, the latter is an expression of the impact of third party relationships on interactions between individuals or collectives. The Balance theory itself was imported into the study of social networks from social psychology and it is believed to have developed as a theory of cognitive consistency, as it concerns the tendency for individuals to "promote connections between their friends" (Kilduff and Tsai, 2003: 41). The central postulation of the theory is that people strive to maintain balance whereby the degree of attraction or aversion multiplies out to give a positive outcome. In this regard reciprocity is reflected through the transaction content that flows between actors in which the affect valence between the actors is positive (Conway, 1994). That is, the relationship between two actors is maintained such that the actions of one actor in the relationship would generate a corresponding act from the other. Similarly for transitivity where there exists a perceived imbalance among three actors or sets of actors, the possibility exists for the one party to be motivated to correct the imbalance. This argument can be explained by the following simplistic example: If \(X\) likes \(Y\) and not \(Z\), but \(Y\) has a positive relationship with \(Z\), then an imbalance exists in which \(X\) can choose to be favourably disposed to \(Z\) or to be unfavourably disposed to \(Y\) in order to restore the balance.
We thus observe that both reciprocity and transitivity contribute to the dynamics of individual thought processes and actions in maintaining their network of relationships. As the networks of individuals in an organization also contribute towards developing the organization's collective social capital, there is the possibility for tensions and potential conflict to exist between the individual actors (through commitment to their informal networks), and the formal organizations to which they belong (Conway, 2001). Conway further explained that while the management of an organization may "set the legal parameters for informal exchange behaviour" (2001: 99), it is individual actors that determine the true day-to-day exchanges through their interactions. Given the possibility for tensions between the informal and formal networks, the probability thus exists for individual actors to influence the use of the social capital resources irrespective of organization dispositions.

3.1.2 Cultural Capital

Although the concept of cultural capital has not received as much attention as social capital nor has it achieved the same level of prominence in sociological literature, it is one that has arguably received more focus of attention from Bourdieu than any other form of capital. According to Bourdieu (1986) cultural capital exists in three states, that is, the embodied, objectified and institutionalised states. While the embodied cultural capital typifies the "long-lasting dispositions of the mind and body", the objectified state represents cultural goods and artefacts, and the institutionalised state is considered as "a form of objectification" but separately categorised due to its ability to confer originality on the cultural capital it is meant to guarantee (1986: 243). An example given by Bourdieu, of cultural capital in this institutionalised state is academic qualifications.

Bourdieu particularly distinguishes cultural capital from economic capital by stating its predisposition to function as symbolic capital due to the fact that "the social conditions of its transmission and acquisition are more disguised than those of economic capital" (1986: 245). He however identified similarities in certain distinct features of cultural capital and economic capital. For example, Bourdieu views academic qualifications as serving the same purpose for cultural capital as money serves for economic capital. In this regard, he argues that, "academic qualifications,
like money, have a conventional, fixed value which being guaranteed by law, is freed from local limitations” (1977: 187). In addition, he also argues that the cultural capital which these academic qualifications guarantee are permanent and do not require a constant need to be proven. For Bourdieu therefore, cultural capital not only has a symbolic significance but is also a means of exchange. A possible flaw in this view however lies in the assumption that academic qualification is free from local limitations; as qualification may be affected by local variations in which case certain national academic qualifications are widely recognised and accepted while others are not. Furthermore, the ascribed value to qualifications can change over time as institutional status changes, thus devaluing or revaluing the qualification as a currency. Unlike economic capital however, cultural capital, as is the case with social capital, functions strictly as symbolic capital, and may go unrecognised and unvalued, which perhaps explains why economic theorists tend only to measure yield in terms of “monetary investments and profits” (Bourdieu, 1986:243).

A distinction can also be made between cultural capital and social capital since the latter exists as a resource for both the individual and the collective, while the same cannot be categorically said of cultural capital. Going by Erickson’s (1996) description of cultural capital as a resource resulting from status and class position, one can deduce that an individual is endowed with cultural capital as a result of being situated in specific environments over time and imbibing the norms of that social context. Unlike social capital however, one observes a particular characteristic feature of cultural capital that distinguishes it from social capital given that it “cannot be accumulated beyond the appropriating capacities of an individual agent; it declines and dies with its bearer (with his [sic] biological capacity, his [sic] memory, etc)” (Bourdieu, 1986: 245). This distinction lies in the inability of cultural capital to be collectively owned, unlike social capital, which can be “owned jointly by the parties in a relationship”; hence the death of one party does not limit the use of the social capital accrued to the other (Nahapiet and Ghoshal, 1998: 244).
The term cultural capital was coined by Bourdieu to explain the cultural differences that reproduce social class\textsuperscript{13} divisions, and his analyses of cultural capital dealt extensively with its development through family systems and on the possibility that it can both be acquired as well as inherited. For Bourdieu, cultural capital presented itself at the outset as a "theoretical hypothesis which made it possible to explain unequal scholastic achievement of children originating from the different social classes by relating academic success...to the distribution of cultural capital between the classes and class fractions" (1986: 243). In addition, Bourdieu’s discourse lays emphasis on the important role played by social class in the development of the cultural capital of individual actors. Invariably, it can be argued that the value of an individual actor’s cultural capital is determined by the level of exposure afforded the actor by his or her social class. It will therefore be expected that an actor’s cultural capital would have extensive value-adding potentials at a wider group level when there is exposure to different cultural environments and interaction among individuals belonging to different social classes. The introduction of an actor into a new organization would thus imply that the actor possibly brings along a set of resources which may or may not be readily available within his or her new environment and at the same time, the possibility exists for such individuals to further develop their own cultural capital. The latter is possible in instances whereby the individuals find themselves working over an extended period of time in an environment with good leadership and a conducive corporate/organizational culture (Newell et al., 2002).

Although critical views would suggest that there is a difficulty in establishing a unit of measurement for cultural capital\textsuperscript{14}, this does not diminish the values that can be obtained through its possession. However, cultural capital, as a ‘legitimate’ competence, presents the possessors with advantages such as those arising from qualifications obtained (i.e. the institutionalised form of cultural capital) as well as from the social origins of the individual. In the case of the latter, the cultural capital builds and endures for the period of existence of an individual (in the embodied

\textsuperscript{13} Social class is understood here within the context of the definition ascribed to it by Bourdieu, whereby it is defined as "a class of identical or similar conditions of existence and conditionings" (Bourdieu, 1990b: 59).

\textsuperscript{14} As Bourdieu (1986) himself explained, the existence of cultural capital as a symbolic capital with no economic basis for its quantification, makes it acceptance rather awkward.
state). According to Bourdieu, "by considering the relationship between the social
world and works of culture in terms of reflection, external analysis, in contrast,
directly links these works to the social characteristics (the social origins) of their
authors or of the groups for whom they were really or potentially destined and
whose expectations they are intended to meet" (1993b: 180). As such, one observes
that cultural capital allows actors to develop an appreciation of the values that exist
in the groups or communities to which they belong. Whilst not discounting the
possible negative experiences that may arise from phenomena such as social
exclusion, cultural capital can also provide the opportunity for individual actors to
identify with the group through a sense of belonging that arises from affiliation with
the norms of the group. Furthermore, provided there is a supportive environment, it
affords individuals the opportunity to contribute the valuable resources that accrue
from their different societal backgrounds to such collectivity.

3.2. Development of Resources through Communities of Practice

Although the concept of communities of practice is discussed in the preceding
chapter, this concept also plays a crucial role in understanding how resources
constitute a source of competitiveness for organizations as it highlights "the extent
to which knowledge and learning are situated in work practices" (Swan et al., 2002:
477). As demonstrated in the previous chapter, communities of practice allow for a
broader consideration of how knowledge is made actionable in practice through the
process of learning and knowing. It was also noted that knowledge is not possessed
equally by all members of any given community, consequently the tendency for
some individuals to isolate or be isolated by other individuals is reduced and the
possibility of achieving competitive advantage increases through aggregation of
collective knowledge (Duguid and Brown, 2001; Anand et al., 2002). Not only can
knowledge be differentially distributed within a community but also across
communities within an organization. The existence of a number of communities
within an organization is summed up by the notion of multiplex systems. These are
described by Portes (1998) as systems where individuals are bound together to
create an avenue through which an intense community life is established. Brown and
Duguid (1998: 97) elaborated on this in the context of communities of practice by
stating that, “most formal organizations are not single communities of practice, but rather, hybrids of overlapping and interdependent communities”. These overlapping and interdependent communities thus constitute the multiplex system of communities with the possibility for actors to belong to any number of communities within the system.

The existence of communities or groups in a multiplex system as described above, coupled with differential distribution of knowledge, is important to understanding resource sharing amongst individual actors within specific environments. As members of defined communities or groups, each actor has access to the resources residing in their respective communities. Furthermore, by belonging to more than one community, certain individuals act as boundary spanners who are able to move across the various communities thereby contributing to the leakage (or sourcing) of knowledge and information (see Conway, 2001). Knowledge leakage, in this regard constitutes a positive action and in terms of boundary structures, the boundaries spanned across communities may differ to those of formal organization units. In addition, it can be argued that at the point of boundary spanning, “competence and experience tend to diverge” (Wenger, 2000: 233). This divergence is itself a condition considered to be required for facilitating knowledge sharing. Brown and Duguid (1998) further view the possibility for participants to broker between communities as theoretically valid as this brokering or boundary spanning would result in the development of inter-communal relationships that “allow the organization to develop collective, coherent, synergistic organizational knowledge out of the potentially separate, independent contributions of the individual communities” (Brown and Duguid, 1998: 97). Therefore, by maintaining a flux of participants in the multiplex communities of an organization, the participants are able to jointly define what constitutes knowledge in their given contexts. Furthermore, interconnectedness is sustained between the groups or communities, thereby increasing the propensity for knowledge exchange and learning, and thus the development of community resources (Wenger, 2000).
3.3 Comparing Social Capital, Cultural Capital and Communities of Practice

From the ongoing discussion, it is evident that whilst social capital, cultural capital and communities of practice are all social interaction concepts, they are quite distinct from one another. They differ in orientation in terms of their focus on individualism or collectivism. However, by reviewing the definitions and characteristic features of these concepts, it is possible to identifying important similarities in the constituting elements, which thus allows them to be considered through a single lens for practical applicability in research (see Table 3.1 below).

<table>
<thead>
<tr>
<th>Concept</th>
<th>Definitions</th>
<th>Key Features</th>
</tr>
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<tbody>
<tr>
<td>Social Capital</td>
<td>“made up of social obligations (&quot;connections&quot;)” (Bourdieu, 1986:243)</td>
<td>Interactivity</td>
</tr>
<tr>
<td></td>
<td>“aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (Bourdieu, 1986: 248)</td>
<td>Interactivity, Mutuality, Identity (Recognition)</td>
</tr>
<tr>
<td></td>
<td>“the sum of resources, actual or virtual, that accrue to an individual or group by virtue of possessing a durable network of more or less institutionalized relationships of mutual acquaintance and recognition” (Bourdieu and Wacquant, 1992: 119)</td>
<td>Interactivity, Mutuality, Identity (Recognition)</td>
</tr>
<tr>
<td>Cultural Capital</td>
<td>“theoretical hypothesis which made it possible to explain unequal scholastic achievement of children originating from the different social classes by relating academic success...to the distribution of cultural capital between the classes and class fractions” (Bourdieu, 1986: 243)</td>
<td>Interactivity, Identity</td>
</tr>
<tr>
<td></td>
<td>“can be acquired, to varying extent depending on the period, the society, and the social class, in the absence of any deliberate inculcation, and therefore quite unconsciously” acquisition (Bourdieu, 1986: 245)</td>
<td>Interactivity, Unconscious acquisition</td>
</tr>
<tr>
<td></td>
<td>“It cannot be accumulated beyond appropriating capacities of an individual agent” (Bourdieu, 1986: 245)</td>
<td>Value limited to individual agent</td>
</tr>
<tr>
<td>Communities of Practice</td>
<td>“group which needs to work together for its dispositional know-how to be put into practice” (Brown and Duguid, 1998: 96)</td>
<td>Interactivity</td>
</tr>
<tr>
<td></td>
<td>“grow out of a convergent interplay of competence and experience that involve mutual engagement” (Wenger, 2000: 229)</td>
<td>Mutuality</td>
</tr>
<tr>
<td></td>
<td>“groups of people informally bound together by shared expertise and passion for a joint enterprise” (Wenger and Snyder, 2000: 139)</td>
<td>Identity</td>
</tr>
<tr>
<td></td>
<td>“groups of people who share a passion for something that they know how to do, and who interact regularly in order to learn how to do it better” (Wenger, 2004: 2)</td>
<td>Identity, Interactivity</td>
</tr>
</tbody>
</table>

Table 3.1 Comparison of Concept Features
By reviewing various definitions accorded to social capital, it is possible to identify three main defining features, which are ‘interactivity’, ‘mutuality’ and ‘recognition’. These features arise from considerations of networks in terms of its constitution as opposed to its structure, based on the possibility for networks to be constituted by either task related or non-task related interactions (see Conway, 2001). While interactivity is used here to denote a degree of interaction and communication among actors, mutuality denotes the interdependence and existence of common or binding interests among actors. Identity denotes a belongingness that results from shared interests and personal histories developed in the context of specific communities (Wenger, 1999). In the case of social capital, identity is also indicative of recognition, in which instance an actor is able to identify with the resources possessed by other individual actors.

The main defining features identified for cultural capital draw from Bourdieu’s (1986) description of the concept. These are expressed as the possibility for it to be acquired unconsciously and in the notion that the value of cultural capital is limited to individual agents. In addition to these features, identity and interactivity are also observed in the actual process of acquiring cultural capital, as they relate to actors belonging and participating in social classes. Finally, going by definitions from Brown and Duguid (1998), Wenger (2000, 2004), and Wenger and Snyder (2000), one observes the key defining features of communities of practice as; interactivity, mutuality and identity.
From the above diagrammatic representation, one observes that there are certain characteristic features of each concept that are common to either one or both of the other concepts under consideration. The common features that transcend all the concepts are interactivity and identity, coupled with mutuality which is common to both social capital and communities of practice. It is thus possible to employ each of these characteristic features in order to understand how any of the social interaction concepts impact upon the propensity of individuals to share knowledge. However, a more practical consideration of these social interaction concepts, which may be classified as resource concepts, is achievable by taking the identified features as a point of departure for research purposes and considering the features through an overarching framework, where they find convergence rather than individually through their distinct conceptions. This is the goal set out in the following section, in which the concept of the habitus is reviewed with a view to establishing a framework that brings these features together.
3.4 *The Habitus*

The concept of the habitus is one that was extensively developed by Pierre Bourdieu whose work, as already shown, dealt with theories of social practice (see Jenkins, 1992). Bourdieu employed the term habitus to explain a socially constituted cognitive capacity of agents and the impact of their beliefs and dispositions in fields of practice in relation to their capital. Although habitus is a Latin word that literally "refers to a habitual or typical condition of the body" (Jenkins, 1992: 74), Bourdieu's original use of the notion of habitus was in the rendering of Panofsky's works and to consciously dissociate himself from what he termed the structuralist paradigm:

At the time, the notion of habitus allowed me to break away from the structuralist paradigm without falling back into the old philosophy of the subject or of consciousness...By taking up the old aristotelian notion of *hexis*, converted by scholasticism into *habitus*, I wished to react against structuralism and its odd philosophy of action. (Bourdieu, 1985: 13)

Bourdieu's reaction to structuralism and its 'odd philosophy of action' is perhaps best illustrated through his theory of practice which is geared towards transcending the dualism existing between subjectivism and objectivism as he demonstrates in *Outline of a Theory of Practice*. By introducing subjectivism into the construction of objective reality, he further positioned himself at the middle ground to overcome another perceived duality in the form of structure and agency. To this end, Bourdieu (1990a) argues that the construction of social reality is not an isolated process but is subject to structural constraints, which themselves are socially constructed, having a 'social genesis' and also involving individual and collective enterprise. He also argued that the notion of habitus is purposeful in affirming "*generative capacities*" for dispositions as it emphasises that the capacities possessed by agents to be creative, active and inventive, are not those of a "transcendental subject in idealist tradition, but that of an acting agent" (1990a: 13). In essence, social reality is viewed as being jointly determined by the acts of agents as well as by structural constraints, and it is this joint determination of social reality that Bourdieu reflects on in developing his conception of habitus.
The usage of the term habitus by Bourdieu was thus backed by a theoretical intention, which was "to get out from under the philosophy of consciousness without doing away with the agent, in its truth of a practical operator of objective constructions" (1985: 14). As with his other concepts, the notion of habitus allowed Bourdieu to dissociate himself from what can be referred to as 'theoretical theory', or simply put, theory for the sake of theory. Rather, Bourdieu attempted to ground his theoretical ideologies in everyday life experiences by constantly applying his concepts within the framework of empirical studies. The habitus thus offers a potentially important benefit to the understanding of social learning processes as it allows a move from considerations of theoretical abstractions to social praxis.

For Bourdieu, the habitus explains the relationship between the historical past and the actors nature given the description of the habitus as "history turned into nature", in which case the 'unconscious' denotes a "forgotten history" that is itself produced by the incorporation of "the objective structures it produces in the second nature of the habitus" (1977: 78). In essence, the actor's past is described as "yesterday's man... who inevitably predominates in us" and "yet we do not sense [him] because he is inveterate in us" (1977: 79). Thus, an actor's past, presented by historical experiences, becomes deeply rooted within the individual and whilst having been established through objective structures, it possesses the capability for subjective influences in the present and future. Bourdieu thus aptly described the habitus as "that which one has acquired, but which has become durably incorporated in the body in the form of permanent dispositions" (1993a: 86).

For a clearer understanding of this concept, it is expedient to consider the scope of the defining words used in describing the habitus, to review the various uses to which it can be subjected, and also its mode of operation. In order to articulate what the concept of habitus encompasses, Bourdieu makes use of the word disposition in which the habitus is defined as systems of dispositions. For Bourdieu, disposition "expresses first the result of an organizing action, with a meaning close to that of words such as structure; it also designates a way of being, a habitual state, (especially of the body) and, in particular, a predisposition, tendency, propensity or inclination" (1977: 214). The term disposition, as a state of thing that only manifests
itself under certain specific conditions, along with the emphasis on the body thus provides a basis for the concept of habitus to transcend the Cartesian dualism. By bringing cognition into account, the habitus allows us to grasp how the intangible may result in identifiable effects. The habitus also provides a basis for explaining causal interactions between feelings and structural/material actions. Furthermore, the system of disposition is viewed to be practice oriented and to embody the past, the present and the future. According to Bourdieu, it is “a past which survives in the present and tends to perpetuate itself into the future by making itself present in practices structured according to its principles” (1977: 82). The interaction of the past, present and future in the system of dispositions thus introduces a dimension of reflexivity to the concept of the habitus.

Furthermore, by constructing the habitus as a system of dispositions that can be acquired, and that function as “categories of perception and assessment” as well as “organizing principles of action” Bourdieu argues that it is possible to constitute social agents in their “role as the practical operator of the construction of objects” (1990a: 13). Hence, the habitus is constructed as a socialized subjectivity, in which instance, the habitus provides an understanding of the connection between social space, capital and individual identity (Everett, 2002), and as such provides a sociological alternative for understanding common sense cognition and the tendency for individual actors to employ experiences in decision making.

Although the habitus is described as being incorporated in the body, it does not exist in stasis but rather, by being chronologically perpetuated, it is constantly subjected to experiences that may result in it being changed. As Everett noted, “the habitus is also always changing because the experiences to which habitus is constantly subjected are many and varied, most are reinforcing, but many are modifying” (2002: 65). He further stated that this capability for change is essentially due to a change in the character of the field and also because of changes in capital within the field.

Bourdieu describes fields as competitive arenas in which individuals operate and also noted that, “capital does not exist and function except in relation to a field”
Bourdieu and Wacquant, 1992: 101). One is thus confronted with the possibility for a relationship between the resources of individuals, their dispositions and their field of play. This is to say that changes in the capital resources of individual actors, such as those through knowledge acquisition for example, as well as changes in the environmental context would have a change defining impact on the habitus. In particular, the relationship between the habitus and the field is described as mutually determining as the field not only structures the habitus but the habitus also structures the perceptions of the field (Everett, 2002).

3.4.1 The Habitus in relation to other Social Theories

Because as a concept, the habitus was originally proposed in order to reconcile structure and agency, it is expedient to consider other social theories which were devised for a similar purpose. Other social theories that have been proposed to address the structure agency debate and attempt to reconcile the two include; structuration theory, actor-network theory, and activity theory. This section provides a brief précis of these theories in a bid to outline how they differ from the Bourdieu’s habitus. The first of these, to be considered is Giddens’ structuration theory.

Structuration theory, like the notion of habitus, is geared towards transcending structure and agency. This theory however does so by making sense of structures which are defined as “organized sets of rules and resources” that govern social action (Giddens, 1984: 25). In this regard, the theory explains that the rules and resources which determine social action are at the same time responsible for the reproduction of structural systems, by means of modalities drawn from social actors (Jones et al, 2000). The structure, as rules and resources, is particularly distinguished from the social system, as the former is said to be “marked by an ‘absence of the subject’” while the latter comprises “the situated activities of human agents, reproduced across time and space” (Giddens, 1984: 25).

Giddens further describes the duality of structure as a notion in which “the structural properties of social systems are both medium and outcome of the practices they recursively organize” (1984: 25). That is, structure is viewed to be both constitutive
of everyday action and reproduced by the action itself (Held and Thompson, 1989). In which case, structure provides for the binding of social practices into social systems, which can be both enabling and constraining with respect to human action (Edwards, 2000). In essence, the discussion of structure-agency, in structuration theory, tends to emanate from a focus on structure and its reproduction. This said however, it is noted that the emphasis by structuration theory on “circularity rather than linearity of causality” is shared by the habitus, which also emphasises in common with structuration theory, “social self organization”, and “the role of human actors as creative beings, exercising agency within constraints” (Morrison, 2005: 319). As such, a prominent similarity observable between structuration theory and the habitus is the temporal considerations of human activity.

Although the habitus shares a number of commonalities with structuration theory, there is also a significant distinction. According to Ritzer (2006), the habitus provides a major alternative to structuration theory. This is because structuration theory focuses on the mutual constitution of structure and agency, in which case the theory suitably allows for analysis of the interrelationship between the two. Bresnen et al (2005) also subscribe to this view as they regard the principal concern of structuration theory as addressing “the relationship between the individual and society” (2005: 551, emphasis added). On the other hand, by placing an emphasis on the perceptions of actors and their role in constructing their social world, the habitus stresses the ability of ‘individual actors to invent and improvise’ within the structures of their routines (Ritzer, 2006). As such the habitus addresses structure-agency more from the perspective of the agent since social actors are regarded as playing a more dynamic role in the construction of objects, and shaping of the society, which in turn informs the habitus.

Another social theory which attempts to reconcile structure and agency is Actor-Network Theory (ANT). The three main proponents of this theory were Michel Callon, Bruno Latour and John Law. The scope of ANT is considerably broad as the notion of social is regarded as a “patterned network of heterogeneous materials” which not only includes human interactions and artifacts, but also focuses on language and discourse thereby “granting equal citizenship to a range of disparate and heterogeneous elements” as active participants in the network process (Nicolini
et al, 2003: 19). As a consequence, ANT is viewed as providing new perspectives on sociological methods through analysis of “managerial power and organizational technologies” (McLean and Hassard, 2004: 516).

One of the central approaches to ANT is the sociology of translation, first addressed by Callon and which is described as a “new approach to the study of power” (Callon, 1986: 198). The notion of translation emphasises continual displacements and transformation of goals, interests, and subjects of research. Translation is described as the mechanism by which the social and natural worlds take form. This mechanism is determined by four ‘moments’ which constitute different phases of translation vis-à-vis problematisation, intressement, enrolment, and mobilisation. Each of these moments is viewed to possess the possibility for overlap with one another and together they represent phases “during which the identity of actors, the possibility of interaction and the margins of manoeuvre are negotiated and delimited” (Callon, 1986: 203).

What is apparent in the sociology of translation is the focus on mechanisms of action between agents and their interactions with material objects. According to Fox (2000: 865), ANT can play a particularly significant role in elucidating “detailed force relations amongst concrete practices and tangible materials”, thereby bringing to fore the issue of power and power relations in practice. This is quite different from the habitus, whose main preoccupation is with predispositions of agents and how action is influenced by these sets of dispositions.

The third social theory to be considered in this section is activity theory which is described as “deeply contextual and oriented at understanding historically specific local practices, their objects, mediating artifacts, and social organization” (Engeström, 1999: 378). Engeström also describes activity theory as not only focusing on the creative potential in human cognition but also seeking to explain qualitative changes in human practices over time. Activity theory attempts to reconcile structure and agency through its construction of activity systems. An activity system is said to constantly generate actions whereby “the object of the activity is enacted and reconstructed in specific forms and contents” (1999: 381). In activity theory, activities are regarded as social practices oriented at objects. These
objects of activity themselves are constituted by entities which are able to address human needs.

Engeström further elaborates on a perspective of activity theory which he termed expansive learning and defined as a method of “grasping the essence of an object by tracing and reproducing theoretically the logic of its development, of its historical formation through the emergence and resolution of its inner contradictions” (1999: 382). Thus expansive learning can be construed as a cyclic framework for developing abstract conceptions into a concrete whole through the use of artifacts which are not inherently fixed to a specific but may manifest in different forms. As with the habitus and structuration theory, there is also a temporal dimension to activity theory as it seeks to explain changes in human practice over time.

Based on the précis of these other social theories, one observes that there are commonalities between them and the habitus in as much as they are all geared towards reconciliation of structure and agency. It is also observed that each of the theories considered tend to draw significantly on structure, be it as rules and resources or as artifacts that are integral to action of agents. This is in contrast to the notion of habitus, which as I have established in the above section predominantly focuses on the predispositions of actors and how these may determine the strategic actions and subconscious activities of the actors (Bourdieu, 1977). Whilst this is a marked distinction between the habitus and some of these other social theories, each have their own merits that make them particularly suited for specific research. However, in this instance, given the focus of the habitus on actors’ predispositions, the habitus is considered to be better suited for research into understanding the basis for individual knowledge sharing inclinations. This is more so because not only does the habitus attempt to reconcile structure and agency as do the other social theories, but the habitus also focuses on the individual, and allows one to embrace features that are evident in other concepts traditionally associated with knowledge creation and sharing, as mentioned in preceding sections and will be discussed subsequently. Furthermore, because the other social theories have been extensively used in research, the use of the habitus in this research thus presents a form of research novelty.
A number of critical views have been expressed on Bourdieu's use of the habitus and some of these, if not properly examined have the potential to 'dilute' the effectiveness of the habitus both as a concept as well as an analytical tool. For instance, based on the view that learning by modelling may occur out of awareness, Strauss and Quinn critique Bourdieu as laying down "hard-and-fast lines between the "universe discourse" and the "universe of undiscussed" (1977: 168)..." and claim that he [Bourdieu] "believes that the knowledge embodied in the habitus is unsayable because "schemes are able to pass from practice to practice without going through discourse or consciousness" (1977: 87)" (Strauss and Quinn, 1997: 46). However, the quotes cited in this critique are taken from Bourdieu's Outline of a Theory of Practice and when the latter is considered in proper context, it reads, "But the fact that schemes are able to pass from practice to practice without going through discourse or consciousness does not mean that acquisition of the habitus comes down to a question of mechanical learning by trial and error" (Bourdieu, 1977: 87-88).

Here, one notes that Bourdieu addresses a possibility in which the habitus may be acquired without necessarily discounting 'learning by awareness' as the critique seems to suggest. Indeed, Bourdieu's insistence on the possibility of structured learning through "verbal products" and "practices" (1977: 88) suggests a consideration of both conscious and subconscious learning. In this regard, the ability for schemes to pass through practice without going through 'discourse or consciousness' is facilitated by "systematic application of principles coherent in practice" (1977:88). In essence, where there exist common principles of operation in a group, such as that prescribed by Von Krogh (1998) in facilitating knowledge creation and conversion through organization care, learning can be expected to occur through a tacit socialization process (Nonaka and Takeuchi, 1995).

Another widely held critique of the habitus can be traced to King (2000), who views that there exists a discrepancy between "the progressive, "practical" element in Bourdieu's social theory" and "the implications of the habitus" (2000: 418). By
making a distinction between these two aspects of Bourdieu’s work, King (2000: 422) argues that with his ‘practical theory’, Bourdieu makes significant inroad by overcoming “the impasse of objectivism and subjectivism, or structure and agency by highlighting the virtuosic and indeterminate interactions between mutually susceptible and constraining individuals”. This achievement is however viewed to be counteracted by the introduction of the habitus, which for King, “constitutes a moment of regression into objectivism and, therefore, back into the very dualism of structure and agency” that Bourdieu strives to transcend (King, 2000: 422). In essence, by engaging with the notion of habitus, Bourdieu is considered to have set a deterministic trap that invariably construes agents as being subject to the structure within which they operate (see also Manderson and Turner, 2006).

A slightly different view is however held by Lizardo (2004) and Pickel (2005). Whilst Lizardo (2004) is in agreement that some of Bourdieu’s deployment of the habitus may be deterministic and reductive, he however refutes King’s claim by basing his counter argument on the ‘generative capacity’ of the habitus and makes the point that the claim can only be sustained “when the habitus is seen simply as a passive perceptual and classificatory faculty or when the embodied habitus is simply seen as the docile clay where society leaves its stamp, and not as an active generative matrix of action” (2004: 379). Pickel (2005) on the other hand argues that more could have been done by Bourdieu to provide a clearer and more systematic conception of the habitus, but nevertheless maintains the view that the habitus provides “a promising conceptual linkage” between various dimensions of reality such as “cultural, social, psychological and biological dimensions of reality” (2005: 437). Based on this critique by King (2000) and the counter argument by both Lizardo (2004) and Pickel (2005), again one observes the possibility for distinction between the critique of a concept in itself and a critique of the scope and application of the concept.

Other critiques of the habitus include views that it is deficient in its ability to explain production of practice as well as in its scope of application. The habitus as sets of dispositions is thought to be deficient on the basis that whilst it is described as enabling practice, “it is not clear how dispositions produce practices” (Jenkins, 1992: 79). Jenkins further points out that aside from having a problematic definition,
the habitus is implausible when discussing the collective; "The criterion of embodiment makes habitus a reasonable enough individualistic concept – allowing for its problems of definition – but a wholly implausible attribute of collective or abstract social entities" (Jenkins, 1992: 93). Interestingly however, Calhoun (1993: 67), in his investigation of the scope of application of Bourdieu's concepts identifies the habitus as being able to "fit all social settings".

Finally, in his research, Margolis (1999: 80) based his argument on the notion that cognitive competence "is assignable exclusively to individual agents" and that "Habitus signifies the collective fluency of a form of life". Thus according to Margolis, for conceptual reasons, the "habitus cannot be a cognitive power". This argument however is based on the premise that the habitus is collective and not individualistic. One thus observes seeming contradictions among various critiques of the nature of the habitus. Whilst it is not essential for these critiques to emanate from a coherent position, the seeming incoherence appears to suggest that the habitus as a concept could be weak on multiple fronts. It is therefore necessary to take a closer look at the literature in order to comprehend both the nature and scope of application of the habitus. For instance, if indeed the habitus possesses an individual dimension then going by Margolis' argument, the habitus would be a 'cognitive power', that is, if cognitive power were to be understood as an ability to conceptualise. Furthermore, as Mutch (2003: 392) points out, the habitus "in the sense of durable dispositions to act, has something to offer, if we can find more precise ways of conceiving of its formation and impact. Such ways might...help us examine the impact of previous experience on the ability to negotiate identity and meaning". As such, the subsequent section examines the existence of the habitus in individual and collective forms and also its role in determining practice.

3.4.3 The Individual and Group Habitus

That the habitus exists both in individual and group forms, is made explicit in The Logic of Practice in which Bourdieu describes the class (or group) habitus as "the individual habitus in so far as it expresses or reflects the class (or group)", and went further to state that such group habitus could be regarded as a "subjective but non-
individual system of internalized structures, common schemes of perception, conception and action” (1990b: 60). As Bourdieu not only describes a social class as one with similar conditions of existence but also as “a class of biological individuals having the same habitus”, it becomes evident that whilst individuals possess their own habitus, and belong to a social grouping, such grouping will also have its own habitus which is quite distinct from that of the individual (1990b: 59). Through common ‘schemes of perception’ and ways of doing things, the social class or group develops a group habitus that is based on commonalities of experience, which can be reflected to varying extents in the habitus of the individual members. As Bourdieu further explained, “it is certain that each member of the same class is more likely than any member of another class to have been confronted with the situations most frequent for members of that class” (1990b: 60). This would imply that members of the same class would exhibit a similar habitus, which may be quite different from that of another group, and as such, the possibility exists for an individual from a different group habitus, but in a new environment, to influence that habitus and in the same vein have his/her own habitus influenced with time.

The relationship between the individual and the group habitus is better understood within the context of communities. Bourdieu views the habitus as a “law laid down in each agent by his earliest upbringing, which is the precondition not only for the coordination of practices but also for practices of coordination” (1977: 81). An individual is exposed from childhood to collective dispositions through “manifestations of external necessity” such as “forms of the division of labour between the sexes, household objects, modes of consumption, parent-child relations, etc” that produce the structures of the individual habitus, “which in their turn are the basis of the perception and appreciation of all subsequent experiences” (1990b: 54).

Hence, the group habitus informs the individual habitus in its formative stages, which in turn predisposes the individual to peculiar actions in subsequent experiences thereby helping to shape the group habitus and develop the individual's own habitus by way of an interactive process between the two. This notion is corroborated by Strauss and Quinn (1997: 45) who hold the view that the habitus is not only being structured by objects and practices in the environment but in turn it
“structures public culture as people act, creating new (or recreating old) objects and practices”. Such new practices can emerge from interactions between the habitus of a group and its individuals and those introduced through possibly prolonged involvements of new members into the group. In this regard, when the habitus of an individual, which has been structured in a specific field, is subject to a differential field that has its own group habitus, the possibility exists for the individual habitus to structure the perceptions of that field, thus contributing to the group habitus and thereby determining practice.

As noted in Chapter Two, the role of the habitus in relation to practice is one that has allegedly been subjected to wrongful application in research (Mutch, 2003). Bourdieu is however very clear on this relation as he sees the habitus as producing practice; “The habitus is the universalizing mediation which causes an individual agent's practices” (1977: 79). Warde further expressed the view that for the purposes of empirical work, the notion of practice is “incorporated in the concept of the habitus” (2004: 10). For Bourdieu, the capacity to be creative, active and inventive is affirmed in every individual by the habitus, thereby allowing the habitus to condition the practice the individual engages with (see Bourdieu, 1990a). Similarly at the group level, he notes that it is the “objective homogenizing of group habitus” that “enables practice to be objectively harmonized” (1977: 80). The relationship between the habitus and practice is thus one of consequential occurrence with the habitus playing an enabling role. Bourdieu highlights this enabling role by referring to the habitus as both a “system of schemata of production of practices and a system of perception and appreciation of practices” (1990a: 131). In essence, the habitus not only produces practice but also allows for the appreciation of practice by providing a ‘context’ and ‘space’ in which “tradition and creativity intersect to generate new knowledge” (Von Krogh et al., 2000: 152).

3.4.4 The Dynamic Operation of the Habitus

The operation of the habitus can be likened to a strategic game that may involve both the conscious and the unconscious states of an actor. According to Bourdieu, individuals are predisposed to act in certain ways by virtue of the habitus and the
actions of such individuals may be determined by the extent to which they 'possess' their habitus and vice-versa. He explained this as such; “If agents are possessed by their habitus more than they possess it, this is because it acts within them as the organizing principle of their actions, and because this modus operandi informing all thought and action (including thought of action) reveals itself only in the opus operatum” (1977: 18). In essence, where the habitus is well ingrained in the individual, it manifests as an active and dynamic concept that is evident retrospectively in the accomplished actions of the individual actor. In this instance, the individual may act without recourse to deliberate calculations thus demonstrating the potential for reflexivity of the habitus. That is to say, because the past informs the habitus and manifests as a second nature (Bourdieu, 1977), individuals can take decisions based on prior experiences but in situations where no such experience exists, such individuals would be prone to draw on similar previous experiences and anticipated expectations to consciously determine a course of action.

Structure (or context) also plays an important role in the determination of acts in producing practice. Where practice appears as an explicit realisation of a plan, Bourdieu explains this as being due to the outcome of past experiences coinciding with the current outcome “to the extent (and only to the extent) that the objective structures of which they are the product are prolonged in the structures within which they function” (1977: 73 original emphasis). The individual actor thus acts based on the past experiences, which have contributed in shaping the habitus, as well as in consideration of the specific contexts that inform the decision. Bourdieu further notes that whilst objective intentions and actions should not be reduced to the “conscious and deliberate intentions of their authors” (1977: 73), the tendency for the responses of the habitus to be “accompanied by a strategic calculation tending to carry on quasi-consciously” (1977: 76) should never be ruled out. The habitus is thus able to function as a “matrix of perceptions, appreciations, and actions” that culminate in individuals being able to achieve “infinitely diversified tasks” whilst at the same time contributing, through its hysteretic effect, to the possibility for individuals not to take advantage of potential opportunities (Bourdieu, 1977: 83 original emphasis).
3.5 The Habitus as an Action Tool for Research

In discussing the various social interaction concepts, several characteristic features were identified as being common to the concepts and it was noted that there is the possibility of identifying a single concept to serve as an overarching framework. This was the set goal in reviewing the habitus as a concept. In particular, the choice of the habitus as the overarching research concept stems from the probable inability of any of the three resource concepts to sufficiently act as an appropriate tool in the management of knowledge. For instance, research has demonstrated that "the community of practice is not always an appropriate knowledge management tool" and that in order to effectively manage knowledge, additional mechanisms must be developed (Roberts, 2006: 637).

As demonstrated in the above review, the habitus possesses a unique ability to determine practice, through interplay of individual experiences, environmental and structural contexts, along with perceptions and actions of actors, which may occur unconsciously or quasi-consciously. Although the original definition of the habitus refers to 'a typical condition of the body' (Jenkins, 1992), its conception by Bourdieu as dispositions, to designate a way of being, allows it to transcend both the notions of mind and body, and to therefore serve as a useful tool for applying theoretical concepts within the framework of empirical studies (Bourdieu, 1977, 1985). Furthermore, the individual and collective existence of the habitus confers on it the capability to act as a conceptual research tool at both micro and meso levels of organization and management research (Özbilgin and Tatli, 2005).

The possibility for this dual existence of the habitus is also indicative of how the habitus may manifest in the various social interaction concepts discussed earlier in this chapter. In Table 3.3 below, the three social interaction concepts have been classified as resource concepts due to the fact that these concepts can serve as resources for the individual actor or within the community to which the actor belongs. The characteristic elements on the other hand are also relational elements as they facilitate individual relations and constitute integrative features in generating the single framework for research purposes. Given the fact that the habitus exists
both in individual and collective forms, the habitus not only facilitates an exhibition of the elements common to the individual but also the elements applying to the collective concepts.

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<tr>
<th>Resource Concepts</th>
<th>Relational Elements</th>
<th>Decision Factor</th>
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<tbody>
<tr>
<td>Social Capital</td>
<td>Interactivity</td>
<td>Habitus</td>
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<tr>
<td>Cultural Capital</td>
<td>Mutuality</td>
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<td>Communities of Practice</td>
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<td>Limited Value</td>
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Table 3.3 Integrating Resource Concepts through the Habitus

The diagram above is inspired by the basic concept of set theory. As mathematics itself is viewed to draw "its inspiration and motivation from the language of man, from the mental habits of man" and indeed from "the thought processes of man" (Lightstone, 1965: 15), it would seem very appropriate to use the notion of 'mapping' to demonstrate the relationship between the habitus and the resource concepts. The relationship between the resource concepts and the habitus as a source of individual decision making can be represented as a 'many-to-one' mapping in which case the habitus is related to more than one resource concept, that is, the habitus acts as the 'second term' of more than one ordered pair in the mapping through the characteristic relational elements that are facilitated by the habitus and which in turn manifest in the resource concepts. As such the habitus plays an integral role in the social capital and cultural capital resources available and utilised.
Specifically, the role of the individual habitus is evident in cultural capital through the individual agent's capacity for appropriation, which infers an individual's cognitive awareness for decision making. Furthermore, the group habitus of the individual, which results from membership of specific social classes (Bourdieu, 1990b) is indicative of the sense of belonging that is fostered through mutuality and common identity, which are both key features in communities of practice and in the process by which social capital is actioned. Considering the common identifiable features of social capital, cultural capital and communities of practice, i.e. interactivity, identity and mutuality, there is an implicit inference of engagement between individual agents and collectives, which may serve to determine an individual actor's disposition and course of action in practice.

All of these features are summed up in the habitus, which provides the means for interaction between the individual's past, present and future (through anticipated outcomes). By viewing the habitus as sets of (pre)dispositions of the individual actor, which also act in concert with objective structures of the contexts that inform practice (Bourdieu, 1977), one is able to understand the intricate involvement of the habitus in the production of practice and specific actions. Therefore, as is the case for this thesis, one can engage the habitus not only as a theoretical concept but also as an empirical tool in investigating how individuals come to decisions on sharing their knowledge resources.

3.5.1 Application of the Habitus in Research

As noted in the preceding section, there has been an increased engagement by English speaking researchers in theoretical debates on the notion of the habitus. This, according to Lizardo (2004) is aided by the dissemination of Bourdieu's writings in Anglophone academy, albeit, a selective and uneven distribution with the incorporation of Bourdieu's work being moulded to suit the theoretical and epistemological tastes of respective institutional establishments. It would seem that
this relatively nascent engagement with Bourdieu's theory, coupled with such critiques of his concepts as considered above, might be responsible for a drought in instances of applications of the habitus in research. This is not however to say that the notion of habitus is not being applied in empirical research across different fields. One such area has been in gender studies; in education (Dumais, 2002) as well as in industrial relations (Sayce, 2006). Other research areas of application have been in relation to studies of; communities of practice (Mutch, 2003), the knowing in practice approach (Gomez et al, 2003), the practice of public service (McDonough, 2006) and ethnography of social interaction among law students (Manderson and Turner, 2006).

Both Dumais (2002) and Sayce (2006) take a feminist perspective in applying the habitus to their research. Their application of the habitus is based on the view that the durable dispositions acquired by individuals is not only accompanied by a notion of stability but is gender-related. Bourdieu (1984) himself acknowledges that gender (sexual) properties play a definite role in social class, although he sees the distinction as less prominent as one moves up the social hierarchy. As such, whilst in her research, Sayce explores how women's differential access to [symbolic] capital can facilitate "positional progress within hierarchical gender-stratified industrial relations" (2006: 468), Dumais was able to investigate the role of the habitus in enabling academic success by using quantitative methods in which she controlled for the effect of the habitus by operationalizing it "as students' occupational aspirations" (2002: 51). McDonough (2006) on the other hand draws on the existence of the habitus as social (or group) habitus, which is jointly shared by members of a collective, in order to demonstrate that through the embodiment and reproduction of daily practices, "front-line workers' narratives reflect a public service habitus" which predisposes them to pursue public good over private interests (2006: 630). Gomez et al (2003), Manderson and Turner (2006) as well as Mutch (2003) all draw on the social attribute of the habitus in their application of the concept. For example, Gomez et al used the notion of social habitus to demonstrate that "the particularity of Chef A's habitus, as opposed to that of others" enables an understanding "of why chefs are chefs" and how they attain a "high level of excellence" (2003: 118). They thus manage to synthesise the notion of social habitus.
and practice by making the point that the social attribute of the habitus is attainable in that “it depends on interactions with others in practice” (2003: 119).

Three trends are observable in all the instances of application mentioned above: i) the habitus was used in almost all the instances to interpret data gathered in the research, ii) the habitus was used in conjunction with one or more other concept, such as, cultural capital (Dumais, 2002), social capital (Manderson and Turner, 2006), communities of practice (Mutch, 2003), practice (Gomez et al, 2003), and field and capital (McDonough, 2006; Sayce, 2006), iii) and possibly most interesting is the fact that in none of these cases was the unit of analysis the individual but were; groups (boys vs. girls – Dumais, 2002; chefs and cooks – Gomez et al, 2003; involvement in work unions – Sayce, 2006), social interaction (relationship among pub managers – Mutch, 2003; relationship among attendants at coffee houses – Manderson and Turner, 2006), and the community (public service – McDonough, 2006). Notably, in all instances of application, collection and analysis of data was predicated on the existence of the habitus in group (social habitus) form. In addition, the last two points are of particular interest because while the first of the two is indicative of precedence in using the habitus in conjunction with other concepts, the second is indicative of the novelty of this research in its excursion into the relatively uncharted territory of application with the individual as the unit of analysis.

3.6 Conclusion

The thrust of this second literature review chapter has been to bring together several social interaction concepts into a framework that would allow for the exploration of individual action in the social process of knowledge sharing. This has been achieved through a detailed consideration of three social interaction concepts, which have been classified as resource concepts, and identifying the constitutive elements of these concepts. The chapter also presented a detailed consideration of the concept of habitus and critiques to which it is subjected. Furthermore, in identifying the constitutive elements of the resource concepts, it was possible to map these onto the habitus which thus serves as an integrating concept for these elements and thereby enables its utility as an overarching framework for this research.
Chapter Four

4. Methodology and Methods

4.1 Introduction

An essential part of managing knowledge is the ability to understand why and how actors may decide whether or not to share the knowledge they have acquired through diverse sources and to understand how such knowledge might be harnessed, at the micro (individual) level among individual actors and within an organizational context. Research into knowledge is one that has particularly been faced with a persistent difficulty in arriving at a consensus on what knowledge is (Calhoun and Starbuck, 2003). In addition, there is also the difficulty in addressing the problem of resolving related methodological issues that can be employed to facilitate a better understanding of knowledge research (see Swan and Scarbrough, 2001). One such research methodology issue would be the difficulty of research into the reasoning guiding individual action in making decisions to share knowledge, and the underlying factors that govern such reasoning.

In order to proceed with the discussion on the methodology and methods adopted in this research, it is worth reiterating the aims and objectives of the research, as set out in the introductory chapter. The principal aim of the research has been specifically identified as to explore the dynamics of knowledge sharing in organizations from the perspective of individual agents. In so doing, the research draws from the proposition that the cognitive awareness of individual agents play a crucial role in the way knowledge is shared. It was also noted that this aim was identified in order to gain insight to the reasoning behind the actions of individuals on sharing their knowledge and expertise. As outlined in the preceding chapter, the research employs a multi-concept theoretical approach in which the habitus serves as an overarching framework. To achieve the objective of understanding the dynamics entailed in individual knowledge sharing decisions, the central research questions posed were: what factors are responsible for the knowledge sharing decisions of individuals in an
organization?, and more explicitly, why would individuals share (or not share) knowledge within an organization environment?

In this chapter, I outline the basis for employing an interpretive approach in the empirical studies by discussing the factors that contributed to determining the methodology and methods used in designing the research. This ranges from ontological and epistemological considerations to practical issues that were addressed in the course of research design and implementation. The chapter is divided into five main sections discussing the challenges that arose from implementing the research method of choice as well as the practical considerations taken in order to ensure a well founded empirical research. The opening section sets out to establish the justification for the research perspective taken and as such the choice of a qualitative analysis method for implementing the research.

The next section is a discussion of the process of securing research access with the ensuing difficulties encountered. The subsequent section goes on to highlight the research context by providing justification for the selection of construction as the industry context. The section also presents an overview of the case organization. This is followed by a section describing the constitution of the data source, and the alternative operational methodologies – specifically, the different data collection techniques that could be used to implement the research. I also establish the basis for using the in-depth interview technique as the data collection method of choice along with the strengths and limitations that can arise from the use of the technique in data gathering. The section further discusses the ethical considerations that arose due to the choice of in-depth interviews and the attempts made to ensure proper ethical protocol was observed throughout the collection of data. Finally, the concluding section details the coding process; explaining how the research codes used in data reduction were derived and applied, and the justification for the use of a manual coding method as opposed to the use of data analysis software such as N6 or NVivo.
4.2 Research Perspectives and Justification for a Qualitative Approach

There are a variety of different epistemological positions which legitimize their own distinctive ways of engaging with management and doing management research. (Johnson and Duberley, 2000: 177)

The above quote by Johnson and Duberley is supportive of occurrences in present day management research, that is, the eclectic nature of management and organization studies has given rise to an influx of a variety of theorisations and research practices from other disciplines such as philosophy, sociology, psychology etc. Furthermore, the implication of this eclectic nature is that the different epistemological positions are useful in order to get a more complete grasp of social reality (see Morgan, 1997). In addition, Morgan and Smircich (1980: 491) noted that, “the case for any research method...cannot be considered or presented in the abstract, because the choice and adequacy of a method embodies a variety of assumptions regarding the nature of knowledge and the methods through which knowledge can be obtained”. It will thus be expected that the choice of research method in any particular research would be governed by the epistemological position assumed by the researcher, which in turn is determined by some specific ontology to which the researcher subscribes and thereby shaping the ways in which the research is executed.

In a bid to demonstrate the impact of paradigms on sociological thinking and based on a reading of Thomas Kuhn’s *The Structure of Scientific Revolutions*, Burrell and Morgan (1979) established a framework in which the dominant approaches that governed sociological thinking could be located. They identified four contiguous but separate paradigms, each of which results in different approaches to social analysis. That is, within each of these paradigms, there exists different epistemological positions, and each position represents a perspective which holds different research implications for academic research. The four paradigms relate to two axial dimensions that are based on different meta-theoretical assumptions. These axes are the subjective-objective dimensions and the sociology of regulation-sociology of radical change dimensions. The paradigms thus described by these dimensions are;
radical humanism, radical structuralism, interpretative sociology and functionalist sociology. Each paradigm is argued to be "mutually exclusive" of one another and together they provide a basis by which "contemporary social theory" may be established (Morgan, 1979: 138).

According to Johnson and Duberley (2000: 80), the "incommensurability thesis" proposed by Burrell and Morgan, along with the "recommendation for separate intellectual development" of the various paradigms is the reason for so many debates between proponents of incommensurability on the one hand and those in support of more conceptual relativism on the other hand. For instance, proponents of pluralistic views argue that there should be dissolution of meta-theoretical boundaries between paradigms (Johnson and Duberley, 2000). In order to overcome the extensive debates on paradigms, Hussey and Hussey (1997) proposed a broader categorisation of research paradigms into two, phenomenological and positivist. Morgan and Smircich further related these two research paradigms to the subjectivist-objectivist debate, by noting that assumptions about ontology and human nature are essentially captured in ways that define epistemological and methodological positions, and also that by looking at subjectivism and objectivism as existing as a continuum, a "case for qualitative research...begins as one departs from the objectivist extreme" (1980: 497). In essence, ontological assumptions which view reality as a "concrete structure" at the objectivist end of the continuum tend to manifest through positivistic epistemological stance and research methods, while ontological assumptions of "reality as a projection of human imagination" manifest through phenomenological epistemology (Morgan and Smircich, 1980: 492). In between these two extremes is an array of ontological and epistemological assumptions that are then manifested in the research methods employed.

Positivism may be alternatively referred to as quantitative, objectivist, experimentalist, scientific or traditionalist paradigm while the phenomenological paradigm is also known as qualitative, subjectivist humanistic or interpretivist paradigm (Hussey and Hussey, 1997). Being at one extreme, positivism excludes statements of subjectivism, intentionality and appropriation of meaning in research, rather it seeks objective causal explanations for social science phenomena (Denzin,
Ontological assumptions that lie towards the subjectivist end of Morgan and Smircich's continuum on the other hand, manifest in perspectives that tend to consider human action as playing an involved and therefore a subjective role in the research. This is also reflected in approaches such as realism, existentialism, constructivism, and hermeneutics (Thompson et al., 1989).

In the above discussion, I have highlighted how Burrell and Morgan (1979) arguably demonstrated that there are fundamental paradigms that form the basis for social theory, and that it is possible to view the paradigmatic debate as emanating from ontological assumptions which fall within a subjectivist-objectivist continuum (Morgan and Smircich, 1980). It is also evident that the nature of the metatheoretical paradigm to which the researcher implicitly subscribes shapes the way in which research is executed (Morgan, 1979; Morgan and Smircich, 1980). Furthermore, by viewing metatheoretical paradigms as the first of three paradigmatic levels (Morgan, 1979), it is possible to conceive incommensurability of paradigms at the metatheoretical level and at the same time observe commonalities in research method approaches based on an inclination towards a subjective epistemological stance.

Ontological assumptions towards the subjective end of Morgan and Smircich's (1980) spectrum would suggest that reality is subjective and that man plays a crucial role, in concert with other contingent factors, in determining the constitution of the environment and occurrences within that environment. This is a view to which I subscribe and it is in light of this view that the interpretive/phenomenological paradigm, as described by Hussey and Hussey (1997) is considered to be most appropriate for this research. The practical implications being that to investigate the factors determining the knowledge sharing decisions of individuals, it becomes pertinent to employ a methodological approach that would highlight the dynamics of human action in the decision making process and the interpretations ascribed to occurrences which help to shape the individual decisions, hence the case for a qualitative approach in data gathering and analysis.
4.3 Gaining Research Access

Given the widely acknowledged difficulty of securing research access, especially with business organizations, the search for a relevant organization for the purpose of this research began six months into the PhD research. Due to the centrality of knowledge management and social interaction to the research, the initial focus was on organizations in the finance and consulting sectors. The primary reason for this is that both sectors may be classified as consisting of knowledge intensive firms and rank high in employing knowledge workers. An additional impetus for selecting finance and consulting sector was my personal experience in the banking industry and keen interest in consultancy. Based on Davenport's (2002) definition and for the purpose of this research, the knowledge worker is regarded as an individual with a high degree of education or expertise whose work primarily involves the creation, distribution and/or application of knowledge.

The process of securing access began with drawing up a research proposal that was tailored to suit the anticipated interests of business organizations. That is, the proposal was an abridged version of that submitted for the PhD but with less academic content and more explanation on what the practical implications of the findings would be for the participating organization. An introductory letter\(^\text{15}\) was sent with the research proposal along with my resume, to the following organizations: Accenture, Barclays Bank, Cap Gemini Ernst and Young, Citibank, KPMG, Deloitte and Touche, Booz Allen Hamilton, Goldman Sachs International Ltd, HSBC, and Morgan Stanley. All of these companies had offices in the UK and the initial contact was with the London offices. The Internet proved to be a very effective tool as the contact details for all these companies were found by carrying out a web search.

Another avenue that was explored in gaining research access was the Knowledge and Innovation Network (KIN) which is a network of senior knowledge management practitioners within knowledge firms, run by academics from the Warwick Business School's Innovation Knowledge and Organizational Networks

\(^{15}\) See Appendix I for the sample introductory letter.
unit (IKON), and the University of Leicester School of Management. Details of the nature and requirements of the research were submitted for publication in the January 2004 KIN news bulletin but no interest was shown by the KIN members.

With the exception of two, all the companies contacted declined access and this necessitated widening the field of consideration. Given the above description of the knowledge worker, the search was extended to Oil and Gas companies, Construction companies and other organizations that essentially employed individuals with high levels of expertise and who by virtue of their work, had to interact and exchange knowledge with their colleagues. In the case of one company, I was required to contact the head of the knowledge management department who was situated in the US and correspondence was maintained by telephone contact. For a period of eight months (June 2003-February 2004), I had regular correspondence with the head of the knowledge management department of one consulting outfit and this was the most promising prospect until access was eventually declined on the basis of ongoing ‘reorganizations’ within the company.

4.4 Basis for Selecting the Construction Industry as Industry Context

Although construction was not the first industry context chosen for investigation in this research, it was however one of the few selected for consideration due to the knowledge-intensive nature of construction work. The choice of this UK industry was further deemed appropriate due to developments in the industry in the past two decades. These developments led to an economic downturn and a consequent renewed interest by all stakeholders to develop best practices and ensure equitable management of industry knowledge. This in turn led to the publication of a number of reports such as the Latham (1994) report and the Fairclough (2002) report, which focused on facilitation of R&D and innovativeness in the industry sector.

The UK construction industry accounts for ten percent (10%) of the country’s gross domestic product; it employs about 1.4 million people and in terms of output, is considered to be among the world’s strongest, featuring in the global top ten.16 This

underlines the economic importance of the industry to the UK and given its nature as an investment-led sector, it also offers a plausible explanation for the susceptibility of the industry to economic downturns.\textsuperscript{17} Indeed, the industry was a victim of the recessions in the mid 1980s and early 1990s, in which there were major declines in construction volumes. According to King (1999), a major contributory factor to the decline of the industry in this period was its litigiousness, which arguably resulted from factors such as inefficient practices. In his words, “In the UK, disputes surrounding major projects such as Canary Wharf and the Channel Tunnel came to exemplify what many saw as the decline of a once magnificent industry which had built an Empire”. It was this industrial downturn, particularly in the 1990s that launched the need for greater awareness and communication of best practices in the industry.

Due to its sheer size and complexity, the industry employs a very diverse workforce that includes designers, architects, civil engineers, component and product manufacturers, and contractors.\textsuperscript{18} The industry is also considered to be highly labour intensive, which explains the proposition by Ives et al (2004), for the suitability of labour productivity as a measure for determining industry competitiveness. The importance of the labour workforce to the industry is also evident in the Latham report (Latham, 1994) which points to the fact that only a fraction of the industry’s 1.4 million employees work in large corporations. At the time of the report, “the construction industry contained 200,000 contracting firms with only 12,000 employing more than seven people” (1994: 7). That is, in spite of the massive size of the industry, only six percent (6%) of the representative firms could boast of more than seven employees. Hence, the industry can also be said to consist of a ‘dispersed’ workforce.

In addition, government reports point to the fact that the UK government has consistently played a major role in the construction industry through its infrastructure investment programmes, which in the late 1990s was instrumental in the reversal of the decline that was being experienced by the industry.\textsuperscript{19} The main

\textsuperscript{17} http://www.corporatewatch.org/?lid=262 visited 19 Oct 2005.
agencies and organizations that are very much involved in the construction industry activities include; the Department of Trade and Industry (DTI), and the Department for Transport Local Government and the Regions (DTLR), both of whom play key roles in policy formulation at the national level, and Constructing Excellence, which is a non-profit making organization formed in response to the Latham and Egan reports. Constructing Excellence is aimed at delivering a “streamlined approach to the delivery of construction industry reform, and offers the industry the first point of contact for information and activities on construction improvement techniques".  

A significant implication of the ‘dispersed’ industry workforce is the inevitable existence of an industry sector that requires considerable networking; to maintain cohesion, to allow for the transfer of best practice, and hence ensure knowledge distribution. Even with government support, this has been a major challenge for the stakeholders. Owing to the nature of industry, coupled with the recent events that led to active involvement of government in the industry to facilitate the management of knowledge and best practice, the UK construction industry thus presents an interesting case for understanding how knowledge distribution is ensured among its members.

4.4.1 The Case Organization: An Overview

Fourteen months into the research and with little leads to follow, there was increased apprehension about organization access. This was more so as the original time schedule set for field research and data collection was to span the period between January and September 2004. However, through a network contact, I became aware that Construct Co. had a technology centre, which had previously entertained academic research, albeit, in engineering. By emailing my research proposal to the R&D and technical knowledge manager of Construct Co., and arranging a follow up meeting, research access to the case organization was secured in the space of one month.

31 See Appendix II for the original time schedule set for the duration of the PhD. This was later amended to accommodate a move from full-time to part-time studies.
Two specific reasons were identified for Construct Co.'s interest in my research proposition. The first had to do with the belief by the R&D and Technical Knowledge manager, that socialisation is very important to the knowledge management process. This belief, presumably, was informed by the outcome of a particular research that had been carried out with the organization by another student. In that research, it was identified that the organization as a whole did not sufficiently engage in socialising. The second reason for the interest in this research stemmed from the fact that Construct Developments, a sister company to Construct Co., had recently acquired two other companies. The company was interested in how best they might exploit and consolidate the networks inherent in the acquired companies and given my masters dissertation on mergers and acquisitions, the manager was keen to explore my line of thought on this.

The parent company of Construct Co. is Construct Ltd and this was established in 1921 with the initial company operations solely focused on building working-class homes in the UK. Since this beginnings, the organization has established itself as a leading developer of sustainable communities of high quality homes and although the organization still has home-building as its primary business focus, it is also very active in other areas of construction and in facilities management for clients. The company employs over seven thousand people worldwide, with the main markets located in the UK and North America. The UK outfit employs about 4,600 employees in three sister companies: Construct Developments (2,928), Timberwood (140) and Construct Co. (1,532). In the 2006 financial year, the revenue generated by Construct Co. was £550.6 million with a profit before tax of £8.1 million. This represents a revenue increase of £51.4 million over the preceding year\(^\text{22}\), and is indicative of the increasing commercial viability of the company.

The company prides itself in actively demonstrating corporate social responsibility, not just within the community it operates but also among its employees. Speaking on employee-related issues, the 2003 annual report states, "We strive to be an attractive company for talented and motivated people in which high levels of personal and

\(^{22}\) Figures obtained from the company's 2006 financial report and accounts.
company performance will be recognised and rewarded... We aim to create efficient working arrangements, personal development opportunities and promote a challenging and fulfilling working life”. In a bid to achieve these aims, the company not only involves itself in initiatives to improve practices within the sector, but also embarks on knowledge management initiatives within the organization with a view to enhancing the sharing of knowledge and best practices among its employees. Furthermore, the organization carries out periodic employee opinion surveys, which serve as feedback concerning the views of employees on the actions of the organization as well as to inform formulation of company policy and decision making. One of the initiatives carried out by the company is subsequently examined in the next chapter, along with documentary evidence gathered from the last employee survey23 conducted before the commencement of this research.

4.5 Data Source and Technique for Data Collection

To facilitate the research, the nature of data sought essentially focused on relationships, interactions and networks. This included the networks both established and mobilised by organization employees. As a result therefore, the primary sources of data were individual employees in the organization and the data were drawn from their personal experiences. The aim of collecting such data was to enable a contextualisation of the flows within networks of relationships resulting from socialisation and also to articulate the reasons governing different individual actions in relation to sharing knowledge. Data collected included the types of relationship existent between individuals in the organization and investigations into contributions from external actors, which might have had any bearing on the task performance of respondents. In addition, by collecting data on how respondents related to individuals both within their teams and other teams, there was the possibility of assessing the impact of interaction on knowledge exchange across different units.

Furthermore, by undertaking an instrumental case study of a single organization, it was possible to carry out a case examination, which provided specific insight into the issues under consideration (Stake, 2000). In essence, the rationale for carrying

23 The 2003 Employee Opinion Survey Result was made available courtesy of the knowledge manager.
out a single case in this instance owes to the usefulness of the approach both in identifying commonalities of a case as well as the unique attributes of the case (Stake, 1995). By studying individuals in Construct Co. as a single case study, it was possible to gather specific in-depth data on the factors behind the knowledge considerations of the respondents. This approach also offers the possibility for identifying and developing related cases through the instrumental case approach (Stake, 1995, 2000).

As explained in the section 4.2 above, given the epistemological position taken in this research, a qualitative approach was considered to be best suited for carrying out the empirical investigations. According to Miles and Huberman (1994), the strength of data collected by the qualitative approach lies in the ability to gain insight into the meanings individuals place on their lives, through emphasizing their 'lived experience' and connecting such meanings to the social world. The next task therefore was to determine which qualitative approach would be most suitable for data gathering.

By considering previous research, it was observed that a variety of data collection methods have been used in carrying out related research on knowledge and social interaction. The researchers employed one or two techniques to varying extents, often using one technique to gather preliminary data and another for the actual research. For instance, in using the survey technique, questionnaires were sent by post to collect relational and non-relational data (Tsai and Ghoshal, 1998). Others used internal mail to disseminate questionnaires which were followed up with selective face-to-face interviews (Hansen; 1999, 2002), unstructured/semi-structured interviews and documentary review (Tsoukas and Vladimirou, 2001), and telephone interview using open-ended questions (Lahti and Beyerlein, 2000).

4.5.1 **Interviewing as Choice Method of Data Collection**

As noted above, a number of different methods have been used by researchers in carrying out similar research in relation to knowledge and social interaction, with the use of interviews as a common method of data collection. According to Yin
In choosing to conduct a case study research, the most frequently used methods of data collection are; "documentation, archival records, interviews, direct observations, participant observation, and physical artifacts". From the discussion of the habitus in Chapter Three, it was noted that the concept consists of both a cognitive and a social dimension which allow for considerations of conscious and subconscious activities of actors. Invariably, this implies that any number of data collection methods can be employed in collecting data relating to the habitus, dependent on the which aspect of the habitus is of interest in the research. Because the focus of the research is on individual predispositions in practice, the options of a suitable principal method of data collection can be reduced to any of three; ethnography, observation (participant and non-participant/direct), and interview.

Ethnography is described as involving an “ongoing attempt to place specific encounters, events and understanding into a fuller, more meaningful context” (Tedlock, 2000: 455). Since both ethnography and (participant) observation share the same belief that a first-hand understanding of the world requires the researcher to be actively involved in the researched, the two methods share similar strengths and are also susceptible to the same weaknesses (Silverman, 2001).

The advantages of ethnography and observation include; the ability to study events in real time and as such within the context of occurrence, as well as provision of insight to personal behaviours and motives (Jorgensen, 1989). The shortfalls on the other hand range from the time consuming nature of the methods, with the consequent heavy investment of man-hours on the part of the researcher, to obvious biases that arise as a result of the researcher’s active involvement (Yin, 2003). Yin also finds interviews to be insightful and ‘targeted’ as they focus directly on the case study topic. However, the interview technique suffers from response bias whereby respondents may provide information based on their perception of the researcher’s interest.

Evidently, each method of data collection has its own strengths and weaknesses. As such, in deciding on a method for collecting data on the habitus, ethnography and observation will be better suited to collecting some aspects of data than interview, whilst interview will be better suited for collecting data on other aspects of the
habit. For example, data relating to the subconscious actions of agents and the implications of such actions may be better collected through use of ethnography and observation techniques whilst data relating to explicit strategies and decisions can be better collected through use of interviews. However, in reviewing previous instances of application of the habitus (see Table 4.1 below), one observes that with the exception of Dumais (2002) which used secondary data collected by survey, in all the other examples, data was predominantly collected from primary sources using some form of interview technique. Whilst this is not necessarily an indication that the interview method is best suited for researching the habitus (and none of the previous research applying the habitus make this argument), the decision to use interviews in collecting data was guided by three factors.

First, given the research interest in understanding the 'how' and 'why' of individual action, the method utilised had to make a good attempt at capturing elements of the habitus that are represented by both conscious as well as subconscious activities. Since the outlined objective was to collect detailed information on both the past and ongoing experiences of respondents, the interview method presented itself as a very plausible option. A second factor in the choice of interviewing for data collection is research precedence; all the qualitative research listed in Table 4.1 below employed the interview technique in one form or the other, and even in the case of Manderson and Turner (2006) who conducted an 'ethnographic study', one observes that the bulk of data collected was by interviewing participants at the coffee house. This hints that the interview approach might be appropriate, if not necessarily ideal, for collecting certain types of data on the habitus. Finally, another factor that played a part in the selection of interview, over ethnography for instance, related to limitations of the study, such as difficulty in securing prolonged access which is relevant to both ethnography and observation.
<table>
<thead>
<tr>
<th>Example of Application of Habitus</th>
<th>Source of Data</th>
<th>Method of Data Collection</th>
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</thead>
<tbody>
<tr>
<td>Manderson and Turner (2006)</td>
<td>Primary</td>
<td>Ethnographic interviews</td>
</tr>
<tr>
<td>McDonough (2006)</td>
<td>Primary</td>
<td>In-depth (unstructured) interviews</td>
</tr>
<tr>
<td>Mutch (2003)</td>
<td>Primary</td>
<td>Interviews (supplemented with documentary analysis, observation and survey)</td>
</tr>
<tr>
<td>Sayce (2006)</td>
<td>Primary</td>
<td>Semi-structured interviews</td>
</tr>
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Table 4.1: Collection Methods used in Research Applying the Habitus

Of the different interview methods, the option of in-depth (unstructured) interview was taken, as it was believed this would yield the desired type of data. In the first instance, an interview offers the opportunity for interviewers to actively engage with both the respondents and the collected data. According to Holstein and Gubrium (1999: 106), 'active interviews' also create the opportunity to give greater attention to "the ways in which knowledge is assembled than is usually the case in traditional approaches". I believe that such active engagement is particularly made possible in this research by making use of in-depth interviews, which is described as a "science of subjective experience", where science is seen as "a systematic method of constructing knowledge and reporting the phenomenon studied" and subjective experience here refers to the respondents lived experience (Paget, 1999: 81).

In addition, in-depth interviews provide the opportunity for researchers to systematically investigate the experiences of respondents based on the specific accounts given by the respondents themselves. Through in-depth interviews, as an interviewer, one is also presented with the opportunity of redressing areas of concern arising in the course of the interview and to seek clarifications. As Johnson (2002: 106) further explained, in-depth interviews begin with "commonsense perceptions", "explore contextual boundaries" and strive to "penetrate to more reflective understandings" about the nature of experiences.
In the case of this research therefore, by using the in-depth interviewing technique, it was possible to get respondents to talk extensively about their specific experiences that involved acts of knowledge exchange or the lack of knowledge exchange, as the case may be, and to get them to reflect on what factors influenced their actions or inactions in the specific instances, thereby generating data that would enable analysis of the thoughts and considerations taken into account by respondents in making knowledge sharing decisions. This possibility to further probe responses given by respondents, and in so doing encourage reflexivity to gain additional insight to the meanings behind respondents’ statements, makes in-depth interviewing particularly attractive.

Arguably, one of the strengths of in-depth interviews is that they have the capability of producing their own content. They are subject to raising different questions and exploring different issues from one interview to another (see Hussey and Hussey, 1997). This could also prove to be a pitfall for the researcher given the constant possibilities for the interview to go off on a tangent to the initial scope set out for the research. It was however possible to mitigate this potential pitfall by drawing up a theory-driven schedule of interview questions, which served as a guide to ensure that all the pre-identified areas of investigation crucial to the research were addressed.

Finally, in order to ensure a high quality of collected data and given the exploratory nature of the research, a form of storytelling was employed as an effective tool to elicit additional information from respondents, where applicable. Storytelling is a proven tool in executing management research as it is not only a tool for eliciting relevant information from respondents but also serves as a phenomenon by which knowledge can be preserved within communities (see Orr, 1996; Gabriel, 2000; Tsoukas and Vladimirou, 2001). On the whole, by making use of storytelling, it was possible to ask respondents to recount specific experiences that could help clarify or buttress their statements and also to guarantee a clear understanding of attributed meanings through the given illustrations.

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24 See Appendix III for the Interview schedule.
The fieldwork was carried out in two stages; the first stage consisted of five preliminary interviews and a second stage in which the remaining twenty-two interviews were conducted. These preliminary interviews are distinct from the common notion of pilot studies, which act as 'pre-tests'. The term 'pre-test' may be defined as a trial run used to assess some part of an instrument or procedure (Vogt, 1993). Where pilots are used in trial runs (pre-tests), it is essentially recommended that they do not form part of the final sample as they might influence the later behaviour of research subjects (Haralambos and Holborn, 2000). In the case of the preliminary interviews however, these interviews did not serve the purpose of trial runs as there was no intention of further interviewing the respondents involved, rather they constituted an actual part of the ongoing research. All the respondents were interviewed individually, with each interview tailored towards addressing the same overarching research questions.

A total of twenty-seven interviews were conducted with respondents from three principal locations. The first few respondents were determined in conjunction with the knowledge manager to whom the factors guiding the choice of samples had been explained. The subsequent sample of interview respondents were however determined through the snowball sampling technique (Miles and Huberman, 1994). All the interviews were conducted and recorded by myself as the investigator on a face-to-face basis, with the exception of one, which was conducted via telephone and recorded by a special recording facility. The inability to interview this respondent in person was essentially due to logistic reasons and the losses in advantage of 'contextual naturalness' and 'symmetrical distribution of interactive power' were compensated for by the advantages such as 'reduced interviewer effects' (see Shuy, 2002). Also, as the data collected in all the interviews were from different sources and at different periods in time, it was possible to have a form of data triangulation (Easterby-Smith et al., 1991).

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25 Appendix IV gives a general breakdown of the respondents' details such as available demography, work history and cite locations.
Whilst twenty-seven interviews might be considered in some quarters as being a small sample size for a doctoral thesis, this number of interviews was deemed to be both adequate and sufficient to meet the requirements of the empirical research as a lot of valuable data was collected, as each interview had the capability to create its own content (Paget, 1999). Content creation in this sense is as a result of in-depth interviews being “contextual rather than abstract in their organization” (Paget, 1999; 83). In which regards, the interview evokes the specific experiences of the respondent. Although the interview sessions were broadly guided by an interview schedule prepared for the purpose, each interview developed along with answers given by respondents, which in turn generated subsequent questions. In a qualitative research interview, “the interviewee is seen as a ‘participant’...actively shaping the course of the interview rather than passively responding to...pre-set questions” (King, 2004a: 11). As such, by actively engaging the respondents in the interview process, questions were generated in the course of the interviews which often required the respondents to be more explicit about particular scenarios or to provide more details about certain lines of thought. In addition, where a respondent tended to lay emphasis on, or deliberately brush aside, particular issues and these are perceived to have possible bearing on the research, then the opportunity was there to steer the conversation in that direction thus making each interview unique in its content.

Furthermore, many researchers are rather ambiguous on the number of interviews that should be conducted for specific researches and as Johnson explained, “The number of interviews needed to explore a given research question depends on the nature of that question and the kind or type of knowledge the interviewer seeks” (2002: 113). For this research, the research question was exploratory in nature and sought to address the intricacies that governed the choices of respondents, hence the centrality of individual experiences. He also stated that there is no specific set answer for interview counts and cites Glaser and Strauss as recommending that interviews should be conducted “until a state of theoretical saturation is achieved” (2002: 113). Even this state of ‘theoretical saturation’ is not specified and is rather ambiguous. As such, the decision on sufficiency of interviews is often at the discretion of the interviewer. The content of each interview conducted was
considered to be sufficient in as much as all the key areas outlined for investigation in the interview schedule were covered. Since respondents were being asked to discuss their personal experiences, in which case the respondents were given the opportunity to be reflexive in discussing their work and social relationships, the majority of the respondents were very keen to give illustrations to corroborate their views thereby contributing to the richness of data collected.

The interviews averaged forty-five minutes each; the longest one lasted for ninety minutes and the shortest interview lasted for almost thirty minutes. Many researchers have expressed the fact that the interview technique does have its own concerns, for instance, it is believed that the social categorisation of interviewers in terms of social stance, occupation or family status for example, could influence the way respondents relate to interviewers (Finch, 1999; Warren, 2002). It is also possible that the personality of the respondents could influence the way such respondents responded to interview questions, in which case the more gregarious respondents readily contributed to the interview conversations as opposed to those that were less so. These social categorisation and individual personality influences could either work in favour of the researcher or against the researcher.

In order to mitigate any possible negative influence, as a researcher, I was required to draw on my interpersonal skills to ensure a favourable and conducive atmosphere for each interview. For instance, where dealing with a less gregarious respondent, there was a need to be more proactive in asking probing questions in order to elicit answers that went beyond monosyllabic responses. However, whilst it was possible to apply one's skills in managing the course of interviews with variously disposed individuals, it was impossible to control the physical environment during the course of the interviews. In another instance, despite conducting the interview in an enclosed environment, due to the structure of the building, there was a lot of interference picked up by the tape recorder and this adversely affected the clarity of the recording26. Despite the seemingly 'bad' quality of these two interviews, very useful specific data were still obtained from both sets of interviews upon data reduction. Furthermore, it was possible to avoid a recurrence of the latter example

26 See Appendix V for this interview.
because all the interviews were reviewed immediately and efforts made to transcribe them as soon as possible after the interview process (Miles and Huberman, 1994).

4.5.3 Ethical Considerations in Using In-depth Interviewing

In making use of in-depth interviews for the purpose of research, a number of ethical issues arise, which must be adequately dealt with. Such issues have been identified to include; confidentiality, truth telling, informed consent and keeping promises (see Johnson, 2002). Each of these issues were encountered and addressed in one form or the other in the course of the research. To begin with, once research access was granted by the organization, the process of arranging the interviews involved either telephoning and/or e-mailing respondents to introduce the research to them and to schedule an interview period that would be conducive for them. This was done in spite of the fact that each of the respondents had already been informed of the research by my contact within the organization. The reason for this initial contact and introduction was essentially to avoid the feeling on the part of the respondents, that they had been ‘roped’ into participating in the research, and also to give the respondents some sense of control over the interview process.

At the commencement of each interview, the respondents were assured that all correspondence would be treated in strict confidence and where necessary, this was reiterated at different times in the course of the interviews. This essentially had the effect of making some respondents more relaxed and willing to air their thoughts without fear of repercussion. The need to reiterate the issue of confidentiality was more important, seeing that all the interviews were being documented through audiotape recording. As Warren (2002: 91) expressed “not only might turning on a tape recorder alter the ensuing conversation...but the meanings of audio- or videotaping may be different to different respondents”, so whilst getting a verbatim record of the interview contributes to the validity and meaningfulness of the analysis (Johnson, 2002), it may cause the respondents to be extremely cautious in their utterances. As a result of this, from the onset of each interview and before the tape recorder was brought out, the issue of strict confidentiality was explained to each respondent. Permission was also sought for the use of the tape recorder with the
accompanying explanation of how no one else would have access to it and how it would make 'my work much easier'.

Throughout the course of the interviews, it was imperative to maintain a reasonably open mind and to be truthful with the respondents as any suggestions that I was being less than honest in anyway could cause the respondents to clam up and reduce the extent of their openness. To this end, each interview commenced with exchanges aimed at establishing a good rapport with the respondents and giving them background information about the research and about myself. I also made sure that I did not make any promises to the respondents, which I would not be in a position to keep. The one promise made to the organization, and which has been kept, was that a report would be submitted at the end of the research, detailing all the findings as applicable to the organization and how some of the issues raised may be addressed for optimal output from the respondents.

4.6 **The Coding Process and Data Reduction**

The actual transcription of interviews conducted lasted over a period of eight weeks. In order to further allow for familiarisation with the context of each interview, each transcription was personally carried out by me. Furthermore, for two principal reasons, a manual coding process was selected as an alternative to the use of analytic software packages such as N6 or NVivo. Firstly the number of interviews conducted was viewed to be sufficiently small as to allow the use of a manual method for coding without giving rise to complications and having to deal with complexities that could arise from the analysis process. Secondly, and following on from the first reason, by coding manually, it was possible to achieve a greater degree of familiarity with the data. The desire to be very conversant with the data was more so seeing that the coding process is itself considered an initial stage of data analysis involving differentiation and combination of retrieved data and reflections on available information (Miles and Huberman, 1994).

In addition, whilst qualitative analysis software programmes can be advantageous in facilitating data reduction, recombination, indexing, easy retrieval and so on, they do...
not actually carry out the analysis process and can often contribute to loss of meaning in specific contexts. Having personally conducted the interviews and the subsequent transcription, manual coding of the collected data constituted a continuous flow in the process of analysis.

King (2004b: 257) defined a code simply as “a label attached to a section of text to index it as relating to a theme or issue in the data which the researcher has identified as important to his or her interpretation”. The actual process of coding was theme-based and involved a thorough review of each interview. The data coding process involved two distinct stages of three step processes each:

**Stage I (Research-led coding)**
1. Interviews were reviewed and comments made on recurrent themes
2. Emic codes were devised based on emergent themes
3. Codes were further divided to enable specific categorisation

**Stage II (Theory-driven coding)**
1. New set of codes were generated based on theoretical framework
2. Relevant quotes identified in stage I were reviewed based on new etic codes
3. Consolidation of etic codes to yield parameters used in analysis

4.6.1 *Research-Led (Emic) Coding*

The coding commenced with the identification of perceived relevant and interesting features in the interview transcripts that had possible bearings in relation to the research question. These were noted down as thoughts and comments beside specific quotes. At this stage, field notes were also added to reflect real-time considerations during the interview process. The purpose of this was in anticipation of later analytic stages where theories from existing literature would be reconciled with the observations from the collected data. This was particularly pertinent since for the purpose of analysis, an interpretive perspective was to be adopted. However, a conscious effort was made to avoid an active consideration of the obtained data in
light of the theories guiding the research. This was so as to avoid coding in accordance with the expected outcome of the research.

The second step in the emic coding process involved identification of commonalities in respondents’ comments, thus making it possible to group the data into five broad coding categories. The emanating themes were: i) social interaction/networks, ii) knowledge related issues, iii) culture related issues, iv) employee disposition to organization activities, and v) reasons for individual actions.

The third step of this stage involved sub-division of codes to enable specific categorisations of respondent comments. As such, for instance, knowledge-related issues were sub-categorised into enabling [KTRF(+)] and hindering [KTRF(-)] factors to knowledge transfer as well as (KTRF) which specified the different ways in which transference of knowledge occurred in the case organization. A full listing of the coding parameters is in Table (4.2).
<table>
<thead>
<tr>
<th>Coding Parameter</th>
<th>Interpretation of Code</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Social interaction/networks</strong></td>
<td></td>
</tr>
<tr>
<td>SNET(+)</td>
<td>Factors enabling social networking</td>
</tr>
<tr>
<td>SNET(-)</td>
<td>Factors hindering social networking</td>
</tr>
<tr>
<td>SNETD</td>
<td>Individual actions on network development</td>
</tr>
<tr>
<td>SNETM</td>
<td>Instances of network mobilisation</td>
</tr>
<tr>
<td>SNETI</td>
<td>Use of internal networks</td>
</tr>
<tr>
<td>SNETE</td>
<td>Use of external networks</td>
</tr>
<tr>
<td><strong>2. Knowledge-related issues</strong></td>
<td></td>
</tr>
<tr>
<td>KTRF(+)</td>
<td>Factors enabling knowledge transfer</td>
</tr>
<tr>
<td>KTRF(-)</td>
<td>Factors hindering knowledge transfer</td>
</tr>
<tr>
<td>KTRF</td>
<td>Modes of ensuring transference of knowledge</td>
</tr>
<tr>
<td><strong>3. Culture-related issues</strong></td>
<td></td>
</tr>
<tr>
<td>CULT</td>
<td>Culture related issues</td>
</tr>
<tr>
<td><strong>4. Employee dispositions</strong></td>
<td></td>
</tr>
<tr>
<td>EMPD(+)</td>
<td>Favourable employee disposition to organization activities</td>
</tr>
<tr>
<td>EMPD(-)</td>
<td>Unfavourable employee disposition to organization activities</td>
</tr>
<tr>
<td><strong>5. Reasons for individual action</strong></td>
<td></td>
</tr>
<tr>
<td>MOTV(+)</td>
<td>Reasons for sharing knowledge</td>
</tr>
<tr>
<td>MOTV(-)</td>
<td>Reasons for not sharing knowledge</td>
</tr>
<tr>
<td>MOTVI</td>
<td>Reasons for engaging in social interaction</td>
</tr>
</tbody>
</table>

Table 4:2 Initial Interview Coding Parameters

4.6.2 *Theory-Driven (Etic) Coding*

The etic data coding stage involved generation of a new set of theory-driven parameters. These consisted of categories that reflected the existing literature on concepts being applied in the research. The logic in moving from an emic to an etic coding perspective (Miles and Huberman, 1994) was to generate a form of parallel coding (King, 2004b) in which the interview segments coded earlier on the basis of respondents' contributions could also be considered in the light of the theory informing the research. The new coding parameters generated were: i) social capital/interaction, ii) network, iii) reciprocity, iv) cultural capital/cultural background, v) academics as a resource, vi) knowledge as context-based, vii) basis
for sharing, viii) workplace dependence, ix) ownership of capital, x) past relationships/relationship benefits, xi) basis for respect, xii) personality issues, xiii) time/ distance effect, and xiv) knowledge as a political tool/resource.

In carrying out step 2 of the etic coding, numerical codes were given to each data item coded. This generic code was represented by AABBCCC where AA = etic coding category (01-14); BB = respondent number (01-27) and CCC = interview page number (001-182). Although both coding stages were conducted independent of each other, on reassessment of the two sets of coded data, considerable overlaps were found to occur between the data sets as exemplified in the following excerpts drawn from the coding document:

1. CULT: Academics as the access key 0514099
2. CULT: Any correlation between individuals' background and inclination? 0527180
3. CULT: CC drawing on personality to establish relationships 0410077
4. CULT: Community atmosphere creates a sense of belonging and personal drive to see project succeed 0424163
5. CULT: Prevalence of organization culture over individual culture. What then does individual culture bring to the organization? 0426174
6. CULT: Qualification as access key but also conferring authority 0508061

In the above excerpt, CULT represents culture-related issues that was coded for in the stage I emic coding. This is followed by the interviewer’s comments, drawn from field notes as well as considerations while reading through the interview transcripts. Finally is the numerical code representing coded data from stage II. As such, in the first instance, the code represents comments made by respondent 14. The comments are located on page 99 of the interviews transcript and was coded under category 5 (academics as a resource). As in the excerpt, which features both etic coding categories 4 (cultural capital/cultural background) and 5, the multiple occurrence of etic codes in the emic categories formed the basis for consolidation of the etic codes in step 3.

The third step in this coding stage involved consolidation of the 14 categories into eight key themes. As King (2004b: 258) observed, there is the possibility of having too many levels of coding which, in attempting to attain "clarity in organizing and

27 See appendix VI for a detail of stages I and II coding categorisations.
interpreting the data”, could result in counter productivity. The earlier mentioned categories were thus regrouped and appropriately relabelled on the basis of similarities in the broad issues they addressed. Table 4.3 shows the consolidated categories and the equivalent step I codes.

<table>
<thead>
<tr>
<th>Consolidated Categories</th>
<th>Equivalent Step I Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Effect of past experiences on resolves to share</td>
<td>(03) reciprocity (10) past relationships/relationship benefits</td>
</tr>
<tr>
<td>2. Past relationships as possible knowledge store</td>
<td>(01) social capital/interaction</td>
</tr>
<tr>
<td>3. Impact of individual attitudes on sharing</td>
<td>(12) personality issues</td>
</tr>
<tr>
<td>4. Role played by organizational environment in ensuring sharing culture</td>
<td>(02) network (08) workplace dependence</td>
</tr>
<tr>
<td>5. Prevailing culture within organization and amongst individuals</td>
<td>(04) cultural capital/cultural background (05) academics as a resource</td>
</tr>
<tr>
<td>6. Perceptions of knowledge as complementary</td>
<td>(06) knowledge as context-based (09) ownership of capital</td>
</tr>
<tr>
<td>7. Active selection of individuals in sharing knowledge</td>
<td>(14) knowledge as a political tool/resource</td>
</tr>
<tr>
<td>8. Reasoning behind individual actions to share</td>
<td>(07) basis for sharing (11) basis for respect (13) time/distance effect</td>
</tr>
</tbody>
</table>

Table 4.3: Consolidated Etic Data Codes

It should be noted that the coded data consisted of block interview quotes that reflected the comments of respondents. The reason for this was to ensure that specific meanings of responses would not be lost at later analytic stages and to ensure that the responses would be analysed within the context they were made. In all, a total of one hundred and eighty two pages of transcribed interviews (ca 108,000 words) were coded. 242 relevant quotes were derived from the two-stage coding process, 88 (40%) of the most illustrative and representative quotes were selected to present the research findings and hence constitute the data analysed in
the subsequent findings and analysis chapters. The distribution of coded data is listed in Table 4.3 under their respective thematic headings.

<table>
<thead>
<tr>
<th>Thematic heading</th>
<th>Proportion of respondents (n=27)</th>
<th>No. of quotes</th>
<th>Quotes used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Past experience as a factor in shaping current resolve</td>
<td>14</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>2. Sustained relationships as a knowledge depository</td>
<td>19</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>3. Individual attitudes, personality and dispositions as impacting knowledge sharing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Friendship ties</td>
<td>15</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>ii. The needs and attitudes of knowledge recipients</td>
<td>15</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>iii. Interactivity tendencies and self-perceptions</td>
<td>15</td>
<td>21</td>
<td>4</td>
</tr>
<tr>
<td>4. Organizational contributions to enabling knowledge sharing</td>
<td>(20)*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Organizational commitment to teamwork and bonding</td>
<td>10</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>ii. Organizational commitment to networking</td>
<td>13</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>iii. Work forums as quasi communities of practice</td>
<td>12</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>5. Individual employee commitment</td>
<td>14</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>6. Perceptions on knowledge and structural implications</td>
<td>(21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Knowledge complementarity</td>
<td>10</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>ii. Ownership of knowledge and disposition to sharing</td>
<td>9</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>iii. Individual positioning and inclinations to share knowledge</td>
<td>14</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>7. Personal interests, intent and motivation</td>
<td>15</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>8. Knowledge sharing as individual and collective strategic tool</td>
<td>14</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 4.4: Data Distribution across Thematic Headings

* With reference to themes 3, 4 and 6, the numbers in parenthesis represent the sum total of respondents that commented on each theme. However, it should be noted that the summation of the number of respondents commenting on the sub-themes do not add up to the sum total as some respondents made comments about more than one sub-theme.
4.7 Conclusion

The focus of this chapter has been to outline the ontological and epistemological assumptions that determined the choice of the qualitative approach and the use of the in-depth interview technique in data collection. The chapter also demonstrates the rigour that went into data collection, and into ensuring a systematic data reduction process. Furthermore, by relating the actual processes that culminated in securing research access and ethical considerations taken in data collection and reduction, it has been possible to demonstrate, in this chapter, the extent of due diligence applied in ensuring an efficacious research.
Chapter Five

5. Industry and Organizational Involvement in Knowledge Management Initiatives

In this chapter, secondary data and documentary sources are reviewed in order to establish a brief overview of the UK construction industry; its background, the current industry trends, the key players and the scope of recent research endeavours. The chapter goes further to highlight the involvement of the case company Construct Co. in a sector-led knowledge management initiative and also a firm specific knowledge sharing initiative. This is done with a view to identify and understand the disposition of the organization to sharing knowledge and also to enable us to interpret the profile of the organization within the framework of industry activities.

One such sector-led initiative considered in this chapter is the development of a knowledge management toolkit by a consortium of industry stakeholders, academics and consultants. By discussing the rationale behind the development of the toolkit along with some of the toolkit's key constituents, I have been able to highlight the extent to which the construction sector is committed to fostering best practice through knowledge sharing. The discussion also identifies possible areas where lapses and/or incongruity exist between practitioner perspectives and theoretical literature that relate to knowledge management and thereby identify the area(s) where this thesis can contribute to the application of theoretical knowledge in fostering knowledge sharing within the organization sector and the company in particular.

5.1 The DTI Construction Sector Unit

The construction sector unit of the DTI is the government's representation in the UK construction industry and is aimed at increasing productivity and competitiveness by encouraging industry contribution to sustainable development and through provision of cases for policy development and regulation, to ensure that policy development is
based on clear understanding of the industry\textsuperscript{28}. Among others, the unit focuses on; research and innovation to bring forward new knowledge, raising awareness through construction best practice programmes, and tackling what it refers to as `people issues'.

As part of its initiatives, the DTI has been responsible for a number of reports within the industry. These include; \textit{Constructing the Team}, a report by Sir Michael Latham (1994), which was a landmark report that made recommendations on how the functioning of the industry might best be improved. Others are the Levene Efficiency Scrutiny (1995) and ‘Rethinking Construction’ by Sir John Egan (1998)\textsuperscript{29}, and ‘Rethinking Construction Innovation and Research’ by Sir John Fairclough (2002), which focuses on R&D as an important driver of innovation, and which also makes some very interesting observations of relevance to knowledge and innovation in the sector. Among others, the Fairclough Report’s review of the government’s R&D policies and practices in the sector identified the innovative capacity of an industry as influencing long-term competitiveness and effectiveness. The report also made recommendations to address problems of institutional learning in capturing innovation for future projects.

Despite the point of note earlier mentioned regarding the importance of the labour workforce to the industry, and the supposed focus on ‘people issues’ by the Department of Trade and Industry, most of the reports that are available in the industry have focused exclusively on policy issues at the institutional level. Even the activities of organizations such as Constructing Excellence (as shall be considered subsequently) tended to be focused at the meso level.

\subsection*{5.2 Knowledge Management in Construction: A Sector-led Initiative}

In a bid to ensure equitable communication of best practice among companies operating in the construction industry, a partnership was set up by industry

\textsuperscript{29} Both of these reports are listed as some of the key reviews of UK construction in a report by the National Audit Office ‘Modernising Construction’ by Sir John Bourn (2001). See http://www nao.org.uk/publications/nao_reports/00-01/000187.pdf
operatives in conjunction with external bodies, to develop a toolkit for managing knowledge in the industry. One of the participants in the partnership was Constructing Excellence, a DTI funded industry led initiative aimed at substantial improvement of performance through cross industry networking and collaboration. Constructing Excellence advocates a need to identify knowledge possessed by individuals, “where it resides and how it can be used to drive business growth ...As well as the need for faster access to information and learning.”30 This, in essence, summarises the basis for the organization’s participation in developing the toolkit. The other project partners in the research included; two consultancy outfits – one, a global consultancy firm and the other a specialist in performance management, knowledge management and best practice; a top ranking Management College, and two construction companies, one of which was Construct Co.

The Knowledge Management Construction Toolkit31 was developed in 2003 for the purpose of introducing some broad concepts and practices to help construction firms improve their knowledge management and was targeted at both beginners and experienced knowledge practitioners. The toolkit provides an overview of knowledge management in the construction industry. Among others, it cites the benefits of managing construction knowledge as leading to a better project management performance due to accelerated learning processes, and as allowing industry participants to move away from price competition through possible demonstration of superior capabilities. That is, the effective management of construction knowledge is viewed as contributing to the development of individuals’ own intellectual capabilities as well as organizational core competences which thus provide an alternative competitive platform to price competition. As such, the toolkit was aimed at enabling practitioners to become better acquainted with the intangible resources in the construction sector and to make more effective use of them.

Whilst the toolkit is very detailed in its content and scope, in reviewing its content in relation to this research, one finds that the toolkit makes some assertions which at best are overly simplistic and uncritical. For instance, there is an emphasis on technology as sustaining expert communities of practice. The toolkit also

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30 http://www.constructingexcellence.org.uk/about/default.jsp?level=0 Visited 21Sept 2004
31 A CD copy of the toolkit was made available for this research courtesy of Construct Co.
emphasises the use of the telephone as a useful method for the transfer of tacit knowledge. In both cases however, one observes a lack of consideration for the role of socialization; in the development of communities of practice as well as in the sharing of tacit knowledge, which implicitly draws attention away from the actual supportive role technology plays. That is, the attention is drawn from the ability of technology to support the communication and search for knowledge (McCampbell et al., 1999), to one of playing a dominant role in the management and sharing of knowledge. From the preceding literature review chapters, one understands that while technology may play a role in supporting communities of practice, the key elements responsible for its continued functioning lie in the individual members and their relationships. One is also aware that whilst technology facilitates communication and easier data transfer, the very nature of tacit knowledge makes any assertion as to the sharing of knowledge through telephone and similar electronic media both impracticable and impossible.

The toolkit further proposes a restructuring of performance appraisals to include questions on the knowledge sharing activities of individuals in order to promote an awareness of the importance of managing and sharing knowledge. However, given the association of appraisals with promotion and salary increases, such an act could prove counter-productive as responses could be subject to falsification in order to ensure excellent appraisals. Yet another point of interest addressed in the toolkit is in relation to informal networks, the purpose of which was viewed to be for collection and transmission of information. This view as expressed in the toolkit presents a myopic view of informal networks as it limits the role of networks to information channelling. It also presupposes that networks are only beneficial to the extent that information can be gained through them, which is in contradiction to the views that networks enable the establishment and development of social relationships through the interaction of its three components, that is, the actors, links and flows (Bourdieu, 1986; Conway et al., 2001). Also, by taking into account the notion that social capital comprise of networks of assets that are mobilised (Nahapiet and Ghoshal, 1998), networks are seen, not just as playing an information-channelling role, but as additionally representing the individuals as well as the resources which they are able to mobilise.
The specific instances considered above are indicative of how oversimplified views of certain concepts coupled with a lack of depth in engaging with such concepts, could result in a shift of focus in the practical application and implementation of theoretical concepts. As demonstrated in the preceding literature review chapters, social interaction plays an important role in the effective management and distribution of knowledge and individual actors are particularly key to these processes. By mainly focusing on technology related issues in the development of a comprehensive knowledge management protocol, the toolkit falls short of achieving all its objectives as it fails to adequately emphasise the important role of social actors and processes, which would invariably impact the way knowledge management issues are addressed. Furthermore, this focus could also be indicative of possible gaps in practitioners’ understanding of the social dynamics involved in the management and sharing of knowledge, which is central to this research. On the whole, however, the toolkit does achieve some of its aims, as it provides a good reference framework for knowledge management practitioners to begin with. Its production is also a demonstration of the commitment of the construction industry stakeholders to ensuring an active involvement of all parties in facilitating innovation through communication of best practice.

5.3 **Company-led Knowledge Management R&D Initiatives**

There have been a number of researches carried out to demonstrate the more socialised nature of knowledge management in the construction industry context. Such research explore the effects of the relationship between structural conditions and agency (see Bresnen et al, 2005), and also show that learning in project settings rely on social patterns and processes (see Bresnen et al, 2003). However, the focus of these researches have been in relation to the community-based approach – another indication of how existing research has been geared towards, demonstrating the importance of collective actions in the management of knowledge. In line with the findings of existing research, this section provides a consideration of the interactivity between organizational structure and human agency, but with specific
focus on individual action. This is achieved through an examination of primary and secondary data on a knowledge management initiative taken by Construct Co.

Prior to conducting this research, there were ample indications that the organization had previously engaged in knowledge related research and development initiatives. The first indication of this came from the contact person through which research access was secured. This particular individual had previously been involved on a number of occasions in conducting research in the field of knowledge management for the organization, albeit this had been from a purely technology/engineering point of view. In addition, it was reliably understood from the R&D and Technical knowledge manager that in the past, the organization had had research students coming in to base their research on the organization. It was one such research, mentioned in the preceding chapter, which acted as an impetus for gaining access to the organization in order to carry out this particular research.

That the organization is also very active in developing innovative ideas to ensure effective knowledge sharing and networking practices among its employers who operate from regionally diverse location, is evident through viewing of the Construct-web. This is the most prominent technological tool developed by the organization for the purpose of intranet service, to facilitate information storage, and to enable forms of data mining. The design of the service is such that it consists of gateway pages which are user-friendly and help users to navigate the information hierarchy maintained on the intranet. The figures below represent two sample gateway pages as illustrated on the Construct-web:
The Construct-web acts as a reference point for guiding regulations within the industry as well as for publications relating to the Acts of Parliament, Building regulatory standards, and Health and safety issues. The major benefits of the Construct-web are identified to include; reduction of time spent searching for information, better informed decision-making processes, and substantial reduction in
paperwork. Although these benefits were highlighted by the organization in its documentation, the seeming importance of the Construct-web as a technological knowledge sharing tool was also evident from the primary data set collected for the research, as is reflected in the following comments:

*We've got like a knowledge base within Construct Co., our Construct-web, that's sort of capturing new ideas, good ideas, information from our technical people, making it readily available to people on site.* (Design Manager)

*We have the Construct-web, without going on for hours about what's on Construct-web, because there are tens of thousands of pages of information on there and including the company procedures because Construct Co. is a procedurally based organization, you need to have a look at that to understand what's on there. Data that goes into technical governance, procedural governance, various other things that we need. It houses on there, most of the things that you need to know procedurally to do your job.* (Senior Design Manager)

As the central idea behind the Construct-web is to give ready online access to a wide variety of information and services, some of which include a technical helpdesk and top tips for best practices, it is expected to serve as the first port of call for employees seeking assistance in resolving problems which they might encounter in the course of their duties. There is also supportive evidence from the primary data set that this is the case among the work employees:

*It's quite useful, yes. I mean, there's enough information there, sometimes you're not fully aware of what exactly is there. ... if I can't find what I'm after, then I'll just ring up either, if it's a particularly big issue and I need some help, then I'll just ring up engineering division.* (Civil Engineer)

*If somebody was on site and they had Japanese knotweed on site, they may not even know that we dealt with it on this project, unless they're in the mindset where they think, oh I need to find out whether anybody else has had this situation and they go on to the Construct-web or something and type in knotweed and see what comes up.*
If they don’t do that, they’re not going to know that there’s anybody else in Construct Co. that’s had experience with it and quite often people can be quite insular and cut off. …I’ve met people recently who perhaps should know a lot more about this project than they do, because of the various technologies and processes we’ve been doing here and these people, that’s their background. They work for the company and yet know nothing about what’s going on in this project, which I find astounding really. (Systems Manager)

In order to sustain the value-adding capacity of the Construct-web and ensure the availability of up-to-date information, project managers are expected to update the Construct-web with information on ongoing activities in their current projects. This includes detailing any problems they might have encountered in project execution and the processes which led to the resolution of such problems. The Construct-web was thus designed by the organization to serve as the primary knowledge sharing tool. Furthermore, its effective functioning was underlined by an assumption which defines the value potential of the construct-web. This is the expectation that individuals will readily contribute to the update of information on the intranet and that employees would actually visit the intranet site to resolve problem issues. The primary data shows this assumption does not necessarily hold in practice. As one respondent explained, some individuals might be more disposed to seeking out requisite knowledge through face-to-face interaction because the Construct-web was not being updated:

I think you would [get value] when we start getting the information on the construct-web – the intranet, but it tends to be your project manager is talking to my project manager at some event and mentions that you might be able to help. (Assistant Design manager)

As another respondent noted, the lack of contribution to the intranet is explainable given two factors vis-à-vis time constraint and lack of realisation of the full potentials of the Construct-web:
People get overwhelmed and fed up with, if you like, forms filling that is required, they say the lessons learnt register and those types of things are another type of form to be filled in. Not until someone has actually benefited from someone else's lessons learnt process will they probably use it. If at some point they have a look at it and actually benefited from it, they're more likely to contribute to it. (Design Manager)

From the primary data and the secondary evidence, it is clear that the Construct-web is set up to function as a boundary object for sharing knowledge gained from practice across different project environments in the organization (Carlile, 2002). It is also observed that the functionality of the intranet as an object fit-for-purpose is wholly dependent on the input of organization employees. Many propositions exist as to why seemingly excellent technological tools often fail to achieve their set goals and one such explanation is the mechanistic view that is adopted by organizations. According to Grey (2005: 120), “The entire notion of a toolkit requires that the objects to which the tools are applied are just that – objects. But they are not, they are people.” In essence, it is important for organizations that desire to effectively manage their knowledge and expertise to realise the value of human agency, possibly over and above the technology they implement. Where this is not the case, it would be expected that even with the availability of efficient toolkits such as the Construct-web, firms still have to grapple with ‘soft’ employee issues, which could effectively nullify the value ascribed to technology. The following section presents a glimpse of this scenario from an employee survey conducted by Construct Co.

5.3.1 Brief Summary of the Key Findings of the Employee Survey

In 2003, Construct Co. conducted an employee survey that dealt with seven main themes which included; customer focus, work environment and culture, communication, management and leadership, personnel development, reward, and job security and satisfaction. The key findings of this survey were presented as a summary result which showed that the company demonstrated significant strengths in areas such as open communication, opportunities for growth and development, and encouragement of innovation and improvement. Of particular interest was the
acknowledgement by employees that at the organizational level, the organization was 'actively' committed to innovation and sharing of best practices. From the employees’ perspective, there is thus an indication of the organization’s desire to enhance both personal and firm-wide productivity.

The survey also identified several areas of major concern and these included; lack of encouragement of individual employees, lack of teamwork/cooperation between groups and lack of employee input in decision making processes. These three areas of concern are however all personnel related issues and do not resonate with the organization’s aims such as ‘the promotion of a challenging and fulfilling work life’. These concerns can effectively contribute to perceptions of a lack of organizational care on the part of the employees (Von Krogh, 1998) and if left unattended, could constitute a major hindrance to the effective sharing of knowledge and best practices.

It was in the immediate aftermath of this survey that access was sought to the organization and given the findings of the survey; the firm presented itself as a good case in which to investigate the factors that determine whether or not individuals share their knowledge and expertise. As an organization operating within a sector that is keen on sharing knowledge and best practices, and as a key participant in many sector-led initiatives geared towards innovativeness, knowledge dissemination and sharing of best practices, the issues raised by the employees’ survey are indicative of a likelihood that in spite of the commitments of the organization, other extraneous factors come to play in determining actions such as cooperation among individuals and teams which could then result in effective knowledge sharing.

5.4 Conclusion

From the foregoing discussion, one notes that the construction industry is one in which stakeholders actively engage with policy-related issues aimed at improving performance in the industry. One also notes that these policies often tend to relate to institutional level activities. In addition, it can be deduced from the nature of the reports that have been published within the industry that there is a need to pay closer
attention to individual capabilities and competences as well as organizational
capabilities in order to foster learning and innovation. This is perhaps best summed
up in a statement made by Constructing Excellence: “The traditional balance sheet is
increasingly regarded as an incomplete measure of an organizations worth, as it
excludes the value of intangible assets known as intellectual capital... [which]
includes the knowledge of employees... businesses therefore need to take a more
coherent approach to managing their knowledge resources”.

Furthermore by examining two specific knowledge management initiatives; one that
involves a consortium of industry stakeholders and another that is exclusive to
Construct Co., one observes a trend which is suggestive of the tendency for
practitioners to mainly focus on the technology aspects of knowledge management
and innovation, to the exclusion of other critical factors such as social interaction. In
addition, from the considerations of the Construct-web as well as the key findings of
the employee survey, a second deduction can be made concerning Construct Co.;
that whilst the organization strives to achieve its aims by putting in place processes
which would encourage innovativeness and knowledge sharing, and setting up
 technological tools such as the Construct-web, there were indications, from the point
of view of the employees, of concerns related to the lack of effective organizational
care; notably, this could have adverse implications on the extent to which
knowledge and expertise is shared within the organization community.

Finally, based on the evidence of the interview data, it can be safely deduced that
although the organization actively engages in developing technological tools to
facilitate knowledge sharing, such tools would not be effective boundary objects
unless the requisite social processes are in place to ensure their functionality. Given
the developments in the construction industry, with respect to increased focus on
innovativeness and sharing of best practices, and the circumstances of Construct Co.
as being technologically proactive but facing concerns over its ‘people’ issues, the
organization was thus well placed as a suitable context in which to carry out
research into understanding the factors that determine whether or not individuals
share their knowledge in the organization.

32 http://www.constructingexcellence.org.uk/about/default.jsp?level=0 Visited 21Sept 2004
Chapter Six

6. Empirical Findings and Analysis I

6.1 Introduction

As noted in Table 4.3 of Chapter Four, from the 27 interviews, a total of 242 data items were coded across the range of responses on the various themes. The most commonly addressed theme was 'individual attitudes and dispositions as impacting knowledge sharing', with comments from 23 of the 27 respondents interviewed (24% of coded data), while the least single theme addressed in the interviews was 'past experience as a factor in shaping resolve' with comments from 14 of the 27 respondents (12% of coded data). In all, 88 of the 242 data items coded (40% of total) are used as representative quotes in the three subsequent chapters in order to present the findings as a form of narrative. In this chapter and the two subsequent chapters, the empirical findings are presented to demonstrate the number of respondents and the frequency of data items coded, with respect to various themes and sub-themes. Each of these is illustrated with representative quotes.

The findings and analyses are also presented in a longitudinal structure so as to align the empirical findings and the analytic format with the conceptual framework being employed in the research. That is, the findings and analysis sections are structured in such a way as to demonstrate the flux between the past, the present and the future considerations of individuals, in line with the definition of the habitus as a system of dispositions that has "a past which survives in the present and tends to perpetuate itself into the future by making itself present in practices structured according to its principles" (Bourdieu, 1977: 82). The ability of the habitus to transcend the past through the present into the future is essentially due to its characteristic as dispositions which are embodied (Bourdieu, 1993a). The habitus particularly allows for a demonstration of the flux between the three time frames as it does not exist in stasis but has the potential to undergo dynamic changes due to the fact that each individual has different experiences over the course of a lifetime, which then contributes to shaping and moulding of the individual’s habitus.
The findings presented along this chronological theme are subject to a tripartite analysis such that those relating to the past are analysed in this chapter followed by a second chapter on the findings and related analysis of respondent considerations in making knowledge sharing decisions in the present and in relation to collective inputs. The third of the three chapters presents findings that allow for an analysis of how consideration of future intent can affect decisions of individuals on sharing knowledge in present circumstances. In each instance, the findings are presented individually and followed by a detailed analysis. The purpose of this segmentation is to allow for a more objective assessment and interpretation of the data. In practice, separation of this kind provides the opportunity for "a clear demonstration of how data can be subject to multiple interpretations depending upon the conceptual framework utilised" (McGillivray, 2003: 93). Furthermore, the value of adopting this structure is that on the one hand, it demonstrates the implicit awareness by respondents, of the resource concepts that they possess, and on the other hand, it draws attention to the interplay of the characteristic elements which define the relationship between the habitus and the resource concepts as discussed in the preceding literature review chapters. As such, by presenting the empirical findings as separate from the analytic discussion, one is able to vividly demonstrate the use of the habitus as a distinctive tool in research analysis.

6.2 The Impact of the Past on Individual Action

This section of the findings details how the experiences acquired, and relationships maintained over time by respondents have a significant bearing on the immediate actions of such individuals. As the research is aimed at gaining insight to the basis for individual action using the habitus, the research utilizes a first order documentation of the findings whereby the collated data are presented on the basis of respondents' dispositions to the thematic issues and instances of perceptions on how the issues bear on the respondent population. In relation to the first of our tripartite structure vis-à-vis 'the Past', 26 of the 27 respondents interviewed expressed views that the past plays some role in guiding their actions.
For the purpose of presentation, the findings relating the past and the present are classified into three groupings which are represented by subsections 6.2.1, 6.2.2, and 6.2.3. In the first of these subsections, the findings relate to the notion that past experiences can positively or negatively shape an individual actor’s resolve to share knowledge. In this regard, the section provides accounts of what roles the past of different individuals play in determining their decisions on knowledge sharing. This is followed by a thematic analysis that explains these accounts by employing the habitus as the analytic lens.

The second subsection addresses the possibility of sustained relationships to act as depositories for knowledge and how such knowledge store might only be functional within the context of an active relationship. From the analysis that accompanies this subsection, one observes a reason for this is the attitudes and dispositions of actors in the relationships. The findings and the ensuing analysis in the third subsection therefore offer an in-depth consideration of how the individual’s own attitude and disposition influences the transference and reception of knowledge. These attributes and dispositions are thus considered in relation to; i) friendship ties, ii) the needs and attitudes of knowledge recipients and iii) self-perceptions and interactive tendencies of individuals.

6.2.1 Past Experience as a Factor in Shaping Current Resolve

One of the key findings of this research is that past experiences affect and shape the resolve of individuals on sharing knowledge. This section documents empirical evidence representing comments by 14 interview respondents (12% of data coded) and demonstrates how the experiences of respondents is a factor in their knowledge sharing predispositions. The presentation of findings is followed by a thematic discussion highlighting the impact of the habitus in shaping such individual resolve.

6.2.1.1 Empirical Findings

In the first instance, empirical evidence from the 14 respondents mentioned above suggests that personal resolve could be as a result of an awareness of the expertise
possessed by other individuals, owing to a previous working relationship. This is reflected in the comments made by R13, a design manager:

My background from engineering department helps in that...my background gives me benefit there, that I know the guys who are the technical people, I know John W., who's in charge of technical support, I know Cathy B., who's on information, so I know them personally, which makes it that much easier if I've got something in my head. I know what their capabilities are, so I know whether it's worth going to them and speaking about it. (R13, Design Manager, November 2004)

In addition to the awareness of expertise possessed by other individuals, the resolve to share what one knows could also be determined by an individual's own personal experience and by virtue of the background to which the individual has been exposed. This is viewed by R02 as possibly having influenced the way one's disposition is shaped and is reflected in the following comments by R02 and R01:

I think it's very difficult to say, it may have done, but I think one of the benefits of a university education is that you grow into a situation where you mix with people from all over the country anyway. Any sort of regional variances that you have tend to get battered out of you within that 3 or 4 years at the university. You tend to be able to mix and mingle better with people there. (R02, Contracts Manager, June 2004)

Any information I have, I'll share with anybody. That's how I have people ringing me up everyday for information, I'll stop what I'm doing and I've got no problems doing that because I know what its like being at the other end of the phone - needing information and not getting it. (R01, Mobile Repair Technician, June 2004)

A closer enquiry revealed that some respondents develop their perception of other individuals as a result of previous personal experiences that determine the manner of subsequent interactions with such individuals. Furthermore, the previous
experiences could either result in the respondents forming a positive or negative opinion, which determines their predisposition towards seeking knowledge from the individuals with whom they have had previous encounters. This was the observation made from a number of responses. On being asked what factors were viewed to affect whether people share their expertise and the way in which they may do so, R12 responded:

Trust I suppose, that’s the key. If you speak to someone and he’s trustworthy and what he says is just and true, no problem. But then again if you speak to somebody who tells you its night when its daytime, and you know that he’s not telling the truth then sometimes you just don’t take them on board. There’s people in this industry, they do it for their own personal gain but they don’t realise that after a while people actually work them out and say well, you don’t tell me the truth anyway, so I won’t tell you the truth either. If you want people to have knowledge shared, you’ve got to be open and honest. If you just share false information, propaganda, after a while people won’t use it anyway, so it’s counter-productive. (R12, Contracts Service Team, November 2004)

From R12’s comment, one observes a tendency for the respondent’s own disposition to be influenced by the perceived nature of interactions with others. The notion that individuals either share what they know or manipulate others to their own ends then plays a key role in the way individuals relate to those who have either aided or have been perceived to manipulate them, three specific instances of this were observed among the respondents. In the case of perceived manipulation, the consequence, as described by R11 could be one of estrangement from the unresponsive individual and as R02 comments in confidence, such estrangement from one individual could serve as the factor which drives potential recipients to source information elsewhere:

Some people withhold information and tell you at the last minute or tell you in front of a crowd of large people so that they’d look good ...I get quite frustrated! ... [next time] I’d get the information elsewhere, I’d probably go elsewhere. (R11, Quantity Surveyor, November 2004)
This is all confidential. The reason they probably wouldn’t go to Steve W. or to Paul G., the guys have gone through that route before, they’ve sent emails to the commercial manager, the project manager, they’ve spoken to them both and they had absolutely nothing back whatsoever. Sometimes no response at all, sometimes a response that isn’t the right response to the person asking the question, whether that is right or wrong, I don’t know. ...So I think people feel they can talk to me because I’ve made that offer and I do try and resolve problems, maybe it’s in my nature. (R02, Contracts Manager, June 2004)

In instances where estrangement does not occur, there is the possibility of very cautious interaction with individuals who are perceived to have dealt in a less than honest manner with respondents in the past and this may lead to situations where knowledge that would normally be shared freely ends up being transacted. This is further illustrated by R11:

I’ve been in situations where I’ve done something with somebody and then they take the credit for all of it as if they’ve done the work but really you’ve done all the work and I find that quite frustrating because you don’t get the credit but I know that I did it, so it’ll be like helping him but noting that I did all the work...if he took the credit for something that I had done, then next time I would take something for it in an attempt to show that it’s my work. (R11, Quantity Surveyor, November 2004)

Interestingly however, it was also observed that in situations where the established relationship between individuals had been favourable, the occurrence of an act which might be counted as unhelpful or as an unwillingness to assist with one’s expertise, may not be sufficient to change an individual’s disposition to another. Not only is it possible for the affected individual to have an unchanged mindset but also to find reasons to justify the other party’s inability to assist. This particular case is exemplified in the comments of one team leader:

Anne said, “You can come to me, if they [other team leaders] are all busy come to me, if you don’t want to speak to them come to me.” ...I went to Anne
for help on it and she didn’t really give me anything at all. I had to go and speak with HR, and it took them a good two days to get back to me... The outcome still isn’t finished as yet but I will say that Anne has been off ill for the last few days, so she hasn’t been there the whole time, but that’s because she’s had things been pre-booked. ...I can go to Anne and I’ve been to her on a lot of things when the other guys were busy or didn’t know and she’s really good, she helps me out a lot. (R03, Customer Service Relation Team Leader, June 2004)

6.2.1.2 Thematic Analysis I

One of the main findings of the research is that the past plays an important role in determining the resolve and actions of individuals. In the first instance, past experiences, whether in the form of a brief encounter or prolonged relationships, serve to create an awareness of the situatedness of different forms of expertise that could be tapped into by prospective knowledge recipients. Secondly, it was observed that the personal experiences to which each individual is exposed may have a varying influence on the individual. However, what is lacking in the outlined findings above is an explanation of how and why the individual personal experiences influence knowledge sharing. Therefore, by applying the concept of the habitus to the findings, one is better able to comprehend the dynamics behind the influence of personal experiences.

Taking a critical look at the quote by respondent R13 in which the respondent cites his background in a specific department as being beneficial due to a personal knowledge of the individuals in the department, which had made subsequent communication much easier, it can be deduced that the awareness of the capabilities of other individuals is as a result of definite interaction with these individuals. The interactivity which results from individuals having engaged in common practice (Brown and Duguid, 1998) also brings about a sense of identity which registers in the individual’s cognition. The individual’s own habitus is thus able to identify with previous encounters with these individuals due to recognition of the resources they possess coupled with the common identity and interactivity they once shared. As
such where relationships have been sustained, such relationships have the capability to act as potential knowledge depositories for recipients. In this way, the habitus of the prospective knowledge recipient serves as a mapping for where expertise can be located and affords the recipient the opportunity to exploit such knowledge sources.

In considering the role of personal experience and individual background in knowledge sharing decisions, one notes that in instances where the past experience between individuals has been favourable, the habitus allows for an appreciation of the actions of one individual by the other (Bourdieu, 1990a). Drawing from both generalisable quotes and specific quotes from the findings above, it is evident that certain individuals are prone to avoid seeking knowledge from specific sources due to previous negative experiences. This is as a result of the habitus having identified such knowledge sources as 'out of bounds' areas due to the previous unpalatable experience(s). However, the inherent danger in this instance is that the individual habitus precludes such potential sources from subsequent knowledge sharing activities.

As the habitus develops over time; assimilating and processing vast amounts of information in both an unconscious state of mind as well as through conscious activity, the predispositions shaping the individual's current resolve are not determined on a one-off basis but would have undergone processes of reinforcement in the group habitus to which the individual has spent extensive periods (Bourdieu, 1990b). In essence, encounters with others enable one individual to develop a perception of the other, which then determines the nature of interaction maintained with these others.

Two instances are observed from the findings above to demonstrate the varying impact of the reinforcement process of the individual habitus and the dispositions in terms of current resolve. The first instance exemplifies how negative reinforcement results in a negative outcome and this is illustrated by two different scenarios. As one respondent noted "I've been in situations where I've done something with somebody and then they take the credit for all of it as if they've done the work...I find that quite frustrating" and again "Some people withhold information and tell
you at the last minute or tell you in front of a crowd of large people so that they'd look good ...I get quite frustrated!” In these two scenarios where the respondent is both a knowledge source and recipient, there is a negative reinforcement of actions which the respondent considers to be “frustrating”. These actions, which have registered in the individual’s habitus, bring about a conscious tendency by the individual to transact the expertise they possess, in the first scenario (Von Krogh, 1998), and in the second scenario, the actions cause them to seek an alternative knowledge source. In both of these scenarios therefore, it is observed that where the past experiences of individuals had not been favourable, these experiences are reinforced in the habitus thereby contributing to the seemingly negative resolve concerning actions of certain others.

In the second instance however, one observes that a negative experience could still result in a positive outlook by the individual subjected to the experience. Here, the appreciation of other individuals is to the extent that the occurrence of a one-off contrary act does not change an individual’s resolve but rather, due to experiences that have been positively reinforced in the individual’s habitus, the individual is able to discount one-off experiences as uncharacteristic and thereby not result in a sway of current resolve. This instance is exemplified by respondent R13 in explaining how his line manager was unable to assist him at a crucial time of need but went further to state that this was an exception rather than the norm. He also expressed his understanding of the circumstances which lead to the situation as being due to the line manager’s busy schedule and certain illness, barring which, he was confident he would have received the assistance required. In this instance, the previous favourable experiences of the respondent with the manager had created an appreciation of the way the manager had been helpful in time past. Therefore, the experience of the one-off contrary act did not change the respondent’s resolve. On the contrary since the habitus had already registered a characteristic behaviour for the individual, the habitus is able to draw on the past more favourable experiences with an individual in order to explain away the negative action as a one-off or infrequent act and as such maintain the integrity of the perception and disposition towards that individual.

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In the two instances considered above, the added value of using the habitus as an explanatory tool as opposed to psychological theories such as cognitive dissonance is implicitly evident. What distinguishes the action of the habitus from the cognitive dissonance is that unlike the latter, in which individuals have the tendency to seek consistency between conflicting thoughts through acquisition of new thoughts and beliefs, or modification of existing beliefs (Festinger, 1957), with the habitus, there need not be conflict between existing and new perceptions before reinforcement occurs. Rather, the habitus reinforces individual perceptions by providing a basis for the individual to understand the new action through previous experiences.

6.2.2 Sustained Relationships as a Knowledge Depository

The empirical evidence presented in this section is drawn from a total of 19 respondents (10% of coded data) and they demonstrate the possibility for individual employees to construe their sustained relationships as depositories for knowledge and expertise from which they can avail themselves.

6.2.2.1 Empirical Findings

Based on comments made by the 19 respondents mentioned above, it is observed that the effects of the individual past on knowledge sharing is not limited to the impact of experiences but additionally, in instances where relationships were maintained for any significant periods in time, the relationship structure could serve as a depository of knowledge. This particular observation is best illustrated by the reflections of R14 on the nature of contact maintained with colleagues from previous projects, the respondent noted:

I largely see a lot of them, because Construct Co. has quite a lot of internal courses that people go on. I often see the same faces at things like that or things like Christmas period. It's largely out of work we meet up as opposed to going round to another site and visiting it. But yeah, I definitely still see people from previous sites. (R14, Commercial Team Member, November 2004)
One observes here that the respondent construes these relationships as purely social, and as such when asked if the relationships maintained from previous projects had any specific impact on the way he carries out his present job function, the response given was “not in a big way”. However, the fact the respondent sees these relationships as a depository in which expertise could be garnered, is made implicit in the following statement:

If I have a problem I know someone else has dealt with on a previous project, then I'll probably give them a call and they'll be able to help me out in a big way but other than that, no, it's probably more socially that I see them. (R14, Commercial Team Member, November 2004)

As with R14, two other respondents did not see a major benefit resulting from sustained relationships, but in each instance there is a recognition that such relationships can be availed of in the event of possible difficulties arising in executing one's job function. In which case, the knowledge or expertise of the actors in the relationships can be called upon to resolve problematic situations. Other respondents however draw a definite link between sustained relationships and the ability of such relationships to serve as a knowledge depository. Such a link is made by R08 in commenting on whether sustained relationships have any impact on the way his job function is carried out:

The main impact is actually furthering and gathering of knowledge into one, a database and two an active database, which you have at the back of your mind. So that's experience I've used before, whether its good or bad, its still experience. Obviously, if it's been a good experience, you will tend to reuse the information. (R08, Design Manager, November 2004)

The respondent not only views sustained relationships as a means by which one's knowledge base may be expanded but also as a means for accumulating and storing acquired knowledge for future usage. The use of sustained relationships in this manner however is subject to the disposition of the individuals involved in the relationships. This is exemplified by R07 in describing the nature of a working
relationship he had with two project managers who were sometimes difficult and uncooperative:

When you’re working with them, I wouldn’t think twice about contacting them but now that we’re not together, I would probably choose some different route. (R07, Civil Engineer, November 2004)

In this instance, the use of such relationships as a source of knowledge is deemed acceptable in as much as the relationship is active and encouraged by the prevailing environment. Once the environment changed however, due to the individual’s disposition, the relationship was no longer considered as a knowledge depository.

6.2.2.2 Thematic Analysis II

In thematic analysis I, it was established that in a sense, the habitus can either be positively or negatively reinforced by the past personal experiences of individuals and thereby contributes to the shaping of the current resolve of such individuals. Beyond the individual actor’s past experiences, a second factor that is observed as contributing to facilitating knowledge sharing is the ability of sustained relationships to act as knowledge depositories. Following the line of argument laid down in Chapter Two, the existence of knowledge in a ‘material’ form, an ‘abstract’ form or as a social phenomenon is made possible by the interconvertibility of the tacit and explicit forms of knowledge (Nonaka and Takeuchi, 1995; Spender, 1996; Leonard and Sensiper, 1998). This implies that knowledge is not only embodied in the individual (Bourdieu, 1977; 1986) but as a social resource, it can also inhere the structure of the relationships individuals maintain (Coleman, 1988). By having sustained relationships therefore, the individual is not only aware of the expertise of others but is also aware that the relationship structures themselves are a veritable harbour of knowledge due to social interaction among different individuals over time.

The ability to draw on sustained relationships as knowledge sources arise from the awareness that individual experiences accumulate with time and that one’s personal
experiences can be reflected upon to address ongoing issues. However, where inadequacies exist in an individual's knowledge base, the individual is able to revert to colleagues with whom a relationship has been sustained, as alternate sources of required knowledge. Due to experiences of the individuals, it becomes mapped within the habitus which relationships could yield the knowledge required to address specific issues. As one respondent explained, sustained relationships serve a definite purpose in the process of executing the respondent's job function as they act as "database" kept "at the back of your mind" and constituting "experience" which can be used or reused over time. For individuals that fall into this category, the habitus is able to map out which relationships are repositories for specific knowledge requirements thereby readily identifying actors in such relationships as the need arises. This is also the case observed where a particular respondent states, "If I have a problem I know someone else has dealt with on a previous project, then I'll probably give them a call." Here, there is recognition, arising from a previous working relationship with another individual, that such individual may possess insight to resolve a problem, hence the motivation to contact the individual and avail oneself of the knowledge that can be obtained from the relationship.

So far from the previous discussion and the ongoing discussion, it has been established that the habitus is not only reinforced by past experiences but also that the habitus is able to recognise and map out relationship structures in order to determine where individuals might focus attention for opportunities for knowledge exchange. It was also noted that there is the possibility for different individuals to experience similar 'negative' experiences and yet come out with different outcomes. In one instance, an individual regarded experience as experience irrespective of whether it is good or bad and as such the individual was favourably disposed to the use of sustained relationships as a knowledge source whilst another individual in effect, regarded bad experiences with colleagues as a limiting factor to such colleagues serving as sources from which knowledge can be gathered. In essence, the reaction of individuals are not solely motivated by externalities but perhaps more importantly, choices may be made based on the internal dynamics of the individual and this leads us to yet another finding in the research which helps to further explain the varied outcomes among individuals.
6.2.3 Individual Attitudes, Personality and Dispositions as Impacting Knowledge Sharing

The next set of empirical findings in this research constitutes the largest data set relating to any specific theme, with representative quotes drawn from the comments of 23 respondents (24% of coded data). The findings relate to the view that effective knowledge sharing is a dual process consisting of transference and reception of knowledge (cf. Dixon, 2002). As a result of this, it is to be expected that the dispositions of both the individuals transferring knowledge and those seeking to receive the knowledge would affect the process of sharing knowledge. This section is of particular value to the research as the data collected evince the intricacies of how the attitudes and dispositions of both the transferors and recipients have an effect on whether or not knowledge is shared amongst individuals. Furthermore, the data are presented under three sub-themes to demonstrate how respondents' predispositions were deemed to impact knowledge sharing in relation to friendship ties, recipients' disposition to receiving knowledge and individual perceptions to the context surrounding knowledge sharing efforts. A total of 15 respondents each commented on the three sub-themes, with representative quotes documented to illustrate the findings. This is followed by a thematic analysis section aimed at drawing out the salient issues in the findings as can be comprehended through the habitus.

6.2.3.1 Friendship Ties

A recurrent theme observed among the 15 respondents commenting on friendship ties (7% of coded data) was reference to personal likes or dislikes as playing an important role in the decisions of individuals to share what they know. The approach taken by the prospective recipient was highlighted as a factor in determining the likelihood of any transference. As R20, a systems manager, notes:

I think an informal request is a lot better than sending something... very formally on an email or something. It's less likely to get a good response than a phone call saying, "look, we're just doing this, do you think you might be
able to be help me out” or something. If the person asking doesn’t assume that they’re going to get, they’ll probably get a better response as well. (R20, Systems Manager, November 2004)

Aside from the attitude towards the manner in which recipients request the sharing of expertise, the transferor may be favourably disposed to sharing what they know due to the existence of a close friendship bond between the transferor and the recipient. A similar opinion to that of R20 is expressed by R14, but in this instance, beyond the approach taken, there is a distinct consideration of how the recipient might act if roles were reversed, given the nature of the relationship:

If they’re just going to be sending me emails asking me to do work that’s not related to me, then I probably won’t be much help to the person...if I like the person, then I would assist them more, if I don’t like the person I’ll probably find a lot of other reasons not to do the work for them...If I like them, then obviously the reason is that I’ll be more helpful to them because I’ll probably see them on another situation where they’ll help me out. If I don’t like them I know that they probably won’t do the same for me back, so why should I do it for them in the first place, why should I help them out? (R14, Commercial Team Member, November 2004)

That there is a greater tendency to share with individuals within the same environment, barring feelings of unfavourable disposition, is further made evident by R01:

If you’re in my organization, I should have no reason for not sharing, unless I’ve got personal dislike to you, which shouldn’t come into it anyway. You can see how it would with certain individuals, and if such exist, you’d be averse to share, but other than that, I don’t see why I wouldn’t want to share information with colleagues, at my level anyway. (R01, Mobile Repair Technician, June 2004)
In a similar fashion, when asked if he had any issues with sharing novel ideas and knowledge with a friend R27 responded:

If he’s a friend, no. As long as he’s your friend, you’re more likely to speak to him on things like that. Whereas if someone is a lot more senior than yourself and you don’t know them very well, then you maybe want to keep it more to yourself. (R27, Assistant Engineer, November 2004)

The first point of note in this regard is the willingness of the respondent to share sensitive knowledge with a friend with whom there exists a good rapport and secondly, where the relationship is perceived to be distant or where there is a perceived less than adequate knowledge of the individual, there may be a tendency to display caution in relating with the individual. This was the case observed with 4 of the respondents interviewed. Such caution may be demonstrated by the respondent’s conscious effort to ascertain the reason why an individual might be seeking particular knowledge. As R01 comments:

If someone asks me, “tell me this”, the first question will be why do you want to know and when they tell you, you just have to make an informed decision. (R01, Mobile Repair Technician, June 2004)

As observed from R10’s illustration below, a cautious attitude may also simply result from a lack of familiarity and a sense that an individual does not belong to a particular collective. Once such an individual is viewed as a member of the collective, there would be less caution about sharing one’s expertise:

When I came here, there were people who had been working in the lab group for a number of years...I came, I took over part of it and another guy came and he took over the group as a whole...I guess when people get to know you, they accept you – that developed over a period of time because the more things I did, the more they could see that there were some things I knew and I did have a certain degree of competency and skills and knowledge so now we have got a good relationship. (R10, Technical Service Group Member, November 2004)
When asked if the initial strains in the relationship was due to apprehension, R10 responded:

I think there must have been a small element of that but I think it’s probably more, I don’t know if apprehension is the right word. I think it’s more of if somebody comes in from the outside into that position, where you’re managing people; you’ve got to prove yourself. I don’t think its apprehension about sharing of knowledge, it’s apprehension about how you’re going to operate among the group, how you’re going to interact with them and how you’re going to affect your day to day working life. You sense that feeling that some are not going to pass on their knowledge because they’re going to think that once you’ve got it, we’re not needed… (R10, Technical Service Group Member, November 2004)

6.2.3.2 The Needs and Attitudes of Knowledge Recipients

In this section, I consider how the perceived states of knowledge recipients may play a role in the knowledge sharing process, as well as how the attitudes and dispositions exhibited by the prospective recipients may determine whether or not knowledge is effectively shared. Of the 15 respondents that commented on recipients’ dispositions (represented by 8% of coded data), 6 presented the knowledge transferor’s perspective, another 6 made comments as knowledge recipients and an additional 3 shared their experiences both as transferor and recipient. To begin with, one is presented with a scenario in which transferors are eager to share their expertise. While some respondents display an attitude of caution to sharing, as was observed above, others exhibit a more proactive attitude and are of the opinion that there is no need to wait till a prospective recipient comes seeking knowledge before assistance is offered. This is the case observed with R20 who states:

I hate inefficiency and people doing things wrong if there’s a better way of doing them. For example, if somebody is going to do something and I can help
them with it, if I can help them do it more efficiently and save their own time and the company’s time, whatever, then I’m happy to share knowledge... certainly, I can’t stand seeing people wasting their time and if I can help someone waste less time then that’s fine. (R20, Systems Manager, November 2004)

In this instance, where the transferor perceives inefficiency in the way other actors carry out their duties, the transferor is encouraged to share from her expertise to benefit both the organization and the recipient. Whilst the perceived inefficiency may be considered as a subjective opinion of the transferor, some individuals, as in this case, are encouraged to share their know-how with others, in instances where they identify a knowledge gap which they can fill. That is, a shortfall identified among knowledge recipients could serve as an incentive that favourably disposes prospective transferors to sharing what they know. In the same vein, one would also expect that where the needs of the recipients are not evident, then knowledge might not be shared. However, the possibility exists that even in instances where a need is identified, the attitude of prospective recipients could serve to discourage individuals who would otherwise have contemplated sharing what they know with such recipients. This is observed in the comments made by R27:

The first time I worked, I worked with a guy who was just wound up and stressed the whole time and you couldn’t talk to him sensibly or discuss any problems with him because he’d just go mad. Honestly, he’d start screaming and shouting, so you just left him alone...no one’s sharing any problems or anything new with him, they just didn’t want the hassle of trying to speak to him. (R27, Assistant Engineer, November 2004)

From the point of view of prospective knowledge recipients, and as was observed in the preceding findings sections, an awareness of where the desired knowledge is situated, or of individuals in privileged positions as to know where such knowledge might be found, is often a propelling force for seeking out such knowledge. Whether such knowledge is sought after or not is however governed by the recipient’s
personality. This is typified by the response of R19, a senior design manager, in explaining the nature of his relationship with the technical service group manager:

My relationship with John is that if I need anything from the technology centre, I would always ring John first, even if I know who’s going to deal with the information I need or the advice that I need. The reason for that is that John is the portal between the Construct Co. projects and the technology centre. So by contacting John, I know that I would then have the opportunity for John to say, well actually, this project is doing that or that project’s doing that, this project have tried that and they suggest next time do it this way, you get all that kind of thing from John and John will make sure the answer you get is best practice, that you get the best, if you like, continually improved information that we can offer at that time. (R19, Senior Design Manager, November 2004)

Whilst individuals might show eagerness to seek out knowledge, as was the case with R19 above, the manner in which knowledge is communicated to recipients can also prove to be an inhibitor. This is demonstrated by another respondent who identifies with a need for knowledge to be shared but exhibits reservations as to the manner such knowledge is communicated. When asked if he sees a need for knowledge to be shared, R14 responded:

I do, it’s the way of approaching the subject of how they do it, whether they do a presentation on it or whether it’s just a day-to-day learning. I’m not entirely sure that listening to someone for half an hour waffling on about their experiences on site is going to be too much assistance because a lot of people switch off in that kind of situation. I believe you learn a lot more from working with someone. (R14, Commercial Team Member, November 2004)

6.2.3.3 Interactivity Tendencies and Self-Perceptions

Although the disposition of an individual to share often has a direct relationship to that of other individuals, the interviews also revealed that the personality
dispositions of respondents play an important role in the way they relate and share what they know. This consideration is with regards to introversion or extroversion, which are employed here to denote the orientation of respondents' interests towards self or others. The findings also indicated that the way the respondents perceive themselves plays a role in the way they relate with one another. This invariably reflects on their disposition towards social interaction and hence sharing of knowledge and expertise. The main observation here was that the more extroverted respondents were more inclined towards social interaction and were favourably disposed to sharing what they knew, while the more introverted respondents seemed less concerned with maintaining social networks. A total of 15 respondents (9% of coded data) made specific reference to interactive tendencies and self-perceptions. Thirteen of the respondents described themselves as being inclined to socialising while just two respondents felt they were less predisposed to actively partaking in social activities.

Speaking about the relationship maintained with colleagues, one respondent described the relationships as transcending acquaintanceship to true friendship. His ability to develop a rapport with other individuals in this instance is attributed to his gregarious nature:

In terms of informal relationships with people that I've worked with in Construct Co., they're more acquaintances than friends, a lot of them, but I think it's important that you have a rapport with people. I think it's important and I certainly find that the people that you have a rapport with are often the people that you work best with. I'm quite gregarious, so I tend to get along well with most people, but I certainly find that the people I get along even better with are the people that, should we say, are equally gregarious and professional. (R19, Senior Design Manager, November 2004)

R10 shares a similar opinion with R19 and essentially describes himself as a "sociable animal" that gets along with people. Given this self-classification, R10 is able to readily identify the benefits that accrue from being involved in a number of social activities and having a good rapport with other individuals. A primary benefit
identified in this regard is that good communication is aided where there is a good rapport amongst individuals. Furthermore, the respondent makes an interesting assumption in relation to the disposition of individuals, the premise being that for individuals to engage in activities that foster social interaction, there must already be in existence a good working relationship:

In general, I guess I'm a pretty sociable animal... I've got along with a lot of people, some of them have left now but I keep in contact with those we've got common interests ...I think, and given the assumption, I think it's self-evident that you get along anyway, because if you didn't get on well, then you're not going to be playing golf and going to concerts with them. So basically you get on well to begin with, I think everybody gets to know one another better, I think a certain amount of confidence and trusting people and an easier rapport, all those things I think which contribute to an easy working relationship. You don't have to, the work becomes, I think probably less formal in a management sense, if you know what I mean, I mean you've still got formality there, you've still got to do the admin, send out the invoices and fill in the time sheets, but I think it does enable a certain rapport and dropping of some of the formalities, to function, which I think it, aids communication, it becomes a benefit. (R10, Technical Service Group Member, November 2004)

The notion of an attraction between similar factors is demonstrated in the aggregation of like-minded individuals to partake in common activities, which is echoed by R12. When asked about the nature of people who participate in the work-organized social activities, he responded:

Funny enough, it's the ones who are the more sociable ones, social and more confident. I see a lot of people here and they seem very reserved very shy, but the ones that tend to go are the ones who are very confident and open and sociable and such likes. It's just meeting some new faces and you chat with these people. (R12, Contracts Service Team Member, November 2004)
From the above comment, it can be deduced that individuals not engaging in such social activities are perceived as being reserved and shy. The comments of two particular respondents provide better insight to understand if indeed individuals of less extroverted dispositions tend to be less involved in group social activities. For one civil engineer, having worked with the organization for thirteen years and on ten different projects, when asked if he still maintained contact with former colleagues, he responded:

On the whole, probably not, to be honest with you...there’s not that many that I keep in touch with. (R07, Civil Engineer, November 2004)

For this respondent, one reason that could be deduced for not maintaining sustained relationship was the responsibility of family commitments as identified in the following comment:

For me [the reason] is, errh, as I have a young family, I’d rather try and stick to the home area if you like. So that sort of dictates to some extent as to, errh, where you’re willing to go. (R07, Civil Engineer, November 2004)

In a similar manner, when asked whether colleagues generally involve themselves in social activities within the office, R04 responded by citing the need for quality family time as a reason for not engaging in social activities at work:

I think individual teams from the individual projects do tend to develop their own social lives. There are some people in the teams who are more keen on that than others. Certainly, I’m one who because I have a family at home, try to keep work at work and outside of work time is time for the family. If you’ve got more sort of single people around then they’re a lot happier in socialising out of work hours as well. (R04, Commercial Manager, June 2004)

For R04 however, it was essential that his work be separated from his social life: “I certainly strive to keep a strict demarcation between the two. It probably helps to a certain extent, that I live 70 miles away from the office”. However, when asked if
this has any effect on the working relationship with other staff members, he responds:

I suspect that I don’t know as much about my staff as I would like to because I haven’t had that opportunity to socialize... I would like to think it doesn’t but I suspect it does. Like I said, I probably don’t know some of the staff as well as I ought to or as I would like to. (R04, Commercial Manager, June 2004)

When a similar question was posed to R07 as to the possibility of the few relationships he maintains having any direct bearings on the execution of specific job functions, in contrast to R04 and the comments made by other respondents who considered themselves to be more outgoing, R07 responded, “No, they don’t”. Whilst the more ‘outgoing’ respondents opine that there is a positive effect from socializing, R04 admits that a lack of involvement in social activities with colleagues probably has a counter-productive effect on the working relationship. However, R07’s view that there is no definite effect could therefore probably be related to the fact that the respondent has a preference for seeking information strictly through established official channels:

You have this sort of information, the ‘Construct-web’, which we use, it’s a website powered by Construct Co. and on there there’s also sort of different best practices... regarding safety for example... I mean, there’s enough information there, sometimes you’re not fully aware of what exactly is there... if I can’t find what I’m after, then I’ll just ring up either, if it’s a particularly big issue and I need some help, then I’ll just ring up engineering division... (R07, Civil Engineer, November 2004)

Furthermore, with respect to the extent to which the respondent would consider discussing work related issues and sharing experiences with colleagues from other organizations in the industry, R07 commented as follows:
I won't get into details with anyone [outside of work], when I talk to them... I don't meet with them so I can get ideas. (R07, Civil Engineer, November 2004)

From the preceding observations, one notes that there is a tendency for individuals to be excluded or to exclude themselves from certain activities. This tendency inevitably relates to the individual's level of interactivity and personal dispositions. Furthermore, such exclusion could then lead to individuals being marginalised when it comes to sharing information and know-how. Commenting on the benefit of socialising, R26 notes:

As I say, we don't go out and talk about work all the time and I wouldn't like to think or suggest we should, but with respect to how it helps the team, I think if there was a particular individual who doesn't make the effort to, I think he would miss out on something. (R26, Construction Manager, November 2004)

The notion that work is a major topic of conversation in social events is a point which resonates amongst a number of respondents. As one respondent remarked:

It sounds sad, but when you go out socially, you probably talk about work for more than fifty percent of the time and quite often it's things that we find interesting – it could be boring to other people – like we're talking about who are the best performing sub-contractors on site at the minute? You share whole stories, you know, the bad things that have happened, the good things that have happened, and which you can have a laugh about. It won't be very interesting to non-construction people but we quite often talk for more than fifty percent of the time about work. (R18, Project Manager, November 2004)

So whilst individuals not participating in the social activities might be considered to be 'missing out', participants are viewed to derive a number of benefits from active involvement in socialising. From the following responses, one observes that the accruing benefits range from the provision of avenues for problem solving to creating an enabling atmosphere for carrying out formal duties:
I think informal gatherings can be good. Certainly when I was in engineering, quite a lot of problems get solved in the pub, you know, you go out for a drink and you chat about some work-related issues and some solutions crop up when you're relaxed and not stressed about all the other things you're thinking about, sometimes you can get solutions arising from there. It's good to know the people you're working with. (R13, Design Manager, November 2004)

Yes I think so, inevitably, people that you socialise from your work environment, you're going to feel more comfortable with them. So therefore, your work interaction will be better because you feel more comfortable in asking for help from someone from the golf course. I think it helps the whole work process. (R05, Report Writer, June 2004)

I would prefer if we didn't go out and talk about work but inevitably we do, not to a big extent but we do talk about work after work while socialising. You can actually step back a bit and look at things from a different perspective. ...I'm on site all the time, the commercial guys are sat in the office all the time, but communicating while you're socialising, say between production and commercial actually does help. You can get a different perspective on what you're doing. (R26, Construction Manager, November 2004)

However, even though a lack of participation in specific activities may result in exclusion from certain networks, this is not indicative of a total exclusion, as individuals may still belong to other networks. When asked about what becomes of individuals not engaging in common social activities, R10 commented:

Well, I could only assume that those people have their own circles, which are different from the one I have. I think in all companies you're going to have probably a range of people, I mean, what one might truly call a sort of a social group that do certain things but then I think there will be other people who do other things. There's going to be some people who aren't in groups but that's life. (R10, Technical Service Group Member, November 2004)
So, while individuals might be excluded from certain 'circles' or cliques, there is the possibility that such individuals could belong to other cliques or networks. In addition, it is observed that a lack of participation in social activities may not only be due to the introverted nature of individuals, other factors such as external commitments may be responsible for self-exclusion.

6.2.3.4 Thematic Analysis III

The body of findings in this section exhibit a recurrence of a common theme on personal likes and dislikes which constitutes another key finding in the research, that is, the transference or reception of knowledge is determined by the attitudes and dispositions of the principal actors. In almost all instances, respondents identified their personal likes and dislikes as playing an important role in their knowledge sharing decisions. For the purpose of this thematic analysis, the findings above can be summarised thus; i) individuals would tend to share what they know, dependent on whether or not they are favourably disposed to the possible recipient, ii) considerations of reversal of roles (reciprocity) helps determine courses of action to be taken, iii) a sense of common identity creates a basis for acceptance and willingness to share, and iv) the personality disposition of an individual plays a role in the extent to which such an individual engages in social interaction and knowledge sharing.

Considering the disposition of prospective transferors, one observes that where there is a perceived existence of a close relationship bond on the part of the transferor, the potential for exchange of knowledge is increased. On the possibility of not sharing a novel idea or knowledge with another individual, one respondent stated "If he's a friend, no. As long as he's your friend, you're more likely to speak to him on things like that". From this statement, there is the notion that the disposition of the individual towards sharing is essentially determined by the perceived nature of the existing relationship.

Although the findings expressed above may be regarded as common sense explanations, there is little to go on in social theory to establish a theoretical basis
for explaining these factors. It is in this regard, again, that the significant value of the habitus is realised as an analytic tool. Given the description of the habitus as sets of dispositions, which are also designated as 'predispositions', 'tendency', 'propensity' or 'inclination', and also the notion that the habitus enables the affirmation of an individual's generative capacity (Bourdieu, 1977; 1990a), one identifies a characteristic feature of the habitus that offers a more analytic explanation for the generalised findings on the individual's attitudes and disposition. The habitus not only takes individual action into consideration but also the contributions of structural forces in shaping the individual habitus, which in turn predispose individuals to act. Hence, the generalised actions of individuals can be viewed to be predicated on the predispositions of the habitus to which the individual is subjected. In the following paragraphs, the habitus is thus applied as a lens with which to better understand these generalised dispositions of individuals.

In considering how the disposition of individuals to prospective recipients could impact knowledge sharing, the dependence of the propensity to share as being guided by personal like or dislike is summed up by R14 who stated "if I like the person, then I would assist them more, if I don't like the person I'll probably find a lot of other reasons not to do the work for them". This was observed to be a common way of thinking among respondents and it demonstrates how the relational elements; identity and interactivity, predispose the individual habitus to be favourably disposed (or otherwise) to another individual. Although an individual is exposed to collective dispositions in the form of group habitus, the individual's habitus is also context related. Von Krogh et al. (2000) described the habitus as providing a context where tradition and creativity intersect. In this regard, the habitus sets the context within which the relationship is reviewed and the decision taken. Every individual forms 'opinions' about others, based on experiences and encounters with such individuals. These opinions themselves are a reflection of the individual habitus as they are informed by previous engagements which allow the individual to position others within a mapped field of relationships.

By further investigating the role played by attitudes and dispositions in knowledge sharing, it is evident especially from the perspective of the knowledge transferor that
the perceptions held about a recipient could serve either to trigger or discourage sharing. The following statement gives a clearer understanding of this; "I hate inefficiency and people doing things wrong if there's a better way of doing them... I can't stand seeing people wasting their time and if I can help someone waste less time then that's fine". In this statement one observes a direct indication of how an individual's personal disposition affects the propensity to share. In this instance, the respondent abhors inefficiency, as such wherever she perceives individuals are exhibiting inefficiency in executing their job functions and she finds herself in possession of knowledge to make such individuals work better, then she would share her knowledge. The respondent in this regard makes value judgements based on the values to which she has been exposed, thereby further shaping the habitus and predisposing the individual to specific sets of values that inform the individual's actions irrespective of the recipient.

We recognise that on the one hand, individuals may decide to share irrespective of affiliations, however the findings also point to the fact that the existence or absence of such affiliations can also determine whether sharing takes place or not. Where others are viewed to have common dispositions as the concerned individual (Wenger, 2004), a relationship is fostered among the individuals thus creating a common sense of identity, belonging and acceptance. It is this identity that positions others in an individual's cognitive mapping in terms of friendship considerations and encourages the actor to strive for a balance in the relationship by factoring into their decision making, what others had done or might do for them were the positions to be reversed (Kilduff and Tsai, 2003). Possible caution in engaging in knowledge exchange with others however arises where the individual habitus is yet to identify and position another actor within the identity/acceptance mapping framework.

This scenario was illustrated by R10 in recounting the experience at the initial stages of involvement with a work group. An initial caution was demonstrated in the way others related to R10 as a result of the respondent replacing an established member of the work group. With time however, there was a marked change in the way other members related to the respondent, as when the colleagues got to know him, they not only accepted him into the workgroup but also began to identify with the degree
of competency, skills and knowledge possessed by the individual. What is observed here is that in the first instance, the work group was operating within a specific group habitus in which there existed a common identity with all members of the group (Bourdieu, 1990b). The introduction of a new actor however elicited an initial caution as the habitus of individual members contemplates the new entrant with a view to positioning the individual. Where the new entrant exhibits dispositions that are acceptable within the group and that are congruent to the group habitus, the individual becomes accepted. However, were there to be incongruence between the dispositions of the new entrant and the group habitus, then it would be expected for acceptance not to occur. The acceptance is therefore a consequence of common identity and it is this that allows for sharing of knowledge through ‘interaction’ and mutual ‘bestowing’ among the members of the grouping (Von Krogh, 1998).

So far our analysis has focused on the dynamics of knowledge sharing documented from the perspective of the knowledge transferor. But as Dixon (2002) explained, the transfer of knowledge is equally dependent on both the transferor and the recipient. As the case example above demonstrates, individual acceptance on the part of the potential knowledge recipients effectively impacts the sharing process. Furthermore, where common identity and acceptance are prevalent, because the individual habitus of prospective knowledge recipients have been subjected to different formative factors in the past, different individuals would respond differently to transferors dependent on their cognitive mapping of knowledge reception protocol. This is observed in the comments of one knowledge recipient, “I’m not entirely sure that listening to someone for half an hour waffling on about their experiences on site is going to be too much assistance. I believe you learn a lot more from working with someone”. For this individual, the predisposition is towards a more practice-based learning and because the habitus is so disposed, attempts to share knowledge outside the acceptable convention would be met with a lack of enthusiasm, which could invariably result in a lack of knowledge transfer in spite of any efforts made by the transferor.

Still in relation to personality dispositions, the findings demonstrated that personality types could also indirectly determine who specific actors share
knowledge and expertise with. The observation was that extroverted respondents were more inclined to engage in forms of social interaction and be more willing to share their expertise. This is an implicit indication of a virtuous cycle in which individuals more given to socialising readily share with others thereby extending their network of relationships. As noted in the findings, this could result in acts of inclusion or exclusion. The fact that socialisation plays an important role in knowledge sharing is well documented (see Orr, 1996), and the findings above further corroborate this. A detailed consideration of the findings however provides insight into the role of the habitus in this process. This is achieved by considering the following extracts from quotes in the findings; “inevitably, people that you socialise [with] from your work environment, you’re going to feel more comfortable with them. So therefore, your work interaction will be better because you feel more comfortable in asking for help from someone from the golf course” and “I think if there was a particular individual who doesn’t make the effort to [be involved in socialising], I think he would miss out on something”.

The expressions of these two respondents are a demonstration of how involvement in multiplex systems increases the propensity for knowledge exchange (Portes, 1998; Brown and Duguid, 1998; Wenger, 2000). As has already been established, the more involved an individual becomes in an activity or in this context a series of activities, the greater the likelihood of acceptance and identifying with others involved in the activities. Based on continued interactions at different social and work levels, the extent of interactivity generates a sense of mutual belonging and reinforces the identity among participants in such activities. Thus by associating others with specific activities with which an individual is involved, a sense of camaraderie is developed which registers with the individual habitus and which as earlier established, allows for a mapping of the relationship structure for identification of knowledge sharing opportunities. Furthermore, identity with specific personality types by the habitus encourages a mindset of ready availability of assistance due to the common engagement in forms of social interaction. This was the observed case with the respondent in whose view, this ‘gregarious’ nature allowed him to work better with individuals of similar dispositions. Because an individual enjoys involvement in social activities with certain groups, the individual
The empirical findings and thematic analyses in this chapter have been presented in a tripartite manner, the first being a general consideration of how the past experiences of individual actors contribute to shaping current resolve, followed by an examination of the capacity of sustained relationships to act as depositories of knowledge, and finally a more detailed consideration that centred on the specific influence of the past experiences and encounters of individual actors on the way such actors make knowledge sharing decisions. It was deduced that the past experiences of individuals affect decision making through i) an awareness of domains in which certain expertise reside and ii) reinforcements of perceptions held in relation to others consequent to sustained encounters with such others. It was also noted that where relationships are maintained, the possibility exists for such relationships to serve as knowledge depositories in which instances the knowledge inheres the structured relationships themselves. Finally, whilst past encounters contribute to creating a general mapping of knowledge sources, dispositions to such knowledge sources and hence decisions to share knowledge are ultimately governed by individual attitudes and personalities which are shaped by both the individual and group habitus.

As was observed in the case of the respondents, the habitus of each individual guides the way the individual relates with other actors and helps to create a mental map of resource locations as well as provide justification for engaging with specific knowledge sources or for meeting the knowledge requirements of others. These observations inherently provide crucial support for the fundamental view that the
habitus plays a significant role in determining the individual personality and dispositions.

Furthermore, as the discussions in this chapter have shown, on the one hand, the habitus is influenced by factors external to each individual. However and more importantly, on the other hand, these factors contribute to moulding the individual thereby orientating the individual along specific thought lines which ultimately determine whether or not the individual engages with others in knowledge sharing activities. As shall be discussed in the subsequent chapter, the role of the habitus in determining individual attitudes and dispositions not only relates to the past encounters of actors but also comes into play in the manner in which actors relate within their environment and make knowledge sharing decisions in present circumstances.
Chapter Seven

7. Empirical Findings and Analysis II: Present Undertakings, Collective Input and Implications for the Individual

7.1 Introduction

The discussion in the preceding chapter centred predominantly on the finding that past experiences and personalities shape the manner in which individuals take decisions to share their knowledge. Based on the empirical findings highlighted in the chapter, it was established that the individual context was central to understanding how past occurrences affect the disposition of individuals in making decisions that has direct bearing on ongoing activities. By applying the relational elements of the habitus, it was possible to deduce that individuals are inclined to make decisions as a result of the cognitive mappings generated by the habitus through time, which inform such individuals of interactive and identity affiliations that thus allow them to make specific decisions on whether or not to exchange knowledge.

Although this research was executed at the micro individual level within the organization, in a bid to understand why such individuals would consider sharing what they know, an interesting albeit not unexpected finding related to the role played by the organization as effectively impacting on the individual disposition. As noted in the theoretical chapters, existing literature provides support for the influence of the environment on knowledge sharing activities (Von Krogh, 1998; Brown and Duguid, 2001; Bresnen et al., 2003). In this chapter however, the findings are discussed by employing the habitus framework and its constitutive elements to demonstrate how the collective habitus is able to reinforce individual action and thereby implicitly structure the individual habitus in the present.

This is a deviation from the preceding chapter in which the focus of discussion was on how each individual’s past experiences and personality dispositions contributed to shaping the individual habitus to inform decision making, i.e. the centrality of the
individual context to understanding how past occurrences affect individual decision making in the present. The findings presented in this chapter are representative of the comments of 24 respondents across different themes. These are presented in three sections, the first of which details the organization's disposition to knowledge sharing from a social perspective; in contrast to the technological perspective presented in Chapter Five. This is followed by a section on how the organizational disposition reflects on individual employee commitment to sharing, and a third section on perceptions of knowledge by individuals and of positioning on how knowledge is shared. As such, the findings focus on the active involvement of the organization and the consequent impact on the individual commitment, the relationship between individual perceptions of knowledge and hierarchy to sharing, and how set thoughts that were observed in the previous chapter and viewed to occur on an ongoing basis, contribute towards knowledge sharing.

7.2 Organizational Contributions to Enabling Knowledge Sharing

A total of 20 respondents commented on the role of the organization in facilitating knowledge sharing, amounting to 19% of the coded data. Findings relating to the organization's contribution towards enabling knowledge sharing among employees are presented along three themes. The first set of empirical evidence represents the comments of 10 respondents (5% of coded data) to the effect that the organization was committed to teamwork and bonding, through efforts to ensure a belief in common existence among employees. This is followed by empirical evidence representative of comments by 13 respondents (7% of coded data) which demonstrate the commitment of the organization to networking and a third subsection representative of comments by 12 respondents (6% of coded data) on how work forums established at the instance of the organization act as quasi communities of practice thereby affording the members some of the benefits that come with belonging to a community of practice. The section concludes with a discussion on how the organization's involvement can be interpreted in terms of the group habitus thereby setting the ground for relating organizational involvement with individual employee commitment.
7.2.1 Organizational Commitment to Teamwork and Bonding

In the first instance, it was observed from the 10 respondent comments that the organization is committed to facilitating the sharing of knowledge among its employees. This is evident in the fact that the culture of the organization is continuously communicated to the respondents to the extent that the respondents are fully aware of, and identify with the culture of the organization. This is observed in the remarks made by the following respondents:

The biggest ethos – and I’ve been with this company for 14 years – is teamwork. (R02, Contracts Manager, June 2004)

In the technical service group, which I am manager, most people in technology support the need for sharing of knowledge. That’s the culture we’re in and that’s the culture we need to be in really. (R09, Technical Service Group Manager, November 2004)

When another respondent was asked why it seemed every employee always takes the organization into prime consideration, the employee’s response was indicative of an inherent affiliation and identification with the organization:

It’s drummed into us, I’d say. We do meet regularly with divisional directors, senior directors, executive members, we are a business orientated company...Everyone is now focused on, this is what we’re going to achieve...I always say you’re probably going to get that sort of business, business answer from everybody because it is now our very focus. (R21, Assistant Design Manager, November 2004)

This identification possibly results from the organizations level of commitment towards its employees. Such commitment is demonstrated through the provision of opportunities for personal development, which include sending staff on training courses and providing an enabling environment for social interaction:
I’ve been on about 3 or 4 courses. There are rooms for advancement, I’ve been on two electrical courses, I’m going on another course next week. Yes, they do want the employees to have the knowledge they need. (R01, Mobile Repair Technician, June 2004)

There’s quite a lot of training going on in Construct Co. at the moment so there are actually quite a few opportunities to get together with other commercial managers at the moment. (R04, Commercial Manager, June 2004)

Construct Co. have got a concept, which is a trademark by the way, of teamwork. They encourage people to bond. A graduate engineer who starts with the company will go on training and bonding courses. Maybe they’ll go on a skiing trip or canoe trip or trekking, so they can bond together, so that friendship will last throughout their career. (R15, Deputy Project Manager, November 2004)

Implicit in R15’s comments is the notion that the organization is committed towards ensuring that the teamwork ethos is prevalent and as such make every opportunity available for teams to bond together. This active commitment is also reflected in the sponsorship of local get-togethers:

They organise nights out. We have nights out paid for by Construct Co., they give us a lump sum which is divided into twelve months and then each month we have set figures we can use to go out. Just the other week, we went to a comedy club in Manchester. That was all paid for – the show was paid for by Construct Co., the first few drinks were paid for by Construct Co. (R03, Customer Service Relation Team Leader, June 2004)

7.2.2 Organizational Commitment to Networking

Another avenue through which the organization displays commitment towards encouraging the sharing of knowledge is through an active encouragement of
networking. This is the view expressed by almost half the respondents interviewed and is exemplified in the following comment:

I was on a training course last week to do with leadership and management. It was certainly a new experience. I've been on management training courses before, a lot of what was said in this course, I had heard before, but the whole thing was structured in a slightly different way to normal. Certainly the aspect of networking was discussed a lot wider than any previous course I'd been on. We were very much being encouraged a lot more to explore the opportunities for networking, more than we would have been before in years gone by. (R04, Commercial Manager, June 2004)

Whilst the organization actively encourages individuals to network, the very nature of the organization environment as being project-based also creates the opportunity for individuals to develop their network. This is reflected in R26's comment on the sustained relationship with a colleague:

I worked with him [Paul] on my first two jobs in Construct Co. fifteen years ago and then I worked with him again about five years ago and now I'm working with him again for this project, so you meet them again through other projects. Also you meet people, I just ran a course yesterday, training course, and I met about three other people that I knew from previous projects. They didn't know each other but that's what happens, you meet people again either through courses or through seminars... (R26, Construction Manager, November 2004)

R23 further corroborates the notion that the nature of the industry is such that there is a constant flux of employees from one project to the other, hence presenting the opportunities for networking, for accentuating existing knowledge and/or for acquiring new knowledge:

...So every now and then I get a call from somebody or phone somebody else to say I need a bit of information on a past project or you know somebody's
got some particular skills on some things, so having known those names that, you may not speak to for a year at a time, but it’s just having them in the background. The nature of this industry is you move around so much and not just when you’re moving companies but physically move around so much. Site teams are quite small-knit communities, our interactions with other site teams is not massive, but as this project ends, this team will be broken and some people may go together but people may go to other projects and work for other people. (R23, Project Director, November 2004)

It was also observed that in order to facilitate effective networking amongst its employees, the organization had gone to the extent of establishing a role responsible for connecting various individuals to the appropriate sources of required knowledge. As R09 comments on his role within the organization:

...I’m interactive with the sites, I don’t deal with the enquiries myself; I pass them to the people that I think are best suited to deal with them. Now, once the site knows that person exists, then in future, queries or issues on that or any other sites, its their personal contact with that individual expert that they’ll go to...my role is one of interfacing between sites and technology. It’s also interfacing between regional offices and technology, in other words, I spend quite a lot of my time in our regional offices. So, in a way I can have quite informal dialogue with planners, estimators, project managers from across a broad spectrum. (R09, Technical Service Group Manager, November 2004)

7.2.3 Work Forums as Quasi Communities of Practice

Possibly the most crucial area where the commitment of the organization towards fostering a sharing culture is demonstrated is in the creation of role-specific forums. Based on comments by 12 interview respondents, there is a sense that forums are a very important part of the organization’s activities. As identified by R09, the existing forums range from design managers’ forum to project managers’ forum, commercial managers’ forum, health and safety forum, graduates’ forum and
technical managers' forum. In addition to this, the organization is still setting up new forums:

Besides the forums I mentioned before, there is a fourth coming on stream, which is the construction managers' forum. (R09, Technical Service Group Manager, November 2004)

Whilst no defined communities of practice are present in the organization, given the simplistic definition of communities of practice as groups of people sharing a concern or a passion for something they do and learning how to do it better, through regular interaction, there is a sense that these forums in effect serve in the same capacity as communities of practice.

[We have] got what we call the project managers' forum, which is spread, around the country and meeting regionally with four or five regions. Normally, the forums meet regionally three or four times a year. The Project managers meeting normally will take place on a live project, on site somewhere and will consist of a tour of that site to see what is going on in the project and allow best practices and knowledge to be shared. To be followed by a meeting where topical issues will be discussed – problems coming up often between sites… (R06, Senior Project Manager, June 2004)

It was observed that the forums provide the opportunity for members with similar interests to come together and share their job experiences thus providing an environment for knowledge sharing. In addition, as one respondent notes, due to the nature of the organization, the forums provide the opportunity for members to establish a standardised framework for the knowledge utilised in their job functions:

We have a forum every other month – six months a year, that's the idea. The way Construct Co. works is that we have all our processes and the way we actually do our business and we guard that, coordinate as a series of processes. Because it's a very process-driven organization. It adds to regularity and not to control... (R08, Design Manager, November 2004)
As R13, another design manager puts it, the forums not only facilitate the exchange of ideas but also contribute towards improving the working standards and developing the relationship amongst members:

I think things such as the design managers forum is very constructive, you’re getting like-minded people together especially on the basis that it’s a relatively new role to the company as such, so everyone’s finding their way. Some people are more experienced than others and certainly for those of us that are less experienced in that role, it’s an opportunity to exchange ideas, find new ways of working and improving the way we work, I think that is quite positive generally. Informal meetings, classically, it’s called team building isn’t it? (R13, Design Manager, November 2004)

The possibility for building relationships is in addition to providing the opportunity for knowledge exchange and as noted by R13, the forums act as a support network for the members and offer them the opportunity to develop their network. This particular benefit is commented on by another respondent:

We have a conference which brings all the project managers together, and that’s as much social as it is working and its very good from the point of view of keeping contact with people you don’t see very often. You sort of run around for a day and a half saying hello to everybody you haven’t seen for ages and that’s quite useful because you never know what will come out of that. You haven’t seen somebody for a while and you find out they’re working on something that has a bearing on you, you find yourself two days later phoning them up to discuss it further. (R23, Project Director, November 2004)

In spite of the possible benefits of attending forums however, based on comments by 4 of the 12 respondents who talked about work forums, there is a notion that individuals are not fully participating in the forums and that there is greater scope for improvement in forum activities. When asked if this could be because the forum is regarded as a formal set up, R22 responded:
Possibly, it's pressure of the tasks. Not being available to travel the distance to go away for the meetings which are held around the country in different locations, so people need to travel there. There are separate agenda and it may be that the agenda doesn't draw information out of people. If you've got a busy week, then you may not be able to spare the time to go. (R22, Design Manager, November 2004)

Another point of interest raised by a project director is that while the forums exist as support networks at the management level, there is little to offer non-management members:

One thing that we are conscious of is to try to get more interactions at other levels within our site teams but at the moment, that's pretty limited...What we have is an organization where people work in little pools and the sharing of knowledge between those pools can be very poor. (R23, Project Director, November 2004)

There is however a view that the limited interaction can be addressed by encouraging more non-management oriented forums and also by exploring the possibility of involving employees in multiplex forums. This opinion is expressed by R18, speaking on the availability of forums as a means for networking:

We have a project manager's forum, design managers' forum, commercial managers' forum, there's now safety forum, and a graduate forum. These should be better linked to improve communication and cross-attendance between forums... (R18, Project Manager, November 2004)

We thus observe a prevalence of networking opportunities provided by the organization to enable sharing among the employees. However, in spite of the organization's commitment to facilitating the sharing of expertise, there is a sense that to an extent, the onus lies with the individuals to make adequate use of the networking opportunities provided:
You have to make an effort, a positive intention to meet up. Whether something is actually set up if it’s informally, you need to make that effort. There are quite a number of different groups at the moment that probably all we do is share emails when we can actually be meeting up and share experiences together. (R04, Commercial Manager, June 2004)

7.2.4 Thematic Analysis IV

Based on the findings presented in the sections above, the commitment of the organization to enabling a sharing culture is predominantly demonstrated through the active promotion of a teamwork culture, networking, and the development of self-governing forums which act as forms of communities of practice. Given the research context of the individual role in knowledge sharing in the organization, individual activities cannot be viewed in isolation but must be considered in relation to the organizational activities. In order to fully understand how and why the organizational disposition affects the individual, I draw on the relationship between the group habitus and the individual habitus, and the relational elements that are active in the interaction between the two. As such, this analysis is predicated on the role played by the group habitus in informing the individual habitus and thereby contributing to shaping ongoing activities of individuals.

From the literature review it is observed that in the first instance the habitus of the individual is informed by the collective dispositions of the class or group to which the individual belongs and is in itself a reflection and/or expression of the group dispositions (Bourdieu, 1990b). Furthermore the habitus is said to be subject to change due to exposure to varied experiences which either reinforce or modify it and therefore allow it to produce individual and collective practices (Everett, 2002; Bourdieu, 1990b). In essence, the continued exposure of an individual to a prevalent culture creates an avenue for the group habitus to either reinforce or lead to a modification of the individual habitus. The reverse case also holds true for the group habitus, i.e. the individual habitus can also reinforce or modify the group habitus, which is indicative of a reversible attribution of the habitus between the individual
and the group forms. For the purpose of this analysis I focus on the former instance. Due to the possibility for reinforcement and modification of an individual habitus by the group habitus, one can deduce that individuals could be swayed to act in a certain manner dependent on the disposition of the organization and that there would be a definite impact of the organization’s activities, through the group habitus, on the habitus of the individual employees.

There is a similarity between the way the habitus of social classes is constituted and the overall group habitus of the organization. This is in the sense that the organization possesses its own way of doing things, which advocates collective action and encourages individuals to identify with the collective through involvement in bonding activities. As one respondent noted, “Construct Co. have got a concept, which is a trademark by the way, of teamwork. They encourage people to bond. A graduate engineer who starts with the company will go on training and bonding courses. Maybe they’ll go on a skiing trip or canoe trip or trekking, so they can bond together”. This view was also corroborated by other respondents in expressing the concerted efforts in the organization towards collective functioning. From the outset, individuals that are new to the firm become acquainted with the group habitus of their working community and are invariably encouraged to imbibe the values and dispositions of the organization through the training courses and bonding sessions facilitated by the organization. There is thus an expression of the organization’s disposition, which sensitizes the individual to expectations within the collective, and to possible areas of congruence between the individual and group habitus.

Furthermore, the organization takes a proactive role by promoting networking among its members, thereby serving as the impetus for the achievement of collective goals. As one long-standing employee noted, “Certainly the aspect of networking was discussed a lot wider than any previous course I’d been on. We were very much being encouraged a lot more to explore the opportunities for networking...” In addition, to encourage individuals’ use of network structures, a boundary spanning job role was created by the organization which allowed for a particular individual to interact with different project sites, gathering data on innovative ideas and best
practices, and making the knowledge pool centrally available. As such, by promoting i) interactivity through networking and ii) putting structures in place to facilitate the maximal use of the networks, the group habitus of the organization is not only perpetuated but also has a greater propensity to be embodied in the habitus of the individual members.

Another point of observation that is noteworthy is that the nature of the work environment comes to bear on the individual disposition. This in essence is an indication of how the habitus is a consequence of both structure and agency. Because the organization operates in a project-based environment, interaction within specific projects is not sustained for long periods in time and therefore cohesion is maintained at the organizational level. Whilst individuals identify with specific projects in the shorter term, they are more disposed to identify with the organization in the long term. Also, because individuals move from project to project, the group habitus is constantly being reinforced while at the same time influencing the individual habitus. This is exemplified in the comment “I worked with him on my first two jobs in Construct Co. fifteen years ago and then I worked with him again about five years ago and now I’m working with him again for this project…” As the individuals move from one project to another, they reactivate defunct networks, consolidate existing networks and develop new networks thereby increasing the potential sources of knowledge available to them. Specifically, the renewal of old acquaintanceships allows such acquaintances to update one another on diverse experiences gathered from various projects undertaken in the intervening periods and thus increase the propensity for knowledge sharing.

Finally, I consider the contribution of the organization as a collective with respect to the establishment of forums. Since members of a community differentially possess ‘collective understandings’, there is a need to have processes in place that would ensure that knowledge becomes encultured in the collective, which as demonstrated in Chapter Two, requires a process of time and social interaction for the shared understanding to be achieved (Blackler, 1995; Brown and Duguid, 2001; Tsoukas and Vladimirou, 2001). It is for this purpose that the forums established by the organization were very useful. The forums functioned in a capacity akin to that of
communities of practice in the sense that they provided the avenue to share common concerns through interaction and learn about new ideas. The forums not only allowed for interactivity and mutual engagement of individuals but also bestowed a sense of identity on the members. In addition, and as indicated in the findings, the forums presented an avenue for the individual actors to share best practices and knowledge. Furthermore, by facilitating trainings, forums and networking opportunities, the organization is able to communicate its sets of dispositions to the workforce, who are then in a position to accept or reject these influences. In essence, because the forums facilitate interactions among individuals from different project environments as well as through multiplex forums, they invariably allow a holistic presentation of the group habitus throughout the organization.

7.3 Individual Employee Commitment

As highlighted in the preceding section, the commitment of the organization was demonstrated through putting appropriate structures in place to foster teamwork. The organizational disposition was evident in relation to activities such as: ensuring proper trainings, facilitating network opportunities and setting up specific job-related forums. Based on respondents' comments, the organizational disposition is observed to have had a definite impact on the disposition of employees towards the organization and their personal commitment to ensuring organization success. In this section, I present further empirical evidence demonstrating how the organizational disposition impacts upon the commitment of individual employees.

7.3.1 Empirical Findings

The findings presented are representative of comments by 14 interview respondents (7% of coded data). Firstly, one observes that the teamwork ethos present in the organization is one that seems to have been imbibed at the individual level by both management and non-management employees, as the following comments reflect:

I think, certainly when I first started, the team was very, very supportive to me because I had no construction background at all, so it was a huge learning
curve for me to start off with anyway, but certainly, having a team that knows each other and knows each other’s strengths and weaknesses in terms of organizational management, it means that you’re better equipped as a group to come out with a better result because you know if somebody is a bit weak at one thing, that you can help them out with that or if you have a weakness with something, you know the right person to ask to get the support and just that you all know each other, you all know how each other will react in different situations. (R20, Systems Manager, November 2004)

I’ve been told that “everyone up here at a management level is here to help you” so I was told that, to go to any of the team leaders and Anne said “you can come to me, if they’re all busy come to me, if you don’t want to speak to them come to me”. They were all there at the same time and they all said yeah, yeah any questions you’ve got we’re here to help you. (R03, Customer Service Relation Team Leader, June 2004)

Both R20 and R03 were actively assisted to settle down into their new job functions by the existing members of their project teams. As R20 points out, there was an understanding amongst the existing project team members due to having been together for a reasonable period in time. This is reflective of the nature of the project environment and as one respondent comments, the organization particularly encourages continuity of project teams:

There’s a definite policy in place that whoever the project manager is, he has a assistance managers, senior engineers, whatever you want to call them, who pretty much go around the country as little teams because they know each other, they’ve worked well together... (R02, Contracts Manager, June 2004)

What this favourable disposition does for members that are just joining a project is that it allows for them to feel that they can be and are a part of an existing community of individuals who understand one another and have an amicable working relationship. One of the impacts of such prevailing relationships is that the members of the project group often willingly share what they know with one
another. This is even more so because of the close relationship between separate job functions in projects, as one surveyor noted:

There's always a close interaction between what the other person is dealing with because it sometimes has an adverse effect on the next package to follow on, which I may be dealing with. So we tend to talk, we have regular meetings within the business to make sure we all know what's going on with that specific end which Paul may be dealing with or I may be dealing with. (R25, Quantity Surveyor, November 2004)

The notion that individual employees become predisposed to sharing was exemplified in the comments of respondent R01. When asked if he had experienced individuals who were reluctant to share with him what they knew or what was required to perform certain tasks, he responded:

No, I haven't come across that. Everything I've seen so far is that everyone wants you to succeed; everyone wants to help. So we're all pulling in the right direction, well, from what I've seen anyway. The times I've needed assistance, it's been forthcoming. (R01, Mobile Repair Technician, June 2004)

In addition to creating a sense of belonging for new and existing members, when all the individuals in a project team show commitment in what they do, the belongingness fosters the notion that the team members can be trusted. Identity with the team also comes with responsibility for the team, as is observed in the following comments:

Except you're prepared to share your knowledge, you are as responsible for your particular company not being as efficient as it could be as anybody else who is doing things wrong. (R16, Project Manager, November 2004)

Very often when people are on site, people feel a common goal to actually get things done and it's not individuals working to their best interest. (R06, Senior Project Manager, June 2004)
Well, work colleagues, you have to trust. It's their information that allows you to do your job and to move forward. So if it's in relation to a third party, in relation to what the third party is doing, you have to take on board what they're telling you...I think it comes down to, when you're working on a construction project, you almost feel like you have ownership of a part of that project. It's a personal drive to make sure that project succeeds. Forget about how much it costs; forget about when it's delivered, it's the end product. (R24, Quantity Surveyor, November 2004)

Interestingly, four of the respondents not only saw themselves as part of a team but also as stakeholders in the success of the project hence the need for them to make concerted effort towards ensuring project success. Another point of note is that once identity is established with a group, the possibility exists for an individual to be continually identified with the group even after exiting the group for a prolonged period, thus creating an in-road for such individuals to access the group. This is a view that was commonly shared by the 14 respondents. Commenting on why he still assists his former workgroup colleagues on job-related issues, R10 states:

I still interact with that group to some extent because I know the things they do and I've worked with their clients...they see me as part of the team. They see me as one of them, and the fact that I ran the group for ten years, so, well not the same people now, Bob...the manager, he worked for me...So doing work for them assists me apart from the technical interest in what I do...gives them the benefit of not having to worry about it, they can get on and do the lab work... (R10, Technical Service Group Member, November 2004)

We thus observe that the commitment exhibited by the organization can reflect on the individual employees to the extent that they identify with the organization and their project teams - seeing themselves as part of a community, be it for the duration of the project or even after completion of the project. A critique of this kind of camaraderie however is the possibility for barriers to be raised to the influx of knowledge and expertise originating from outside the team, in a sense it is the 'Not
Invented Here’ syndrome. This inevitably can dampen an individual’s zeal to sharing, as R08 comments:

I worked in Singapore is a small island state...their view of using concrete, which I believe is actually in some ways more ahead than actual use of concrete in this particular country. I’ve tried to import some of those ideas over here and I’ve been not told, but you can sense by body language that it’s a bit, you can’t do that sort of thing over here...I’ve had a bit of resistance before about certain ideas I’ve tried to bring from areas, I’ve worked in areas which are third world in the economic climate such as India...“Oh, the way we do things is better here”, well why is it better, how do you know it’s better? “Because we’ve always done it that way!” When you hear that statement, we’ve always done it that way, it immediately turns you off... (R08, Design Manager, November 2004)

7.3.2 Thematic Analysis V

The findings detailed above exemplify the interaction between the collective habitus and the individual habitus, as they are a demonstration of how the group dispositions impact the individual in terms of commitment and in terms of individual choices with respect to knowledge dissemination. In thematic analysis IV, it was noted that continued exposure to a collective disposition is able to influence the individual habitus by reinforcement or by modification, and in the above instances one is given a glimpse of how this occurs.

As established earlier in this chapter, the organization is favourably disposed to working collectively and to knowledge exchange. This disposition is communicated to the employees through the group habitus, which informs their own individual habitus and thereby elicits from them, dispositions in line with those of the group habitus. This is the phenomenon described by Von Krogh (1998) as ‘indwelling’ – a situation whereby organization care results in individuals displaying commitment to an identified common cause. While indwelling, according to Von Krogh, is
indicative of the existence of organizational care, the concept of habitus helps us to understand the intricacies of the individual-organization relationship.

Because the organization presents itself as a closely knit community that is proactive in equipping its employees with requisite tools to perform their job functions, the individuals are afforded the opportunity for social interaction and bonding which creates a sense of belonging and identity that in turn predisposes the individual habitus to foster the prevalent attributes of the organization. For instance, it is observed that as a result of the prevalent group habitus, individuals are very willing to assist others in fitting into new job roles. This is reflected in the following comment, “I’ve been told that “everyone up here at a management level is here to help you”...they all said yeah, yeah any questions you’ve got we’re here to help you”, and by another respondent; “...when I first started, the team was very, very supportive to me...if somebody is a bit weak at one thing, that you can help them out with that or if you have a weakness with something, you know the right person to ask...” Here one sees in action, the characteristic disposition of the organization to foster interactivity among employees. A willingness by members of the collective to share with new individuals denotes acceptance and reinforces the sense of belonging for that individual. This collective disposition in turn reproduced a similar commitment from the individuals who have come to identify with the collective disposition. In this particular case, because the individual was being actively assisted up the ‘learning curve’ by the team members, the individual habitus identifies with the collective action and as such the individual too becomes favourably disposed to helping others.

In many instances, the identity assumed by the individual as a result of acceptance of the collective disposition and involvement in communal activities, also confers personal responsibility for team efforts through stakeholdership. That is, individuals no longer view themselves as separate from the collective but as intricate parts of the collective and having responsibility for the collective action. Considering the statement “very often when people are on site, people feel a common goal to actually get things done and it’s not individuals working to their best interest”, the ‘common goal is as a result of the sense of belonging and identity which is created
by the group habitus and accepted by the individual habitus. That is why the individual can state that “when you’re working on a construction project, you almost feel like you have ownership of a part of that project”, which in turn creates the drive to achieve success and as such a willingness to share what one knows in order to meet set goals.

Given the interdependent nature of their job functions, individuals are constantly aware of the importance of communicating and sharing their expertise. This was highlighted by one respondent who noted that due to the interactivity between different job functions, follow on effects are very common from one stage of a job to the other and therefore, the need for an awareness of what other individuals are doing. In this way a collective disposition towards teamwork develops and this disposition is ingrained in each individual. This is further accentuated by the personal dispositions of the individuals, which is to succeed in implementing the aspect of work for which they are responsible. As a result, the individuals tend to share what they know in a bid to ensure personal and group success.

Lastly, it was observed that where there is congruence between the group habitus and the habitus of individuals involved in specific projects, there is a risk of non-acceptance of externally originated ideas and views. As noted by one respondent “I worked in Singapore... I’ve tried to import some of those ideas over here...you can sense by body language that it’s a bit, you can’t do that sort of thing over here...I’ve had a bit of resistance before about certain ideas I’ve tried to bring from areas”. This non-acceptance is essentially the not-invented-here syndrome and its occurrence can be explained by the fact that “members of the same class” would have encountered similar experiences, which determine their group habitus (Bourdieu, 1990b: 60) and could be willingly or unintentionally oblivious of experiences of other classes. Where an individual has been involved in another class therefore, the habitus is constituted differently and the difference between the constitution of group habitus and the individual habitus creates tensions that could inhibit knowledge sharing, as in this scenario.
7.4 **Perceptions on Knowledge and Structural Implications**

Another interesting observation from the interviews was the way individuals view the knowledge they possess in relation to that of their colleagues, be it their peers, superiors or subordinates. This is based on the comments of a total of 21 respondents (16% of coded data). Of the 21 respondents that shared their views on their understanding of knowledge, 10 respondents (5% of coded data) made comments in relation to knowledge as being complementary in nature, 9 respondents (4% of coded data) expressed opinions as to who owns the knowledge they possess, and a further 14 respondents (7% of coded data) commented on how their positioning in the organization could impact their inclination to share knowledge.

In the preceding chapter, it was established that considerations of reciprocity contribute to how individuals chart courses of action to take. As reciprocity has become a common parlance in the knowledge management literature, in the first part of this section (7.4.1), the findings further examine the dynamics that contribute to the notion of reciprocity by considering the complementary nature of knowledge. This is followed by a closer examination of the much debated issue of the ownership of knowledge and its implications for knowledge sharing. In the final part of this set of findings, I focus on individual considerations of their positioning in terms of possession of expertise and in terms of hierarchy, and how this affects the way individuals share their knowledge.

7.4.1 **Knowledge Complementarity**

There are indications from the responses of all 10 respondents that knowledge complementarity is a key factor in the sharing of knowledge in the case organization. In this section, findings are presented to demonstrate how the awareness of complementary knowledge can contribute to knowledge sharing. In the subsequent discussion, I highlight how the habitus contributes to this complementarity by facilitating the tendency for individual reciprocity.
7.4.1.1 Empirical Findings

The awareness of knowledge complementarity as playing a role in facilitating the sharing of knowledge is exemplified by the comments of R06, a senior project manager. When asked why he would select individuals he has worked with in the past to constitute a new project team, R06 responded:

[One], I know their strengths and weaknesses, two they know my strengths and weaknesses. We wouldn't have a problem understanding how things work. I would have a clear knowledge in terms of what their knowledge particularly in areas of safety and construction expertise were, and I would know how far to stretch those individuals in terms of my demands on them. When working with people that you've not worked with before, it's always a learning curve, there's always time that it takes to get an understanding... (R06, Senior Project Manager, June 2004)

Although the notion of knowledge complementarity is only implicit in the above statement, other respondents were more explicit in identifying how complementary knowledge between colleagues proves to be beneficial. As another respondent noted, when knowledge is shared on a complementary basis, there is a reciprocal flow of knowledge that is beneficial to the relationship between the concerned parties:

Russell W. spent his career sorting out problems with envelopes. So, if Russell has encountered something that might be good to know since I last saw him, it's good to catch up with him and get the best information at the time. Also, Russell will learn a lot from the project we do and the details that we generate. It's a two-way thing, definitely and that relationship is very good. (R19, Senior Design Manager, November 2004)

The notion of complementary knowledge was further identified by R05 as one of the main reasons why he would consider talking to a particular individual on technical or personal issues:
We share technical knowledge and talk to each other. It's probably because we've come a long way together but also while Ian's crystal knowledge isn't the same as mine, that's because his job doesn't come into contact with crystal very often. Whereas with something called SQR, he's come into contact with that a lot more than I, so I'll go to him for help with SQR problems and he'll come to me with crystal problems, and we're both very similar with Access, so if we have an Access programming problem, we'll go to each other because we have similar knowledge. (R05, Report Writer, June 2004)

However, perhaps the most clear-cut example of the view that complementarity encourages knowledge sharing is presented by R09. When asked if there was any individual he gets on well with in terms of sharing ideas, the following response was given:

The knowledge manager, Adrian M., interestingly, I'm not sure of his actual background but...his ability, really, to understand the computer and put together databases and spreadsheets which is simply what we probably didn't have the right background, most of us are civil engineers, we're not IT specialists. So we lacked skills in that area until Adrian came on board, now he's been with us say a year and he's been marvellous, fantastic. He is very good. We seem to be able to trigger ideas. Because he is working at it from a totally different perspective, possibly, than me, and because I'm closer to the business if you like, the sites, we complement each other in that regards. We might start talking on one topic and quite quickly move on to an area, which we've not even talked about before, which is very exciting really. One thing we tend to, well I relish in a way, is when we meet up periodically, because he's based in Leeds and I pass Leeds quite regularly, we quite often have meetings in the motorway services outside Leeds and we have basically brainstorming sessions. He comes away novel ideas and maybe slightly changed directions, I go away thinking blimey I need to get more information on these aspects and that's how we developed a lot of the work that Adrian's been doing because he puts into practice the things I think business-wise.
That's certainly been the case. (R09, Technical Service Group Manager, November 2004)

R25 makes a suggestion to explain why there is a favourable disposition of respondents to other individuals whose knowledge complements their own. This explanation draws on an awareness of the interdependent nature of the job functions carried out in the organization, which thus encourages sharing. A similar view is expressed by R15, who identifies with the need for members of his team to openly demonstrate their know-how in order to promote the effectiveness of teamwork. The following comment is reflective of this view:

If people lock all the knowledge away inside their heads, the contract will not work. ...I encourage all my staff to be open, not to lock anything away in their mind because its something that could be missed and it could prove to be expensive for the company in the long run. (R15, Deputy Project Manager, November 2004)

7.4.1.2 Thematic Analysis VI

Reciprocity is an aspect of social ties that is key to the network literature and has become increasingly so to the knowledge management literature. It is an integral part of balance theory and the premises for this is based upon a preference by individuals for a balanced relationship (Kilduff and Tsai, 2003). From the findings, it was also observed that a significant factor that enables reciprocation to facilitate knowledge sharing is recognition by individuals that knowledge itself is complementary. However, although the theory acknowledges a preference for balance in relationships, it is not explicit on how the factors that promote such tendencies towards balance actually function. As such, the habitus is used here to offer a plausible explanation as to the dynamics of reciprocation among individuals.

An awareness of complementary knowledge and the identification of individuals with such knowledge increase the tendency for individuals to actively share their knowledge and expertise. While it can be argued that the awareness of
complementary knowledge results from social interaction, once the individual becomes aware of where complementary knowledge is to be found, this registers in the mental map of the individual and predisposes such individual to seek knowledge from the identified source. In this manner, the habitus fosters knowledge sharing by enabling an appreciation of alternate sources of knowledge and a predisposition of individuals to take advantage of the knowledge availability. This was best illustrated by the comments of the technical service group manager on the nature of the relationship held with the knowledge manager, in which regards the works of both individuals were from two different perspectives. However, they still found time to have periodic brainstorming sessions together by meeting in motorway services areas even though they were working in different geographic locations.

In this particular instance there is an awareness by one individual actor, of a lack of expertise in certain areas, expertise that is possessed by the other individual. This serves as the trigger for the knowledge exchange process between the two individuals. In essence, because the habitus of each individual is able to register the resource capabilities of others, it is possible for any individual to both identify a gap in his or her knowledge base as well as a means of filling the knowledge gap.

Furthermore, once the habitus establishes the existence of possible complementarity, the recognition that both parties complement one another in the knowledge they possess then encourages them to periodically meet and ‘brainstorm’, as in the case of the example above, or to generally find avenues through which they may share what they know. In so doing, the individuals act with the knowledge that at the end of the day, they would have either gained new insights or had a reorientation in their thought processes or both. The actions of the habitus is evident in this regard given that an initial encounter allows the individual to recognise and identify with potential knowledge sources thereby encouraging interaction that registers with the individual’s habitus and consequently result in the individual seeking out opportunities where exchanges would be of mutual benefit. Following on from this, it would also be expected that the converse would hold. That is, the possibility for the individual not to exhibit reciprocation tendencies where no present or future possibilities for mutual benefit is perceived to exist.
7.4.2 Ownership of Knowledge and Disposition to Sharing

The question of who owns the intellectual resources residing in individuals is one that has been widely debated in the management and related literature (e.g. Carter, 1989; McInerney and LeFevre, 2000). As was also established in Chapter Two, capital resources can either be individual or collective resources or both. It was therefore expected that individual perceptions on ownership might play a role in knowledge sharing decisions. The findings presented in this section indicate how differing individual circumstances govern opinions on ownership of individual knowledge and as such how it might be utilised when such individuals are faced with knowledge sharing decisions.

7.4.2.1 Empirical Findings

Since knowledge constitutes a capital resource, respondents were asked whom they believed owned the knowledge that resides with them, the organization or themselves; 9 respondents gave a definitive response to this question. The context of the responses varied but the common reasoning was that the knowledge belonged to both the organization and to each individual actor. The implication of the responses received however gives a clearer view of how and why respondents share what they know. Whilst the respondents gave categorical answers, in most instances, further explanations were given as justifications for their answers. The following comment by R04 reflects the views of three of the respondents interviewed:

"I think because all my training was done by Construct Co., I suppose you could say they have more of a call on my knowledge than someone who's only been with Construct Co. a year or two. Having said that, there's a complete freedom for me to move if I wanted to. (R04, Commercial Manager, June 2004)"

Due to the fact that this respondent was trained by the organization, there is a strong sense that the organization is well positioned to make calls on the utilisation of the
individual's knowledge as opposed to cases where the organization had had little to do with the employees training. That the organization contributes to the training of individuals not only seems to give them some right over the individual’s knowledge but also creates a sense of obligation on the part of the respondents to share the knowledge acquired with other members of the organization:

Well, it's the people and the company. That's a good point, because we got the knowledge working for Construct Co., so if you say, if you look at it from the point of view that it's Construct Co.'s knowledge, then we shouldn't be keeping that to ourselves, we should be sharing it. (R18, Project Manager, November 2004)

It depends who gave me that knowledge in the beginning. If its something, I've been on a training course, then the company has paid for that knowledge to be implanted in my brain and its up to me to make sure that every other person in the company, who hasn't been on that training course is aware of what knowledge I can pass on. When you’ve been on a training course, the idea is that you don’t lock it away in your mind, you pass that information onto your colleagues and it gets shared around and it helps the contract to function. (R15, Deputy Project Manager, November 2004)

The respondents do not view themselves as having proprietary rights over what they know but acknowledge that the organization has a right to their knowledge and expertise. Nevertheless they are very clear on who determines its usage. The comment made by R04 above that "there's a complete freedom for me to move if I wanted to", seems to suggest that given the fact that the know-how is embodied in the individual, there is little the organization can do to control the way in which the respondents make use of their knowledge. This is further illustrated in the comments made by R05, explaining his view that the organization is a stakeholder in an individual's knowledge base. When asked if he would consider the organization as having any vested interest in his knowledge base, the respondent commented:
I think I would [say] yes, but a qualified yes. They do have a right to an extent to what I know but I would say not an exclusive right. For instance, right now, I’m helping my son with an Access database for the company that he works for. So, theoretically I suppose you can say that I’m using the skills that Construct Co. has given me, for another company. So, yes, they have a right to that knowledge and that’s good, but not an exclusive right. They don’t own all my abilities. (R05, Report Writer, June 2004)

7.4.2.2 Thematic Analysis VII

The trend in the findings indicates that the perceptions of respondents as to who owns the knowledge they possess is determined by the mode of acquisition of such knowledge and expertise, which in turn guides its utilisation. Where respondents acknowledge contributions of the organization towards their personal knowledge development, there is a sense of duty towards ensuring the organization benefits from such knowledge. Because of the prevalent group habitus which is geared towards collective action, training and equipping of employees, individuals acknowledge the contributions of the organization in the development of their knowledge base and therefore exhibit a sense of indebtedness to the organization. As the individual habitus is influenced by the group habitus, the individuals become obliged to ‘give back’ to the organization, which has contributed to the development of their personal knowledge base, as in the instance above. Hence the view that individuals do not have proprietary rights to the knowledge they possess, if the collective has actively contributed to its acquisition.

Considering the following comment; “It depends who gave me that knowledge in the beginning. If its something, I’ve been on a training course, then the company has paid for that knowledge...and its up to me to make sure that every other person in the company...is aware of what knowledge I can pass on.” There is recognition that the organization contributed towards the development of the individual’s knowledge base. As such it becomes registered within the individual that the organization is a stakeholder in what expertise the individual possesses and thus a potential beneficiary. In this instance therefore, the individual’s disposition is influenced by
the collective disposition, which had played a role in equipping that individual. Because the individual habitus registers this role, individuals become more favourably disposed to the organization as the knowledge provider.

With respect to attitudes and ownership of knowledge however, there is a possible element of time-relatedness. As one respondent noted "I think because all my training was done by Construct Co., I suppose you could say they have more of a call on my knowledge than someone who's only been with Construct Co. a year or two". Indeed, as is the case with the two individuals cited in the findings above, who had worked with the organization for ten and twenty years respectively, the employees with longer service records were more disposed to considering the organization as having a stake in their knowledge and therefore seeing a need to share such knowledge to benefit others. In effect, we can infer that the greater the collective or institutional involvement in the development of an individual's knowledge base, the more disposed the individual would be to share their knowledge with others in the group.

7.4.3 Individual Positioning and Inclinations to Share Knowledge

The analysis of the findings in the preceding subsections has centred on how individual perceptions of knowledge distribution and ownership can determine whether or not knowledge is shared. In addition to this however, 14 respondents' comments revealed that individual positioning could act as a determinant of respondent inclinations to sharing knowledge. The findings and the corresponding analysis relating to these positioning inclinations are presented below.

7.4.3.1 Empirical Findings

In the first instance it was observed that there is a variance in the thinking of prospective transferors and recipients. There were indications from 4 respondents' comments that knowledge should be shared on a need-to-know basis, hence the decision to be selective in the dissemination of knowledge. For instance in the comment below, in acknowledging a favourable disposition to sharing his
knowledge, R07 expresses the view that such knowledge should be shared only to the extent that it is what the recipient needs to know. This thus introduces the notion that the transferor has more insight to the knowledge requirement of the recipient than the recipient does:

I think I would try and give everybody the information that they need to know... I don’t think there’s anything that we hold back as such; I mean it may be a case that I think he might not need to know it. ...Otherwise you’ll spend all your time sharing all your knowledge. I mean, the reason that I would share knowledge is because you think it will be useful for them to do the task they need to do, you wouldn’t share the knowledge if you think it’s not going to be useful for what they’re doing. (R07, Civil Engineer, November 2004)

A similar view is expressed by R09 who goes further to describe a context in which the transferor might choose to be selective in the knowledge that is communicated to the recipient. Again, one observes the transferor determining what level of knowledge suffices for the recipient:

One has to be careful. Certain sharing of knowledge depends on what you’re trying to do. If you’re trying to increase their awareness of a particular issue, with regards to highlighting some of the problems they may encounter, that’s fine. You don’t want to in some respects, give them what they may see as the complete answer but when they apply it to their particular circumstance, they get into thinking they know it all. ...Its just that we can’t give everything because we can’t go into the specifics in some complex sort of aspects of jobs because a) it will not be required and b) any general reader will just totally get swamped with details which they don’t want. So what we try and do...is to try and get them more aware of the general issues and give them the clear understanding that there is help on the back of the generalities. (R09, Technical Service Group Manager, November 2004)

As another respondent speculates, the tendency for selective dissemination of knowledge could also result from a desire to preserve a perceived power base. This
however is viewed by the respondent as a basis for resentment as opposed to providing influence:

There’s a lot of people like that on the construction site as well. They feel that if they give you too much knowledge, then it will take away their position. If they keep their knowledge inside and let it out bit by bit, they feel that they’ve got the power and it means that their position is safe. They feel, they can’t get rid of me because I’ve got all this tucked away in my brain. …It encourages resentment. (R15, Deputy Project Manager, November 2004)

Hierarchical positioning was also identified as playing a role in knowledge sharing among respondents. Based on comments by 9 of the 14 respondents, there is a sense that an individual’s disposition may well be related to the role/job function of the individual within the organization. Hierarchical positioning within a setting is viewed by some respondents to be sufficient reason for actively engaging in sharing their insights or expertise. In addition, an awareness of the individual’s own capability and depth of experience may act as a source of confidence, encouragement, and in certain cases, create a sense of duty. As one respondent commented:

I don’t think I particularly need motivation in sharing knowledge, if people come to me and they’ve got a particular problem, I’ll want to advise them and I spend time with people, even people like yourself, to discuss issues and share and try and help them out. (R06, Senior Project Manager, June 2004)

And speaking on the possibility of his position as project manager being the reason why individuals seeking to tap his experience approach him, R16 responds:

I’d like to think that they would go to where they think they’re going to get the best answer… But I’m also the one with the Supermarket experience, as we’re building a Supermarket store so the nature of that, they’re going to revert to me when they don’t understand some aspects of it. So I have detailed knowledge of something that they have no knowledge…If I know more than my team, I
may make mistakes, it's going to reflect on me anyway. So there's little benefit for me in having a 'knowledge is power' type of philosophy on my site because I'm responsible if it goes wrong ... I think, in general terms, if we're talking in the context of the project, if I had to help the devil to achieve what I need, then, I'd help the devil. (R16, Project Manager, November 2004)

It is also observed that beyond possessing the required knowledge, the respondent shows a keenness to share what he knows based on the responsibility placed on him by virtue of his hierarchical positioning, which is the need to get the job done at all cost. The same view is expressed by R19:

Knowledge isn't power to me. The more knowledge you have the more responsibility that you have to make sure that you use it and disseminate it properly... The one thing I believe in quite avidly is that in autocratic organizations, you have this [tall organization] set up where you have the typical family tree structure ... What I believe in is turning the tree upside down so that the managing director and the managers and everybody else should function to support the people that deliver the work. If they fail, we've all failed. So the teams of people that I look after, I'm doing it for them as opposed to them doing it for me. If they fail, I fail, that's why I support them. (R19, Senior Design Manager, November 2004)

From this, one deduces that a perceived obligation to one's subordinates can be a major factor in the propensity to share expertise. As R26 further noted, the existence of a direct line relationship could be the distinguishing factor as to whether an individual shares his experience or not:

We all have a job to do and part of our job is to manage other people, personally, I would be very quick to share with the people I'm responsible for, because I'm managing them. Other colleagues that I'm not line managing, I haven't got as much time to start sharing with anyone else, so I would tend to prioritise those people. (R26, Construction Manager, November 2004)
Whilst the comments above essentially present a transferor’s perspective, the notion of hierarchical positioning is also observed from a recipient’s point of view. Looking at R17’s comments on his year out of school and on the relationship with his current project manager, there is an implicit notion that where hierarchical differences exist, the flow of knowledge down the hierarchy is both an expected and acceptable norm:

Certainly [during] my year out, everyone knew I was there to gain experience, so I was exposed to different experiences. At the time...the site manager/contracts manager...knew that I needed to learn. So, yeah, I definitely benefited from him, he would sort of share his experiences with me and let me in on what he was doing...I think when there is a sort of mentor relationship, it's quite successful in passing on knowledge and it's a self-satisfying thing... I'm always approaching my project manager, Martin for help. He helps me, “what should we do in this situation, sort of thing”. There might be something like technical that I don’t know about. (R17, Assistant Construction Manager, November 2004)

7.4.3.2 Thematic Analysis VIII

Further to the issue of reciprocity, it was observed from the findings above that the organization environment impacts upon the disposition of individuals to share in relation to their hierarchical positioning. This observation implicitly stems from the disposition of individuals to sharing what they know with their subordinates. This disposition was expressed by a project manager who viewed the collective achievement of his project team as being more important and having a greater consequence than his personal achievements, but at the same time, the collective achievement acts as the measure of his own individual achievements, hence the willingness to ensure he communicates privileged knowledge to his team. Here, there is an understanding that by virtue of his positioning, the manager has overall responsibility for the success or failure of his project.
As established in the thematic analysis V above, identity fosters a sense of belonging for the individual and at the same time, it also impresses on the individual, responsibility to the collective. Hence, in this instance, the individual assumes an attitude of responsibility for his team and is willing to make whatever input necessary and share the knowledge at his disposal to ensure the project’s success. A similar opinion was expressed by a senior manager that, all managers should “support the people that deliver the work”. The reason being that a lack of success on the workers part would result in failure on the manager’s part, according to him, “If they fail, I fail, that’s why I support them.” Again, one observes the disposition to share as arising from positioning within the organization structure and the attendant responsibility of such positioning.

Interestingly, this introduces a notion of class divide in which the structural positioning bears differently upon the group habitus. Going by Bourdieu’s (1990b: 59) description of social class as “a class of identical or similar conditions of existence or conditionings”, it is possible to regard the highly positioned employees, such as the management staff, as being exposed to similar conditionings and hence a collective habitus that requires them to be favourably disposed to sharing their knowledge with subordinates.

In the same manner, individuals in the lower hierarchy experience a different set of dispositions whereby the group habitus is so conditioned that subordinates expect their superiors to disseminate knowledge. For instance, for the individual speaking on the relationship with his manager during his year out from school, in which all his colleagues at that point in time knew he was there to ‘gather experience’ and therefore ensured that he was exposed to as many different learning opportunities as they could muster. For this individual, there was an expectation that because he was inexperienced, others would share what they knew, and certainly, this was the case. So one sees the possibility for hierarchical positioning to introduce differential dispositions to individuals across the hierarchy; one, promoting a need to share on the part of the more highly positioned individuals and the other, an expectation to receive, on the part of the lower positioned individuals.
7.5 Concluding Remarks

The discussion in this chapter has demonstrated the integral relationship between the individual and the collective in facilitating knowledge sharing given prevailing current circumstances. I was able to establish this by drawing on the characteristic of the individual habitus and the collective habitus to impact on one another. In so doing, I also demonstrated that the collective disposition can effectively influence the choices individuals make with regards to sharing their knowledge in present circumstances. Following from the preceding chapter in which I explored the role of the past in shaping individual knowledge sharing dispositions and having explored in this chapter, the impact of present circumstances on the individual, in the next chapter I proceed to address the impact of future considerations in determining individual knowledge sharing dispositions.
Chapter Eight

8. Empirical Findings and Analysis III

8.1 Introduction

In this third and final chapter outlining the findings and analysis, the focus is on future considerations. That is, the findings detail the present actions and circumstances of individuals and how this might be determined by considerations for the future. The chapter is divided into two sections; in the first section, I examine how the interests and motivations of individuals can determine their dispositions to sharing knowledge and expertise. This is followed by a section on the use of knowledge sharing as a strategic tool. In this section, I consider how the possible consequences of decisions taken by individual actors can determine whether or not such individuals would be willing to share their knowledge. In addition, at the meso level, the findings also reflect on why the employees of one organization might be willing to share knowledge with industry competitors. Thus by taking into account the contemplations of individual actors in making specific decisions to share, the habitus makes it possible for us to understand the dynamics that shape the prospective actions of these individuals.

8.2 Personal Interests, Intent and Motivation

In order to better understand the inclinations of individuals to share their knowledge and why they would willingly do so, or as the case may be, why decisions might be taken not to share their knowledge and expertise with other individuals, the respondents were asked questions aimed at uncovering the reasoning behind their actions and dispositions towards sharing. The questions required the respondents to consider specific real life instances in which they had to share their know-how and then to try and identify the particular reason(s) for their decisions. In some instances, hypothetical scenarios were also given in which the respondents were expected to articulate why they might decide to share with their colleagues in specific circumstances. This was to ensure that the researcher would be able to compare
instances of what the respondents might consider as ideal, with the considerations in real life situations. In this section, I present findings which demonstrate how strategic considerations of the future shape knowledge sharing decisions and I apply the habitus to understand the implications of such considerations.

8.2.1 Empirical findings

Following from the discussion of the findings in Chapter Seven, in which the environment of Construct Co. was adjudged to have had an impact on the decisions of individual employees to share their knowledge and expertise, an expected outcome from most respondents was the acknowledgement of a favourable intent to share. This proved to be the case with the respondents, as a common response that echoed throughout almost all of the interviews conducted was that the respondents were favourably disposed to sharing what they knew, based on an anticipation of future reciprocation. However, as the findings from 15 respondents (7% of coded data) indicated, the reasoning behind the responses varied from one individual to the other. The explanations given were indicative of an overt, and in certain instances implicit, strategic consideration for the future. Out of the 15 respondents, 7 factored future reciprocation into shaping their stance and predisposition to share what they know. This is exemplified by the following comments:

I get on well with everyone especially if I work with them. I try to help them as much as I can and hopefully when the time arises they’ll help as much as they can. (R03, Customer Service Relation Team Leader, June 2004)

Well, basically if we have any valeting problems, then people tend to come to me because that’s what I’ve done, I’ve done that in the past... I’ll gladly share it because I know I don’t know everything, so when I ring somebody up, I’d expect them to give me the information I need if they had it. (R01, Mobile Repair Technician, June 2004)

In the first instance, the common reasoning for decisions made by respondents to share what they know stemmed from benevolence, in which case the respondents
identified with a concern for helping out other individuals in need of their know-
how. However, the responses also revealed that such respondents were acting with
intent towards ensuring their actions elicited similar reactions in the future. In
addition to ensuring future reciprocation, further probing revealed that the
accomplishment of self-interest was a priority consideration in knowledge sharing
decisions:

Well, I mean, my own personal motive for sharing is that I’m a shareholder.
I’ve got shares and I would want to see the share price go up. (R09, Technical
Service Group Manager, November 2004)

Self-preservation! The more efficient the company, the more likely that I’m
going to keep in employment and that’s the bottom line. (R16, Project
Manager, November 2004)

For the first respondent, the conscious effort towards knowledge sharing is as a
means to an end in order to ensure returns on his investment. In a similar vein, when
asked why he would share his knowledge, the second respondent identified a basis
for sharing as the existence of a common goal to see the organization perform
efficiently. As such, beyond the common interest, there is the underlining factor of
the individual’s own interest which emerges as the ‘bottom line’, that is the most
crucial factor. The bottom line in this particular instance was identified as the desire
to maintain employment with the organization.

While long term considerations, as identified above, proved to be sufficient reason
for some respondents to share their expertise, the underlying reason for others was
more tactical, focusing on the shorter term and relating to the execution of job
functions within their immediate work environment. This is exemplified by the
contracts manager who adduced to sharing what he knows as a strategic move to
allow for future delegation of responsibility in the event of an arising need:

It isn’t about, I know it, I’m going to keep it all to myself. It’s about helping
others to develop because if you help them to develop, it helps you ultimately.
You get into a position where you are snowed down to doing something but you know that that individual can do something you want to delegate to them because you’ve taken the time to explain how to do it in the first place. (R02, Contracts Manager, June 2004)

The same view is shared by R03 and R04 who also see sharing as a means to curtail being repeatedly approached for insight and to reduce personal workload respectively.

To me I’d rather share the knowledge I’ve got out. If I find something out about...whatever, and I can share that with the rest of the team then that’s good. I would rather share that knowledge out than be doing something else. I see it as being better for me to give out and make people use it as they want to use it. One they can use it as they will and two they don’t have to keep coming to me. (R03, Customer Service Relation Team Leader, June 2004)

From my point of view, if I share my knowledge, it’s an opportunity to actually pass some of the work I have to do unto someone else. If I’m not prepared to share that knowledge, I will have to do that piece of work. (R04, Commercial Manager, June 2004)

It was not in all instances however that there were material motives or reasoning behind a respondent’s inclination to share their expertise. For 5 respondents, the reason why they share or are willing to share what they know, is due to the anticipation of personal reward in the form of self-gratification. This situation is exemplified by a systems manager who comments:

...If I can help them do it more efficiently...then I’m happy to share knowledge. It’s also a little bit of a pat on the back for the self, it’s nice to know that somebody’s asked me something. It feels good. (R20, Systems Manager, November 2004)
As expressed by this respondent, the sharing of expertise is in itself a feel-good factor that provides a thrill and sense of personal accomplishment. Where such a feeling is prevalent among prospective knowledge transferors, it would be expected that the individuals be willing to share their knowledge and expertise. However, there were indications from the interviews that the willingness of transferors to share do not always result in knowledge sharing, this is illustrated by the following comment which was made in response to whether the respondents encounter problems with sharing with other individuals:

I have noted the possibility of putting together, well not training course, but getting people in and saying alright, I want to give you the basic capability to produce the most simple report so you don't have to come to me with it. Most people don't want that because then, they see it as shifting some of my workload unto them and many of them don't want it. There are all kinds of issues with feeding back knowledge and that kind of thing to other people. (R05, Report Writer, June 2004)

In this instance, the respondent provides personal insight to the difficulty encountered in a bid to share with prospective recipients. For this report writer, individuals are prone to shy away from acquiring new knowledge or expertise if there is a possibility that such knowledge would increase their existing workload. Therefore, rather than learn to be able to perform certain tasks themselves, individuals who reason in this manner would prefer to continually get another person to carry out the task.

8.2.2 Thematic Analysis IX

Having demonstrated that the habitus of an individual often determines the current utilisation of knowledge by instilling in the individual, sets of dispositions which result from past and ongoing experiences, the analysis now looks at how these dispositions affect the individual in planning for the future. Bourdieu (1977) described the effects of the habitus as being hysteretic, that is, the effects of actions on the individual habitus as persisting long after completion of the act, which
explains why individuals are able to draw on their past experiences in decision making.

This also explains why the impact of collective dispositions lingers in individuals and thus interacts with the individual’s own habitus with a possible consequence of restructuring the habitus. At the same time, because these transforming acts become engrained in the individual’s habitus, all future actions of the individual become guided by the individual and collective experiences which are mapped within the habitus of the individual. This in effect allows individuals to take conscious, subconscious and seemingly reflexive decisions in view of future considerations and hence, the active role of personal interests, intent and motivation in guiding individual predispositions to share. In relating this to knowledge sharing, what one can deduce from the above findings is that there exists a benevolent disposition among respondents to share their knowledge and expertise with their colleagues. But further enquiry revealed this disposition to be underpinned by factors such as anticipation of future reciprocation, protection of self-interests, and self-gratification.

Although the common trend in the above findings was a favourable disposition to sharing, the underlying factors varied with the individual respondents. The relatedness of the underlying factor to some future expectation, in each instance is indicative of the role of the habitus. Considering the team leader’s comments from above as an illustrative example; “I get on well with everyone especially if I work with them. I try to help them as much as I can and hopefully when the time arises they’ll help as much as they can”, as was established in the previous chapter, where the group habitus and the individual habitus are in consonance, the prevailing environment can have a positive impact on the individual’s knowledge sharing decision. What is noted here however is the individual explaining the inclination to share as being guided by an anticipation of pay back in kind. In the same vein, the decisions of the other respondents are also guided by future returns to the self.

For the individual habitus, one observes that the self becomes the prime reference of consideration and as such, whatever is considered to contribute to the long term
standing of the individual would be encouraged. Similarly, the considerations of the individual habitus would be to discourage actions which could be construed as counter-productive. According to the comments of the report writer who was geared towards providing his colleagues with the knowledge they would require to put together basic reports, he was effectively shunned because his colleagues did not perceive the gesture as offering them a favourable outcome, since they saw it as him shifting some of his workload to them. I noted the possibility that some individuals would rather not be saddled with additional responsibilities and as such could be averse to acquiring knowledge to avoid such responsibilities. What one is thus presented with in this analysis is another side of the workings of the habitus through individual dispositions. In Chapter Six, it was established that identity and interactivity, as relational elements, predispose individuals to one another thereby allowing them to draw on past experiences to guide their actions. For future considerations however, one observes the capacity of the habitus to determine individual action based on the potential implication for such individuals.

8.3 **Knowledge Sharing as Individual and Collective Strategic Tool**

The strategic considerations of individuals to share knowledge may be regarded as falling within the scope of personal interests, intents and motivation as discussed in the section above. However, because it was identified as a recurrent theme that resonated with a number of the respondents, it is considered here as a separate section. The empirical evidence is drawn from comments by 14 respondents (7% of coded data) and revealed that knowledge sharing not only takes place as a consequence of strategic thinking at the individual level but also at the collective level of reasoning and hence the consideration of how strategic thoughts govern decisions to share.

8.3.1 **Empirical Findings**

Firstly, at the micro individual level, 6 of the respondents identified possible future consequences of their decisions on whether to share or not to share as playing a key role in determining the course of their actions. One such factor taken into
consideration and common among the respondents in this regard was how the manner in which decisions made by individuals could affect their ultimate positioning within the organization. This is illustrated by the following responses:

Well, to external companies, we would deliberately hide knowledge, yes. But internally, there’s no incentive to. You won’t get rewarded financially, but in terms of your position in the company, then if you can advertise yourself as doing best practice, and there’s plenty of news of that, of best practice that bring on innovation, then you get well recognised for that, ...that builds prestige and esteems ...your performance will be enhanced by sharing that knowledge. If there’s an example of not sharing knowledge that people find out about, obviously it would work the opposite, the regional directors would say ‘why the bloody hell didn’t you tell me that?’ and you’ve been done there! (R18, Project Manager, November 2004)

Someone is more likely to register the fact that you’ve provided some useful information that is maybe outside your principal brief and that is more likely to be registered and highlighted somewhere than if you don’t help at all. (R13, Design Manager, November 2004)

No, it makes life easier for us all. If I knew something about a jet washer and I didn’t tell anybody, I know what it’s going to be like.... I’d much rather just tell him, he could fix it and that way he’s happy, I’m happy and at the end of the day you get a good name for yourself with helping people and that places you better within the organization I suppose. (R01, Mobile Repair Technician, June 2004)

This individual level positioning strategy can essentially be described as being competitive in nature. In which case, individuals may decide to share or not share their expertise and know-how dependent on the perceived consequences. As such, knowledge sharing is favoured if it holds promises of reward in terms of improving an individual’s positioning within the organization and also where the lack of sharing could prove detrimental to such positioning if found out.
At the organizational level, there is an observed shift from the individual competitiveness mentioned above, to a more coopetitive strategy\textsuperscript{33}. According to a project director, a mentality of coopetition is employed as a strategic move at the organizational level to ensure continued esteem and value from both clients and competitors alike. This is illustrated in the following comment:

I was getting phone calls from 'Bears' and 'Staines' and 'Canes' wanting information on what we were doing and we gave them it on the basis that what goes around comes around and you've got to look at the longer term benefits... If you put the walls up, you all mutually don't benefit but if you take the walls down then you all mutually benefit. The difference is, I don't believe that by taking the walls down that we lose any competitive advantage because we both stand to benefit, provided it's a two-way street. So if you are both benefitting, then you're no worse on competitive advantage against that particular organization... It would be like looking at say a group of athletes, if you've got lots of them training individually and you sort of take a group of 3 or 4 top sprinters who are working collaboratively and sharing knowledge and experiences and driving each other on and helping each other, that whole group will lift themselves above the norm. ...The other thing you've got to think about is, how does the client perceive you? The client is going to see you adding value to their business not just through the work you're doing but the work you're sharing, which means that you're reinforcing your position within their supply chain. Whereas if they've got an uncooperative guy who's putting the walls up, it's easier to say, well I can cut this guy off because I can replace him quite easily, but you become such an asset and such a positive influence on their overall business, they can't afford to cut you off because they don't just lose the contractor doing the work, they lose the benefits to all the other contractors in the team... (R23, Project Director, November 2004)

\textsuperscript{33} This strategy derives from a practice-oriented model that is itself based on the game theory, and used to understand cooperation in competitive business environments (see Nalebuff and Bradenburger, 1996).
The nature of the construction environment is such that many projects may be carried out by more than one competing company which in turn make use of subcontractors to carry out different aspects of the project. For the client therefore, maximum benefit is obtained in instances where the different companies are able to work together effectively. What can be deduced from the quote above is that by willingly sharing some forms of expertise with the industry competitors, the organization is perceived by its clients as invaluable, to the extent that they not only apply their expertise to deliver quality service for the client but also enrich their competitors and thus ultimately add value to the client.

8.3.2 Thematic Analysis X

According to Bourdieu, the "responses of the habitus may be accompanied by a strategic calculation" which could result in the transformation of "past effect into the expected objective" (1977: 76). In this way, the habitus has the capability to serve as an enabling tool for individuals to strategically consider alternative courses of action and identify that which would allow them to meet their set objectives and aspirations. Because the habitus is acquired through individual experiences and embodied in the individual as permanent dispositions (Bourdieu, 1993a), the experiences become perpetuated in the individual thereby allowing such individual to continuously reflect on the past and present to guide future decisions.

The notion that the actions of the individual habitus is often encouraged by an individual’s desire to position oneself in anticipation of the future, is perhaps best illustrated in the following comment made above by a design manager; “someone is more likely to register the fact that you’ve provided some useful information that is...more likely to be registered and highlighted somewhere”. Here, there is a recognition by the respondent that his actions to share his expertise would not go unnoticed and can potentially be rewarding, therefore providing a suitable justification for sharing. In another instance, a design manager commenting on why he would willingly share his knowledge commented; “If there’s an example of not sharing knowledge that people find out about, obviously it would work the opposite,
the regional directors would say ‘why the bloody hell didn’t you tell me that?’ and you’ve been done there!” In this particular instance, the disposition towards knowledge sharing is determined by the anticipated consequences. That is, the tendency to share knowledge is often guided by possible reactions that may emanate from the collective in the event of their discovering an unwillingness by an individual to share.

As one respondent further explained that sharing what one knows could also be a positioning strategy: “You won’t get rewarded financially, but in terms of your position in the company, and then if you can advertise yourself as doing best practice... then you get well recognised for that ...that builds prestige and esteems.” Thus, whilst not sharing knowledge may result in future reprimand from the collective and possibly confer a negative perception of the individual; a favourable disposition to share could result in accolades and a better positioning within the organizational context. Furthermore, although financial remuneration is discounted for less tangible reward in this case, on a general note, owing to the experiences of the individual, the habitus responds to situations that require a sharing of expertise by allowing the individual to weigh the possible outcomes (both tangible and intangible) and thereby take the option that would yield the most favourable result in the long term.

In the two statements considered, the actions of the individuals were predicated on wanting to facilitate conditions that would personally be favourable in the future by positioning themselves in good stead in their operating environment. The individual habitus not only responds to past and present circumstances to dispose an individual towards taking actions which would favour the self in the long run but also, the actions of the individuals reflect a need to ensure collective support and acceptance from their organization community. One can also deduce from these instances that by virtue of its ability to cause an individual to undertake strategic contemplations of what ramifications ongoing actions could have on their future, the habitus, which is the set of dispositions of the individual, primarily enable the individual to map out future expectations and make decisions that would encourage a realisation of such expectations.
We further noted that the exhibition of foresight in guiding decisions to share knowledge extends beyond the individual level to the organizational level in which instance the trend within the organization is to facilitate coopetition with industry competitors in order to achieve competitive advantage. In explaining the basis for coopetition, a project director commented; “The other thing you’ve got to think about is, how does the client perceive you? The client is going to see you adding value to their business not just through the work you’re doing but the work you’re sharing, which means that you’re reinforcing your position within their supply chain.” Here, coopetition is employed as a strategy for favourably positioning the organization with the clients. Because of the organizational disposition towards sharing best practices and expertise, it is thus easier for the employees to be part of the collective ethos.

8.4 Concluding Remarks

The discussion in this chapter has highlighted how the habitus facilitates the strategic reasoning of individual actors in their predisposition towards knowledge sharing. In so doing, it was observed that such action extends to the collective. However, it was also noted that the individual considerations become the prime factor for taking specific knowledge sharing decisions.
Chapter Nine

9. Discussion

9.1 Introduction

The preceding three chapters of this thesis have focused on the presentation of the empirical findings and thematic analyses derived from the application of the habitus to understand the dynamics which determine knowledge sharing inclinations among individual actors. The discussion in this chapter is however focused on integrating the salient features from the thematic analyses and relating these to the existing literature thereby providing a clearer exposition of the contribution of this research to knowledge. It is worth reiterating that the concept of the habitus has been employed in this research as an overarching framework. As established in Chapter Three, this was as a result of the identification, in the habitus, of the characteristic relational elements of the various social interaction (resource) concepts. This is followed by a section which reviews the critiques of the habitus and addresses the validity of these critiques in the context of this research, and as a consequence of the research findings. Another section is presented to articulate the utility of the habitus, as evidenced from the research findings and thematic analyses. A final section is then presented, in which the empirical and theoretical limitations of the research are considered in detail, along with the resultant implications.

9.2 Interactivity of the Habitus across Different Time Frames

The thematic analyses presented in the three preceding chapters represent an attempt to capture the critical importance of the role played by the habitus in snapshots of time. Whilst this has been done to facilitate a detailed analysis of the role of the habitus in relation to each time frame, in order to really comprehend the inherent value of the habitus, it is expedient to take a more holistic view of the habitus across the three time frames. As the literature on the habitus clearly indicates; the habitus represents an informed past existing in the present and self-perpetuating into the future (Bourdieu, 1977).
The findings and discussion in this thesis consists of ten thematic analyses; three in Chapter Six, five in Chapter Seven and two in Chapter Eight. In the first of the three chapters the discussions centred on the individual’s past and the role of the habitus in this past. The key learning point in the first of the thematic analysis sections (6.2.1.2) is that because the individual habitus, as the sets of dispositions, are constantly reinforced or modified by ensuing experiences, individuals take decisions on why to share knowledge and with whom to share knowledge, based on accumulated experiences that are set in their dispositions as opposed to solitary experiences. The second thematic analysis (section 6.2.2.2) further makes us understand that the habitus is not only reinforced or modified by the past experiences but actually enables the individual to map out relationship structures and to identify within these mappings, potential knowledge sharing opportunities which are available to the individual, hence the notion that sustained relationships serve as knowledge depositories.

There exists an intricate relationship between knowledge and experience, which is evident in the ability of the habitus to map out relationship structures and inform knowledge accessibility based on experience. Leonard and Sensiper (1998) described knowledge as being partially based on experience, and Nonaka and Takeuchi (1995) further described the socialization process as a sharing of experience that arises from the interaction between forms of tacit knowledge. As such the experiences gathered by individual actors are ingrained in the form of mental models and also constitute tacit knowledge in the individual’s personal cognitive map, upon which the individual is able to draw (Skyrme and Amidon, 2002).

Furthermore, the habitus is subject to reinforcement by externally related experiences as well as self-contemplations by individual actors, owing to the mapping of relations in the individual mindset (Bourdieu, 1977; 1990b). This led to the deductions in the third thematic analysis (section 6.2.3.4) that individual attributions, as expressed in their opinions and dispositions, primarily determine whether or not knowledge is shared among any sets of individuals. Drawing from
the communities of practice literature; in order for external reinforcement to occur, and for any cognitive mapping to take place in the individual, there has to be recognition of competence and where it is situated (Wenger, 1999). This view is supported by Brown and Duguid's (2001) view that knowledge is differentially possessed by individuals in collective settings and that it would be expected for know-how to be shared where common practice prevails. As such, for an individual actor to benefit from the knowledge of others, the individual must recognize the specific logic which confers resource on the other (Bourdieu and Wacquant, 1992).

This means that the impetus for acting as a knowledge source, or seeking out a knowledge source, lies with an individual actor’s awareness of, and identification with where the knowledge is situated. As the discussions demonstrate, this is achieved through the actions of the habitus in mapping out the experiences acquired through common practice and predisposing individuals to act based on that which is ingrained in their mindsets. Hence, the habitus determines the dispositions of all parties involved in knowledge sharing processes, and where there is a lack of recognition or lack of acceptance by one party, of where knowledge is situated, the task of sharing knowledge becomes an uphill process and in some instances impossible. This is why both knowledge transferors and knowledge recipients are essential to the sharing process (Dixon, 2002).

The next five thematic analyses that follow in Chapter Seven drew on the capacity for mutual determination between the individual habitus and the group habitus to understand the possible role played by collective involvement in individual predispositions to knowledge sharing. As expressed in the literature review, there is a seeming imbalance in perceptions of social interaction and knowledge sharing due to an over emphasis on collective actions and a corresponding under emphasis on individual action. The capacity of the habitus to exist in individual and group forms however allowed us to relate the two. As Chiva and Alegre (2005) noted, an integral part of social learning is the contributions of individual knowledge to the generation of collective knowledge and at the same time, knowing itself involves interactions with the “social and physical world” (Cook and Brown, 1999: 388). In this regard the exposure of the individual actor to the collective environment and dispositions is
seen to play a crucial role in shaping the individual habitus through reinforcement or modification.

Having established therefore that continued exposure to collective dispositions can influence the individual habitus through reinforcement or modification, it was observed in thematic analysis IV (section 7.2.4) that because individuals in the project environment were spending relatively short periods moving from one project to another, the tendency was to affiliate with the organization as a whole through the collective habitus of the organization. In this instance, one observes a marked deviation from the popularly held view that the nature of the project environment may stifle the generation of knowledge. Indeed, in relation to processual knowledge, the movement of individuals across projects or units have been identified to contribute to the transfer of knowledge along with characteristics of the units (Argote and Ophir, 2002). Wenger (2000) also noted that interconnectedness among groups, as in project settings, increases the propensity for knowledge sharing. In essence, constant mobility across different projects creates avenues for individuals to form new networks and renew old acquaintances. This increases the possibility for the group habitus to contribute to the shaping of the individual habitus and at the same time enable the development of the knowledge depositories of individuals.

Furthermore, the discussions in section 7.3.2 and 7.4.3.2 (thematic analyses V and VIII) highlight the fact that given the right collective environment, the group habitus would reinforce a sense of camaraderie which persists with the individuals as they move from one project to another. This enables concerted efforts to be made towards achieving set objectives both at the projects level and the organizational level. Factors such as mutual identification by actors may exert 'positive influence' on group performances (Nahapiet and Ghoshal, 1998) and lead to the generation of trust in relationships (Granovetter, 1985).

Where both the group habitus and the individual habitus are in congruence, as presented in thematic analysis VII (section 7.4.2.2), the greater the collective or institutional involvement in building the knowledge base of individuals, the more disposed such individuals would be to share their knowledge. However, it was also
noted that inherent risks such as tradeoffs, conflicts and exclusionary tendencies may also arise in fostering collective actions as is the case with capital resources (Adler and Kwon, 2002). This is particularly the case, when the individual habitus is differently constituted to the group habitus. In such instances tensions may arise between views on widely accepted dispositions and that which an individual attempts to introduce, thereby inhibiting knowledge sharing.

Finally, the last two thematic analyses (IX and X – sections 8.2.2 and 8.3.2) highlighted the manner in which individual actors tended to make decisions which determine their future actions, and the considerations guiding their choices in relation to possible future consequences. As it has been argued so far, persistent external dispositions reinforce or modify the individual habitus as a consequence of the hysteretic attribute which the habitus possesses. Because past experiences become deeply rooted in individuals, they structure the habitus – the individual’s sets of dispositions – by persisting long after the actual experiences and are drawn upon making decisions that apply not only to the present circumstances but also to future circumstances (Bourdieu, 1977). That is, because experiences become inveterate in the individual actors and shape the habitus, they in turn guide future decision making efforts.

For this reason, individuals are predisposed to make self-oriented decisions such as self-motivation, which result from originality of individual thought processes (Von Krogh et al, 2000). Again, it is these experiences that contribute to the endowment of embodied capital resources which are typified by the individual dispositions (Bourdieu, 1986). In this sense, the analyses present us with wholly plausible reasons why when it comes to contemplations of the future, individuals essentially tend to make decisions whether or not to share knowledge simply for self-gratification, or in order to maintain self-interests, which may be politically motivated and in which case individual actors seek to better position themselves within the organization.

The above discussion provides a theoretically informed consideration of how the habitus operates through its transcendence of different chronological time frames. In
this regard, individual actors are predisposed to make decisions based on accumulated past experiences, as opposed to solitary experiences, as a result of reinforcements or modifications of previous experiences by more current encounters. This is achieved by the habitus creating a cognitive map of relationship structures and identifying possible locations of knowledge resources within these structures. In this way, the past encounters serve as knowledge depositories. In addition, by determining the attitudes and opinions of individual actors, the habitus invariably shapes the dispositions of all parties to knowledge exchange processes and thereby influences whether or not knowledge is shared. Furthermore, in a bid not to undermine the role of the collective, but rather to clarify the intricacies of the individual-collective interaction, it was also seen that the group habitus has varying influences on the individual, dependent on whether or not the individual habitus and the group habitus are in accord or in conflict with one another, which may lead to tensions and exclusionary tendencies. It is the combination of these factors that underpin knowledge sharing predispositions of individual actors.

9.3 Readdressing Critiques of the Habitus

Section 3.4.1 of this thesis was dedicated to providing a theoretical basis for addressing the critical perspectives raised about the habitus and its utility. However, having carried out an empirical research which thoroughly engaged with the habitus as an analytic tool, it becomes imperative to revisit these critiques in light of the application of the habitus in executing this study. The critiques presented about the habitus ranged from the habitus being regarded as an entity which cannot be discussed or that is "unsayable" (Strauss and Quinn, 1997:46) and deficient in its explanation on the production of practice (Jenkins, 1992), to its inability to be presented as a "cognitive power" (Margolis, 1999). Invariably, critics of the habitus would have us believe that the habitus is a conceptual abstraction which cannot be manifested through practice. Interestingly, as it was also shown in Chapter Three, while some of these critics consider the habitus as an individualistic concept with implausible collective attributes, others based their critiques on the premise that the habitus is a collective attribute lacking in individualistic attributions.
Firstly, in responding to the critique offered by Strauss and Quinn (1997), it was noted that in relation to the habitus, Bourdieu himself addressed the possibility of learning through “verbal products” and “practices”, both of which instances are indicative of conscious and subconscious learning respectively (Bourdieu, 1977: 88). It was also observed in this research that whilst respondents did not expressly speak of their habitus, by virtue of expression of their dispositions and attitudes towards the subject matter of knowledge sharing, it was possible to determine the sets of dispositions of such individuals, which represent the habitus. Indeed, it was observed in section 7.2.1 that practice within the organization was being fostered by both a conscious learning of the company ethos as well as tacit learning among the individuals owing to the sustained working relationships.

In the second instance, the empirical findings do not corroborate the view that the habitus is deficient in explaining the production of practice (Jenkins, 1992). Indeed, Gherardi (2000) identifies the habitus as playing a significant role in shaping practice, and more recent work by Strati (2007) offer further possibilities for relating the functioning of the habitus to practice, through sensory perceptions. Also, by examining how the habitus develops through the reinforcements and modifications of inveterate experiences as a result of newly acquired experiences, it was possible to see how the habitus informs activities of individual actors thereby determining the practices with which they are involved. As I have constantly emphasised in this chapter, because of the inseparability of the three time phases in reality when considering the impact of the habitus, the instances of how the empirical data address the critiques of the habitus are better identified through a holistic consideration of data relating to individual actors.

The notion that the habitus informs the activities of actors through reinforcement and modification of inveterate experiences is corroborated by a number of examples from the data. Firstly one observed the systems manager who received a lot of support from her team when she joined as a rookie with no construction background (section 7.3.1). She went on to state how this early experience helped her climb the ‘learning curve’. It is the reinforcement of this experience in her habitus that allows her to express her dislike for ‘inefficiency’ and how she would personally go out of
her way to provide unsolicited knowledge and assistance to anyone she deemed to be in need (section 6.2.3.2). The data also presented us with a team leader who was accustomed to receiving assistance from his manager, but was then unable to gain the required help in one specific instance (section 6.2.1.1). What was observed in that instance was that because the habitus of the individual had been reinforced by repeated favourable dispositions from the manager, the solitary occurrence did not alter the team leader’s disposition to the manager rather the team leader was able to empathise with the circumstances of the manager. Because he was used to receiving assistance, the team leader was also favourably disposed to helping out others ‘as much as possible’ (section 8.2.1). In addition, there is the case of the quantity surveyor, who because of her experiences of others withholding information and also of others taking information from her without giving her due recognition and credit for her contributions (section 6.2.1.1), developed a modified disposition in which case she sought to ‘transact’ her knowledge and expertise where required in the future (Von Krogh, 1998).

Finally, as noted in Chapter Three, if one is to understand cognitive power as the ability for individuals to conceptualise, then the criticism by Margolis (1999) that the habitus cannot be a ‘cognitive power’ becomes unfounded. The very fact that Bourdieu distinguishes between the individual habitus and the social or group habitus (Bourdieu, 1990b) denotes the existence of the habitus as being personal to the individual and conferring on the individual the ability to generate original ideas (Nonaka and Takeuchi, 1995). Indeed, the ability for each individual to make unique decisions is demonstrative of the ‘cognitive power’ of the individual. There is evidence of this from the research findings whereby personality dispositions and attitudes predispose individual actors to relate to others in specific manners personal to the individual and guided by the individual’s own cognition. In one instance, one observed a civil engineer (section 6.2.3.3) who was not in the habit of keeping in touch with former colleagues or maintaining networks and who also preferred to seek assistance through technological means as opposed to speaking with other individuals. For this individual, knowledge should be shared only on a need-to-know basis and information should not be volunteered unless specifically demanded (section 7.4.3.1). In another instance, there was the senior design manager who
described his personality disposition as being gregarious and getting along with most people (section 6.2.3.3). For him, one noticed an expression of a mentality to identify complementary knowledge in others and to seek to foster relationships that would enable him to tap into such knowledge (section 6.2.3.2). Also, this particular individual was ‘always’ keen to share what he knew because of the association of collective (non)achievements with his personal (non)achievement especially in relation to his subordinates (section 7.4.3.1).

Based on the above discussion, doubts can be cast on both the theoretical and empirical validity of the critiques offered about the habitus. A strong case for this arises from the essential nature of the habitus as existing in individual and collective forms and as being perpetuated through modifications and reinforcements as a result of social interactions over time. For instance, because the habitus itself is subject to change as a result of the experiences to which it is subjected (Everett, 2002), it becomes possible for the habitus to inform the practice with which individual actors engage, thus refuting the view that the habitus is incapable of explaining the production of practice. As such, I can conclude that within the context of this research, the critiques about the habitus are lacking an empirical basis for justification.

9.4 The Utility of the Habitus

The discussion in the preceding sections further allows a detailed articulation of the utility of the habitus as exhibited in this research. One observes that by reflecting on the application of the habitus in the analysis of the collected data, it has been possible to provide supportive evidence for the empirical utility of the habitus over and above the relational concepts discussed in Chapter Three. Based on the process and outcome of this research, it can be argued that a significant attribute of the habitus is its utility as both a conceptual and an analytical research tool. Whilst the habitus cannot replace any of the resource concepts discussed in the review of literature, it was established that the habitus is complementary to, and possesses the capacity to facilitate and accentuate an understanding of the functioning of the resource concepts.

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We noted in Chapter Three that although both social capital and cultural capital are resources; firstly social capital, through its cognitive and relational dimensions, attempts to fill a void in relation to individuals' capacity to reason and to articulate the involvement of agents in network relationships (Nahapiet and Ghoshal, 1998). However, explanations given in these attempts are inconclusive as they do not address why and how the actors mobilise the accruing resources from the different dimensions. Secondly, it was also observed in section 3.1.2 that cultural capital in its embodied state attempts to do the same by typifying dispositions of the mind and body (Bourdieu, 1986). However, as one of its relational elements signifies (see Table 3.2), it is limited in value to the possessing individual.

Furthermore, whilst communities of practice presented an avenue for comprehending how resources constitute sources of collective competitive advantage through highlighting the extent to which learning is situated in work practices (Swan et al, 2002), the concept does not provide a detailed consideration of individual input in the collective learning process. Lastly, it was also observed that through a consideration of the theoretical analyses, it was possible to identify the utility of the habitus through the relational elements identified as linking the resource concepts and the habitus; interactivity, mutuality, identity, unconscious acquisition, and limited value.

Furthermore, in section 9.3 above, it was observed that a number of mechanisms guide individual knowledge sharing. These mechanisms draw on the actor's ability to; recognise the value of past experiences, identify knowledge depositories and be aware of complementary knowledge, and the tendency to pursue individual personal strategies – all of which are related to the functioning of the habitus. This research thus opens up the possibilities for intellectual engagement of the habitus as an analytical tool, in which regards, the research can be considered as providing a starting point in understanding the scope for application of the habitus as a research tool.

From a theoretical point of view, one significant theoretical contribution of the research is in enabling an understanding of the practice of knowledge sharing through the dynamics of the habitus. It has been established in the knowledge and
practice literature that practice is integral to the actioning of individual knowledge. Furthermore, in order to study the dynamics of knowledge actions among actors, it was essential to move from abstract considerations of knowledge. This led to the introduction of knowing-in-practice, which demonstrates the integral nature of practice to making individual knowledge actionable (Orlikowski, 2002; Gherardi, 2000; Nicolini et al, 2003; Newell and Galliers, 2006). It was also noted that there is the determinism associated with frameworks such as Nonaka and Takeuchi’s SECI model for knowledge creation (Engeström, 1999, Zhu, 2006), which do not allow for considerations of social and contextual influences on the conversion process. This led to the introduction of ba in an attempt to specify the context for knowledge conversion.

As I noted however, in focusing on spatial context and the collective, concepts like ba and communities of practice respectively do not allow for further investigation of the modalities of actors involved in the knowledge sharing process. It is in this regard that an in-depth consideration of practice would foster understanding of recurrent interactions among individual actors leading to knowledge exchange and creation of new knowledge (Gherardi, 2000). Therefore, to understand knowledge conversion and sharing processes, there is need for insight into the enabling recurrent practices. This is where the habitus proves very valuable due to its specific constitution as a ‘law’ in individual agents that is a precondition for enabling “coordination of practices” (Bourdieu, 1977: 81). That is, practice is incorporated in, and structured according to the specific principles of, the habitus (Warde, 2004, Bourdieu, 1977). As established through the specific findings of this research, it is in view of this attribute of the habitus that the concept proves to be invaluable as it allows for meaningful interpretation of individual action in practice.

As noted above, the habitus facilitates the concentration of the characteristic elements of social concepts such as social capital, cultural capital, and communities of practice. This allows the habitus to serve as an integrating concept and tool for focused research. It was also noted that whilst the concept proved very useful in interpreting and understanding the actions of agents at the micro level, it cannot be taken as a substitute for any of these concepts. Rather, the habitus is best construed as playing a complementary role in explaining the functioning of the resource
concepts discussed in this thesis. As discussed in section 3.5, in its individual and group forms, the habitus exhibits a significant number of the characteristic features of the resource concepts but it is also unique in its own rights, with its own characteristic features, and as such cannot be taken generally as a replacement concept. However in this context, because the habitus allows us to focus on the individual, and takes into account the impact of the structural environment as well allowing for an embrace of the characteristic elements common to the other resource concepts, it was unnecessary to apply the habitus in conjunction with the other resource concepts. In addition, given the seemingly shortcomings highlighted above in the other evaluated concepts, the habitus is able to act as a complementary conceptual tool to the other concepts and as an analytical tool in its usage as an overarching framework for understanding the dynamics that govern the decisions of individual actors to utilise their resources and also to better understand the role of the individual in collective endeavours.

The utility of the habitus is further evidenced through the constitution of the habitus as attributes which are ascribable to individual agents as well as to the collective. Because of its existence in both individual and collective forms, it was possible to see how the habitus transcends the structure/agency divide, thereby allowing for contemplations of the manifestation of the individuality of actors within collective structures. It is because of this individuality that is demonstrated through the habitus that one is able to comprehend why institutional decisions may not prevail on individual action, even in instances where there is collective understanding.

Furthermore, one sees the habitus playing a gap-bridging role that is inexplicable through considerations of the resource concepts; as resources (social and cultural capital) or as constituting a predominantly collective phenomenon (communities of practice). As was established in Chapter Three, since the individual and collective habitus are mutually determining, the habitus as a concept opens up the possibility for not only identifying and studying the dynamics of individual predispositions to choices, it also allows for an appreciation of interactions between individual actors within multiple levels of networks; from dyadic relationships through to cliques and larger institutional networks.
9.5 Empirical and Theoretical Limitations to the Research

Following a redress of the critiques of the habitus and a discussion of its utility, this section is focused on highlighting the limitations that were encountered in the research and how these specifically impacted on the way the research was conducted. For the purpose of discussion, these limitations are classified as empirical and theoretical limitations. The empirical limitations include factors that were outside my control as a researcher as well as limitations arising from choices made about the research approach. The theoretical limitation on the other hand relates to the habitus and became evident in the course of data analysis.

9.5.1 Limitations Encountered in Implementing Empirical Research

In the first instance, the nature of the research proved a limitation to gaining access into organizations. This is particularly so as the type of data required could best be collected using any of ethnography, in-depth interview or observation, all of which require substantial access. In a few instances, some organizations, for reasons of wanting to protect organizational ‘advantages’ or competences and also to avoid ‘unnecessary distractions’ of their workforce, refused research access. Whilst this scenario is not uncommon in management and organization studies, it demonstrates the importance of alignment between personal research objectives and company interests. This was the case in section 4.4, where company access was attributed to mutual interest between the researcher’s goals and company interests. Another research limitation was insufficient funding. In this regard, the research was conducted on a smaller scale than was preferable. Given the availability of more funds, the research could have been conducted as a longitudinal study, where data could be collected over time to reflect on possible changes in respondents’ positions. However, the research still satisfactorily achieved its aim by collecting data representing ‘snapshots’ of respondents, and demonstrating reflections and prospective considerations of respondents.

A self-imposed limitation on this research was in terms of boundary setting. The scope of the research was restricted to an organization employing knowledge
workers in the UK in the hope that by focusing on the UK, there would be reduced cost implications as opposed to, for instance, multinational studies of the different offices of a company. The research boundaries were set to consist of individuals in specific units and project teams to allow for identification of instances of interactivity that may or may not have culminated in sharing knowledge and expertise. Furthermore, focusing on knowledge workers ensured that respondents would essentially be individuals with jobs predominantly governed by their intellectual capabilities. The research also focused mainly on respondent relations with respondents as the principal actors, in line with the aim of gaining insight into the reasoning behind individuals' action on sharing knowledge and expertise. As such, the research, necessitated that respondents be individuals involved in activities requiring active application of their know-how rather than be predominantly engaged in routinized process-driven work.

In addition, in assuming a constructivist epistemological stance in which knowledge is viewed as contingent on human perceptions and social experiences, the decision was to take a methodical approach involving qualitative research, and this had its attendant limitations. As the research aimed to understand why and how individual actors decide to share knowledge, the methodical approach favoured for the research was a single case study employing the in-depth interview technique for data collection. However, in this regard, one of the main limitations of the approach was the possibility of ending up with post-rationalised espoused thoughts and reasoning of respondents as opposed to observing events as they unfolded. As discussed section 4.5.1, the interview technique was decided upon based on its strengths in; the ability to address specific research interests, research precedence, and the possibility of avoiding the difficult issue of having to secure prolonged research access which would have been required for other viable alternatives such as ethnography, as discussed in Chapter Four.

Finally with regards to the data collected, not all respondents addressed the main themes. On average, two-thirds of the respondents commented on the main themes, whilst about half the respondents actually commented on the issues addressed by the sub-themes. Other respondents were however silent on a number of issues raised and
this presented a methodological problem in some sense. This is more so given the methodical approach taken whereby the in-depth interviews were able to generate their own content. As such, respondents who did not comment on certain themes, more often than not, were those who were uncertain of their positions in relation to certain themes or who did not regard the issues as having specific bearings.

9.5.2 Theoretical Limitation of the Habitus

Having already demonstrated the usefulness of the habitus as a social research tool, it is expedient to articulate the positioning of the concept in relation to other social theories, particularly such theories as structuration theory, actor-network theory and activity theory, all of which were identified in Chapter Two as sharing some similarities with the habitus in that they all attempt to reconcile structure and agency. This need arises from the identification of a particular instance during research analysis, which suggests that theoretically, the habitus may not be fully equipped to deal with certain aspects of individual interactions with the collective.

From the findings and analyses chapters, the value of the habitus is evident as it provides insight into individual reasoning and the guiding principles that influence their knowledge sharing practices. However, in relation to findings on individual positioning and inclinations to share knowledge, there seems to be greater scope for consideration than is allowed for by the habitus. As observed in section 7.4.3.1, there was a tendency among some respondents to engage in selective dissemination of knowledge and an inclination to seek to preserve 'power/knowledge bases'. The section also documented respondent views of sharing on a 'need-to-know' basis, using sharing as a 'positioning strategy', and several references to the notion that 'knowledge is power'.

In the related thematic analysis, the notion of social class was used to explain why class divide between management and non-management staff might result in highly positioned employees being exposed to similar conditionings and hence share the same collective habitus that is favourably disposed to sharing knowledge with subordinates. It was also shown how the characteristic elements; mutuality, interactivity, and identity, predisposed the individuals towards sharing, given the
sense of belonging that is encouraged by mutual involvement in specific projects. The sense of belonging allowed respondents to identify with a desire to see their projects succeed. The habitus however does not allow us to sufficiently analyse the specific interactions arising from power relations between individuals in the same, and from different hierarchical positions.

It is in this regard that the habitus may benefit from use alongside other social theories. For instance, structuration theory, recognises power as “one of several primary concepts of social science” and describes it as a “means for getting things done and, as such, directly implied in human action” (Giddens, 1984: 283). With regards to its application to knowledge, structuration theory already finds application in the closely related and overlapping field of innovation studies. Where it is deemed to provide ‘sensitising’ devises that help in developing the notion of interactivity by focusing, for instance, on how facilities in systems of domination serve as a means for social actors to exercise authority over others (Edwards, 2000; Jones et al, 2000).

Similarly, ANT is particularly suited for studying power relations through the sociology of translation (Callon, 1986; Fox, 2000), as it advocates an approach in which human and non-human as well as social and technical factors can be examined together in the same analytical view (McLean and Hassard, 2004). Also, activity theory which is referred to as being deeply contextual offers this possibility and is oriented at understanding practices as well as mediating artifacts (Engeström, 1999). Thus, a common feature of these theories is their analytic engagement with both power and structural features in the forms of rules, resources and artifacts, which can foster understanding of agents’ actions.

As such, the habitus, with its specific orientation towards predispositions and their influence on action, can be used in concert with some of these other theories that may be better suited for studying structural influences in order to give a more holistic analysis. This could be, for instance, in understanding the impact of context and artifacts in the choices of actors in selectively disseminating their knowledge. Therefore, whilst the habitus proves invaluable in understanding agentic action,
complementary usage\textsuperscript{34} with other theories may prove more beneficial in social analysis.

9.6 Concluding Remarks and Summary

In this chapter, I have been able to demonstrate the interrelatedness of the past, present and future through the transcendent nature of the habitus. In so doing, I demonstrated that the actions of the habitus do not occur in isolation, rather the past bears on both the present and future considerations. This interactivity between the three chronological snapshots enabled a demonstration of how individual actors manifest their dispositions in practice, thus providing insight into the functioning of the habitus in informing predispositions of actors in making practical decisions. By readdressing the critiques of the habitus, I demonstrated that these critiques had no bearing in the context of this research. Furthermore, the discussion of the utility of the habitus as an analytical tool enabled us to articulate precisely how the habitus brings together elements of the resource concepts in practice. Finally, in discussing limitations to the research, it was particularly noted that due to possible theoretical shortcomings, the habitus was not fully equipped to deal with all aspects of agents' interactions within the collective, such as the issue of power relations. As such, it is viewed that for the purpose of research, the habitus stands to benefit more if applied in concert with complementary theories in social analysis.

\textsuperscript{34} This notion of complementary usage is viewed in terms of the possibility of bringing together aspects of theories and concepts which are fundamentally unopposed to one another in ontological and epistemological positions, and applying these aspects to research in order to understand the impact of different perspectives on the researched.
Chapter Ten

10. Reflections and Conclusion

10.1 Introduction

The design of this thesis is as an exploratory study into the dynamics that surround knowledge sharing in organizations. In order to achieve the objective of facilitating a better understanding of how and why individuals make choices, as well as their predispositions on whether or not to share their knowledge and expertise, the research focused on a single case organization for the empirical work. The collected data were subsequently analysed through an interpretive methodology. Whilst avoiding a rehash of what is already documented in the preceding chapters, the object of this reflections and concluding chapter is a retrospective consideration of the various elements of the thesis and how these have come together to ensure that the thesis makes a meaningful contribution to the field of management and organization studies.

The chapter is divided into four main sections; the first section is a reflection on the findings and discussions. In this section, I summarise the salient features that arose from the thematic analyses in the three preceding chapters. In so doing, one gains better insight into how the theory and praxis of the habitus are related. The reflections in the second section are on the theoretical contributions made by this research. In the first instance, I consider how the concept of the habitus has served as an alternative lens for understanding knowledge sharing dynamics and following from this is a consideration of what practical implications the insight provided by the habitus has on perceptions of existing theoretical models. This is followed by a section detailing the scope for future research using the habitus. Finally, the concluding section reflects on empirical considerations and practices which contributed towards shaping the research outcome.
10.2 Reflections on Thematic Analyses

What the research findings in this thesis do is to give insight to how the habitus as a dynamic concept is enacted in individual actors. This is achieved through considerations of how and why actors share or choose not to share their knowledge resources. Firstly, individual actors are deemed to make knowledge sharing choices as a consequence of accumulated experiences and not through solitary experiences. This is because of the reinforcing and modifying ability of the habitus which not only shapes individual actors' dispositions but also enables the individuals to map out informative relationship structures. In addition, because the individual actors do not exist in isolation, it was noted that the reinforcement and modification processes also result from exposure to collective dispositions, which represents the social or group habitus.

Furthermore, not only does the habitus inform individual action, but because of its existence in the group form, it allows for a transcendence of the structure agency divide. It was demonstrated that the group habitus, through reinforcement of collective dispositions fosters comradeship among members of the collective. In this particular case, due to the nature of the organization as one in which work is carried out in project environments, there was evidence of a greater tendency for individuals to affiliate more with the organization as a whole than with specific projects. The reason for this is attributable to the mobility across projects, which in turn allows the projects and its participants to defer to the organization, given its stable structure and common disposition.

Furthermore, for individual actors, personal attributes and dispositions are shaped by past occurrences, which in turn are presented in the individual habitus that guides the actors' current predispositions in concert with the prevailing environmental dispositions. Here, one also observed the potential for tensions between the individual habitus and collective habitus in instances where the dispositions are not similarly inclined. Bearing in mind the possibility for collective influences to prevail on the individual, it is in this regard that the hysteretic attribute of the habitus is observed to the end that individual actors' decisions become primarily motivated towards preserving self-interest. Hence individuals would embark on actions in the
present, through a series of conscious and subconscious contemplations that arise from past experiences which allow for recognition of the situatedness of knowledge resources – especially for prospective recipients and enable individual actors to take decisions that bear on their present circumstances. These experiences also determine the way individuals make strategic and tactical decisions that may have definite implications for their future.

From the above outcome of thematic analyses, it was possible to take a critical perspective on how the habitus is a key factor in the predisposition of individuals to share. According to Strauss and Quinn (1997), whilst the habitus is structured by the practice and experiences of individuals, it also structures the collective culture to create new objects and practices. This characteristic of the habitus allowed us to consider an alternative downside-up perspective to the top-down perspective on managerial influence. In this regard, it was observed that individuals' habitus allow for individuals to make knowledge sharing decisions irrespective of institutional directives, in as much as the expected outcome is agreeable with such individuals.

Finally, by carrying out a discussion of the findings in relation to time implications in which case I discussed the role of past experiences as well as ongoing interactions and future considerations, and relating this to existing literature, I was able to look at the ways the habitus impacts individual predispositions to share knowledge in snapshots. It was however noted that the individual experiences at these different time phases do not act in isolation but rather that they are constantly reinforcing and/or modifying the individual's sets of dispositions. This constitutes the central finding of the thesis and can be summed up as follows that given an enabling environment, individuals would be more disposed to sharing their knowledge and expertise to the extent that the outcomes of such sharing activities are conducive to the individuals themselves.

10.3 Research Contributions

The primary achievement of this research is its contribution to understanding the mechanisms that facilitate the decision making of individuals in the knowledge
sharing process. Whilst not undermining the important role of formal and informal social groups in the management of knowledge and in socialization processes—a point that has been extensively examined in research (see Leana and Van Buren, 1999; Hansen, 2002), the findings of this research have shown that the individual habitus, as expressed by the sets of dispositions that define the individual, is essential in constructing the dynamics that inform the knowledge sharing decisions of individuals in the organization. In this regard, the role of the individual is at the least as important to the process as the involvement of the collective.

Bourdieu’s concepts have often been thought to be difficult to apply empirically and in instances where this has been attempted, they have often resulted in improper usage (Mutch, 2003; Özbilgin and Tatli, 2005). However, by deconstructing Bourdieu’s notion of the habitus and identifying the commonalities with other social interaction concepts, it has been possible to use the concept of the habitus as a theoretical research tool as well as an analytical tool. Given that the habitus exists both as an individual and a collective construct, it was possible to explore how the reality of individuals is subject to structural constraints existent in the environment and at the same time show how structure is socially constructed through collective action thereby informing the actions of individuals. Furthermore, by exploring the mechanisms that determine individuals’ actions, mechanisms such as personality dispositions, individual thought processes and network of interactions; it was possible to deduce that individuals’ sharing predispositions are predicated upon the personal and collective experiences which are reinforced in the individual habitus.

Another area of contribution is the possibility for the use of the habitus as an alternative lens to critically evaluate existing theoretical models in the knowledge management and social interaction literature. By emphasising the centrality of the individual to the knowledge sharing process, the empirical evidence offered in this research is in sharp contrast to the managerialist views expressed in other researches where mobilisation of knowledge resources is deemed to be controlled at the managerial level (see Von Krogh, 1998 for example). This research demonstrates that managerial actions only constitute a factor in the series of considerations which inform individual knowledge sharing predispositions, and further argues that the
personal sets of dispositions of individual actors is a more significant factor in the process.

10.4 Scope for Future Research

Through the use of the habitus, this research has provided much insight into the factors that guide predispositions which inform individuals' knowledge sharing activities. The research supports the proposition that within the organizational context, the choice whether or not to share knowledge is a decision that is ultimately taken by concerned individuals subject to their personal sets of dispositions which is expressed as their habitus. It is however recognised that by no means does this constitute a generalisable finding, for the principal reason that the research was conducted as a single case study in a specific industry sector.

As an exploratory research, this study has not only addressed the research aims by providing insight into the dynamics governing individual knowledge sharing predispositions but it has also identified a couple of interesting areas for future research considerations. Firstly, one of the research findings was that in this particular context, individuals were prone to revert to existing relationships that arose from previous working relationships in project environments. This therefore allows for a proposition that individual mobility across project teams within an organization potentially offers the capacity for knowledge sharing and knowledge creation. A future research agenda would be to test this proposition through a longitudinal case study of knowledge sharing and creation in the project management environment.

Secondly, as Bourdieu's sociological works have become accessible to English speaking researchers, there has been an increased awareness of the general contributions of these works to management and organization studies (Özbilgin and Tatli, 2005). Particularly, researchers have tended to engage with critical appraisals of Bourdieu (see Calhoun et al, 1993; Warde, 2004), whereas few research have been carried out into empiricising Bourdieu's concepts (e.g. Mutch, 2003). In this research, I have attempted to operationalize the habitus by deconstructing it and
identifying its characteristic composition, and applying it to the field of knowledge management. In so doing, the research highlights the importance of human agency in the organization and management of knowledge sharing activities. This provides room for potential theory building based on empirical research. In order to do this and to distinguish such studies from the psychoanalytic strand however, there is need to further refine how the habitus might be operationalized in wider management and organization research.

Furthermore, from the discussion in Chapter Nine it was observed that the habitus is effective as a complementary concept to the other concepts considered in the theoretical framework (i.e. social capital, cultural capital and communities of practice). In addition, identification of the theoretical limitation of the habitus in addressing specific power relations among individual actors in a collective highlighted the possibility for the use of the habitus in concert with other social theories such as structuration theory, ANT and activity theory. This is particularly relevant as existing literatures also indicate the importance of power and power relations in sharing and social practice (Callon, 1986; Lave and Wenger, 1991; Nahapiet and Ghoshal, 1998; Carter, 2000; Contu and Willmott, 2003). As such future research considerations will also include conducting research to determine how best the habitus might be engaged as a complementary concept with some of these other social theories to enable a more critical analysis in social research.

10.5 Epilogue

This PhD research has taken the most part of four years of constantly pouring over existing and new literature in order to produce a worthy doctoral thesis. This process has also been accompanied by many sleepless nights of thinking, ‘worrying’ and writing. Although it is often said that the process of obtaining a PhD is one of extreme academic rigour, little else is said on the impact of this process beyond the academe. I therefore find it expedient that a suitable ending to this thesis would be to mention the varying impact of a journey that started in 2003.
Writing the thesis has proved to be a means to an end and not the end in itself. The first 33 months were spent in full time studies. Of these, I spent the first twelve months reviewing literature and then designing my research methodology for an upgrade which took place three months later. The upgrade was the first of intermittent reflections that revealed theoretical gaps in my grasp of the literature but at the same time demonstrated the extent of progress made in understanding the field of study. This learning process was particularly fostered by frequent attendance at workshops, departmental seminars and attendance at conferences. As discussed in the methodology chapter, carrying out the fieldwork for this research was another exciting experience, and these, coupled with the teaching experience gained along the way, have made the doctoral research output more than just a contribution to knowledge; it has also been a life-changing process that has equipped me for future endeavours.
Appendix I

Sample Introductory Letter

To Whom It May Concern:
XY LIMITED
d Road
United Kingdom


REQUEST FOR ACCESS TO YOUR ORGANIZATION

My name is Ademola Obembe and I am a doctoral research student at the University of Leicester Management Centre. I am writing to you to request for access to your organization for the purpose of carrying out a research into how the social network of employees impact on knowledge transfer within the organization. The main purpose of the research is to gain insights into how factors such as social capital, cultural capital and communities of practice may be utilised to understand and facilitate the distribution of knowledge in the context of the organization.

I believe your organization is most suitable and appropriate for a research of this nature since the services rendered by you require highly technical and intellectual expertise. As such, I believe the organization will afford me the opportunity to research into how its employees are using and can best exploit their networks to bring about adequate exchange of relevant knowledge and ensure continuous organization competitiveness. It is expected that the outcome of this research will put the organization in a better frame to build its intellectual and social capital by tapping into the social networks that employees have and can establish. Thus enabling a realisation of the inherent competitive advantage in one of its most vital resource – the organization employees. In addition, the organization will benefit from a copy of the relevant findings of the research thesis, which will not only detail the findings but also how these results might find beneficial practical application.

Essentially, the research would require face-to-face interviews and possible administration of questionnaires to some employees. These however will be conducted in an appropriate manner in keeping with the needs of your organization. Furthermore, in recognition of the need for employees to pursue their primary functions, minimal time will be required from any participant –to the extent that the research does not constitute a hindrance to employee functions. In the course of the research, I will be bound by confidentiality and trust, as such all my research findings will be treated with utmost confidence. Kindly find copies of my research proposal and CV attached herewith. I very much look forward to a favourable response from you.

Yours faithfully,

OBEMBE Ademola O.

Supervisors:

Dr Steve Conway
Senior Lecturer in Innovation.

Professor Frank Mueller
Professor of Organisation Theory and International Strategy.
Appendix II

Set Time Schedule for the PhD

<table>
<thead>
<tr>
<th>Time Period*</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan – Nov 2003</td>
<td>Literature review and establishing a theoretical research framework. *</td>
</tr>
<tr>
<td>July – Sept 2003</td>
<td>To seek and secure organization access.</td>
</tr>
<tr>
<td>Sept – Dec 2003</td>
<td>i. Attend research methodology courses (Management Centre requirement).</td>
</tr>
<tr>
<td></td>
<td>ii. Finalise literature review chapters in readiness for conversion from APG to PhD.</td>
</tr>
<tr>
<td></td>
<td>iii. Preparations for fieldwork.</td>
</tr>
<tr>
<td>Jan – Sept 2004</td>
<td>Field Research and data collection.</td>
</tr>
<tr>
<td>Apr – Oct 2005</td>
<td>Writing up of thesis and submission of first full draft.</td>
</tr>
<tr>
<td>Nov – Dec 2005</td>
<td>Amendments and submission of final draft.</td>
</tr>
</tbody>
</table>

* These time periods give a rough estimate of how I expect my research to progress. To a large extent, there will be overlaps in the specified time periods, as most of the outlined activities do not occur in isolation.

* The process of literature review will be ongoing till the completion of thesis.
Appendix III

Interview Schedule

1. Job function, years of experience.
2. Basis for being on particular project (contacts?)
3. Past interactions and possible impact on present job function
   a. Are relationships maintained with former colleagues?
   b. Do these relationships offer any benefits to present job function?
   c. Any specific instances?
4. Networking and sharing.
   a. What support networks are available for individuals to tackle job-related issues?
   b. Are there regular formal/informal meetings for individuals with similar job functions?
   c. Do you see a need for individuals to share their expertise? Why?
   d. How are experiences shared (codified/non-codified)?
   e. Any benefits/pitfalls observed from sharing expertise?
   f. Opinion of individuals who just get in touch in times of need.
5. Respondent's contribution to knowledge development of colleagues (subordinates)
   a. Do you feel individuals contribute towards helping others develop their knowledge base?
   b. Are there instances where you have contributed to helping others develop their k-base?
6. Factors affecting KS
   a. Do friends/colleagues influence who we share or knowledge/expertise with?
   b. Why share with some and not other? Exclusion principle.
   c. Any benefits observed from sharing?
   d. Impact of cultural/societal background on intra-organization relationships. Any specific instances?
7. Internal politics, power/influence
   a. How is respondent positioned in org (with or without clout)?
   b. Who commands influence in teams/units/projects, and why?
   c. In instances of difficulty who is most likely to be approached, why?
   d. Political use of knowledge? (Discriminate use to better position oneself)
8. Academic experience
   a. How much does this bear on job performance?
   b. Does it impact on how one is perceived by individuals?
   c. Any relationships between individuals' formal or informal training and perceived value.
# Appendix IV
## Details of Interview Respondents

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Job Function/Title</th>
<th>Sex</th>
<th>Years of Industry Experience</th>
<th>Years with Taylor Woodrow</th>
<th>Time Range</th>
<th>Age Range (Actual/Perceived)</th>
<th>Distance to Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobile Repair Technician</td>
<td>M</td>
<td>-</td>
<td>6 months</td>
<td>Less than 1 year</td>
<td>31-40</td>
<td>Commutes (site visits)</td>
</tr>
<tr>
<td>2</td>
<td>Contracts Manager</td>
<td>M</td>
<td>14</td>
<td>14 years</td>
<td>11-15 years</td>
<td>31-40</td>
<td>30 miles</td>
</tr>
<tr>
<td>3</td>
<td>CSR Team Leader</td>
<td>M</td>
<td>-</td>
<td>13 months</td>
<td>1-2 years</td>
<td>20-30</td>
<td>Local (Manchester)</td>
</tr>
<tr>
<td>4</td>
<td>Commercial Manager</td>
<td>M</td>
<td>-</td>
<td>20 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
<td>70 miles</td>
</tr>
<tr>
<td>5</td>
<td>Report Writer</td>
<td>M</td>
<td>-</td>
<td>6 years</td>
<td>6-10 years</td>
<td>Above 40</td>
<td>Local (Manchester)</td>
</tr>
<tr>
<td>6</td>
<td>Senior Project Manager</td>
<td>M</td>
<td>-</td>
<td>31 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Civil Engineer</td>
<td>M</td>
<td>13 years</td>
<td>11-15 years</td>
<td>31-40</td>
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</tr>
<tr>
<td>8</td>
<td>Design Manager</td>
<td>M</td>
<td>15</td>
<td>3 years</td>
<td>3-5 years</td>
<td>31-40</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Technical Service Group Manager</td>
<td>M</td>
<td>-</td>
<td>27 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
<td>50 miles (site visits)</td>
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<td>10</td>
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<td>M</td>
<td>-</td>
<td>17 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Quantity Surveyor</td>
<td>F</td>
<td>5</td>
<td>5 years</td>
<td>3-5 years</td>
<td>20-30</td>
<td>Commutes (not local)</td>
</tr>
<tr>
<td>12</td>
<td>Contracts Services Team</td>
<td>M</td>
<td>Less than 5 years</td>
<td>6 months</td>
<td>Less than 1 year</td>
<td>20-30</td>
<td>Local (Watford)</td>
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<tr>
<td>13</td>
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<td>M</td>
<td>-</td>
<td>25 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
<td>Local (London area)</td>
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<td>M</td>
<td>More than 25</td>
<td>10 years</td>
<td>6-10 years</td>
<td>Above 40</td>
<td>Local (London area)</td>
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<td>M</td>
<td>-</td>
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<td>More than 16 years</td>
<td>Above 40</td>
<td>Local (London area)</td>
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<tr>
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<td>M</td>
<td>3</td>
<td>1 year</td>
<td>1-2 years</td>
<td>20-30</td>
<td>Local (Cardiff)</td>
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<tr>
<td>18</td>
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<td>M</td>
<td>-</td>
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<td>More than 16 years</td>
<td>31-40</td>
<td>40 miles</td>
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<td>11-15 years</td>
<td>Above 40</td>
<td>40 miles</td>
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<tr>
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<td>F</td>
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<td>5 years</td>
<td>3-5 years</td>
<td>20-30</td>
<td>Local (Cardiff)</td>
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<tr>
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<td>M</td>
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<td>6-10 years</td>
<td>20-30</td>
<td>40 miles</td>
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<tr>
<td>22</td>
<td>Design Manager</td>
<td>M</td>
<td>30</td>
<td>2 years</td>
<td>1-2 years</td>
<td>Above 40</td>
<td>Local (Cardiff)</td>
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<td>20 years</td>
<td>More than 16 years</td>
<td>Above 40</td>
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<tr>
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<td>M</td>
<td>8</td>
<td>12 years</td>
<td>11-15 years</td>
<td>31-40</td>
<td></td>
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<tr>
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<td>M</td>
<td>14</td>
<td>14 months</td>
<td>1-2 years</td>
<td>20-30</td>
<td></td>
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<tr>
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<td>M</td>
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<td>15 years</td>
<td>11-15 years</td>
<td>31-40</td>
<td>Local (Cardiff)</td>
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<tr>
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<td>Assistant Engineer</td>
<td>M</td>
<td>1</td>
<td>1 year</td>
<td>1-2 years</td>
<td>20-30</td>
<td>Local (Cardiff)</td>
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Appendix V

Interview Sample

I: For the record, can you tell me about yourself and your job function.
R: I'm a quantity surveyor and I've been working for 5 years now.

I: What is your present job function?
R: Presently I look after the company's consultants commercially. I create a database, so that we can run a search for the commercial aspect of our strategic alliance partnerships.

I: Are there support networks available for you to tackle job related issues?
R: Like HR or to enable you do your job? I don't really understand what you said. I worked on site for 4 years and any issues you have on site and couldn't resolve it, then I'd go to my line manager to see if he could resolve it.

I: In Construct Co., do you have any forms of social interactions?
R: Nights out. We do have this but you tend to be kind of secluded, you know, if you're on site, you tend to go out with people on site, but you tend not to interact across the hierarchy, we do try and do this at Christmas parties but it would be... [Inaudible] there isn't really a great deal of socialising; you sort of tend to be kept within your department.

I: Do you see any problem with this?
R: Yes and no. Some people are working... [Inaudible] but sometimes it depends as well.

I: Who are the people who you think tend to progress faster in the organization?
R: Blue eyed boys. I think, well, it's not what you know but who you know sometimes. That's usually the case; if someone's worked particularly well for somebody else and they've taken a shine to them then they might progress faster than somebody else who is quiet and not pushing.

I: Then how do you think what you know comes into play?
R: I suppose it's useful to help you in your own relationships and you're like...but other people who might... [Inaudible] their knowledge... [Inaudible]

I: In your present job role, do you guys have regular interactions?
R: [Inaudible] ...I deal with all the different kinds of projects and I also keep the... so they have to we have... [Inaudible]

I: Do you see any shortcomings in the fact that you don’t get to interact with them frequently?
R: Not really, I don’t.

I: Do you have a preferred way of communicating?
R: You can probably cover yourself a bit better with emails because you can track them, see if they’ve been read, whereas if you were speaking to them and you asked them to do something and they didn’t then it would be a case of your word against theirs whereas if you sent an email you can say well, I did send it on a particular day... [Inaudible]

I: either right now or while you were working on site, where there times when you had to relate with people with regards to sharing expertise? Either you sharing with them or them sharing with you?
R: A lot of it sort of depends on the type of person. You know, I’m not afraid to ask and I would ask, I suppose it’s because I’m commercial, but it’s hard sometimes for the people who are on the engineering side or the production side of things to share information because they’re trying to get the job done and you’re trying to keep it within budget and they want to finish it. They’re not really bothered about the cost, because they want to get it finish, so they might go and do something and not tell you, so the next thing you know, you got like a variation or something like that...
[Conversation inaudible]

I: why would you do that?
R: I just like to share; to share the good and the bad. If I have an issue, I would probably discuss with whomever I actually feel would be able to help me.
[Conversation inaudible]

I: [Conversation inaudible]
R: it depends on what context doesn’t it really? Some people withhold information and tell you at the last minute or tell you in front of a crowd of large people so that they’d look good... [Inaudible]
[Conversation inaudible]
R: I get quite frustrated when... [Inaudible]

I: [Inaudible]... and the next time you have a problem would you consider getting in touch with them?
R: I'd get the information elsewhere, I'd probably go elsewhere.
[Conversation inaudible]

I: I'm going to describe a hypothetical scenario, you have a friend X and there's another person Z who you don't particularly get along with, would share with Z normally and what if X prevails on you?
R: I'd still share the information because that's just me but I'd also make sure that it was known that it was borne out of... [Inaudible] I suppose it's like, whenever you do something, I've been in situation where I've done something with somebody and then they take the credit for all of it as if they've done the work but really you've done all the work and I find that quite frustrating because you don't get the credit but I know that I did it, so it'll be like helping him but noting that I did all the work... [Inaudible] if he took the credit for something that I had done, then next time I would take something for it in an attempt to show that it's my work.
[Conversation inaudible]

I: do you think people's socio-cultural background has an impact on the way they work?
R: I don't know really, I don't know whether a lot of it is to do with a person's background or whether it's actually that every background influences the way a person is... [Inaudible]

I: how would you position yourself in the organization?
R: I know a lot of people, I work... [Inaudible] I suppose I know a lot of directors... [Inaudible] but in sort of positioning-wise in the company, my job, I kind of had the job created...

I: I was speaking to someone last week and he mentioned the political use of knowledge... [Inaudible]
[Conversation inaudible]

I: do you think one's academic experience affects the way one is perceived in the organization?
R: I don’t think it’s got any impact, because, again I think it does go back to the type of person. I’m a person who learns through doing something rather than just sitting down in class studying. I went to school, theories are absolutely different...to be perfectly honest, I don’t think I’ve used 20% of what I learnt in college here... I don’t think it stands you in better stead, it might do on paper, that this person’s got a degree but somebody else might have...I do believe that the experience is much more than the degree.

I: [Conversation inaudible]

R: I’d still go with the guy with several years of experience because even though he’s got nothing on paper he would probably be closest to the procedures, the way things work.

[Conversation inaudible]
Appendix VI

Stages I and II Coding Categorisation

Key to abbreviations:

SI = Social interaction
KS = Knowledge sharing

Stage I Categorisation (showing equivalent Stage II numerical coding)

Code: AABBCCC – AA: Category, BB: Respondent number, CCC: Interview page number

1. Social interaction /networks

SNET(+) ‘who you know’ enabling career progression 0227179
SNET(+): Acquaintanceship opening channel for KS 0207050
SNET(+): character as a principal issue in the way people relate. But how is character built? 1213091
SNET(+): Commonalities as basis for SI 0110074
SNET(+): Complementarity as basis for SI 0110073
SNET(+): Could impact of past relationships be tied to years of experience? 1014096
SNET(+): extensive formal support network provided by the organization which could prove both a limiting factor to individuals' proactive informal networking or could serve as a springboard for such 0219128
SNET(+): Friendship factor as enabling KS 0320139
SNET(+): Friendship/ acquaintanceship network providing a channel to facilitate KS 0221145
SNET(+): Interaction dependent on mutual interests 0110071
SNET(+): Networking and KS enhanced by the existence of a ‘primal node’ serving as a portal through which information is channelled 0219128
SNET(+): Organization networking through a point man 0209066
SNET(+): Working on project basis and ongoing trainings allow for renewal of old acquaintanceships 1026171

SNET(-): downside to not socialising 0113087
SNET(-): Exclusion from social gatherings may prove to be counter-productive 0126172
SNET(-): Geographic dispersion as hindrance to networking 0201003
SNET(-): Geographic distance as hindrance to socialising 1304030
SNET(-): Geographic distance as hindrance to socialising 1309064
SNET(-): Geographic distance having possible consequence on working relation 1304030
SNET(-): Lack of SI as hindering team building 0102011
SNET(-): Organization might consider championing individual-led initiatives/ communities 0222148
SNET(-): Organization momentum for networking may not catch on with individuals 0222148
SNET(-): Time constraint due to busy schedule hinders networking 0104028
SNET(-): Unresponsiveness as limiting factor to future interaction 0102014

SNETD Increased focus on virtual communication 0209069
SNETD Social interaction resulting in individual's resource development 109070
SNETD: Dyadic relationship and the effect on 3rd party relationships 0312084
SNETD: Friendship factor 0314097
SNETD: Personality as a determinant in how one copes with job stress and relate to others 1209067
SNETD: Personality as impacting KS 1215105
SNETD: Personality as influencing mode of communication 1204034
SNETD: Personality effect on SI 1212084
SNETD: Personality impacts the way we socialise but individual job roles may influence exhibition of personal traits 1223159
SNETD: Personality/ demographics as determinant for level of SI 0104030
SNETD: Previous contact motivates knowledge seekers 1013088
SNETD: SI based on overlapping interests 0110072
SNETD: Social bonding as possible factor in enhancing productivity 0105040
SNETD: The friendship factor increases expectation or reciprocation 0314096
SNETD: The personality factor in enabling better working relationship 0219127
SNETD: Workplace differences due to individual personality 1206046

SNETM Geographic spread encourages virtual communication 1315106
SNETM use: social networking as a channel for sharing 0215101
SNETM: Acquaintanceship to get new job 1024160
SNETM: Community atmosphere facilitating good work relationship 0406047
SNETM: Despite common trainings individuals are still selective on team members 1016109
SNETM: Influence/clout acquired through central role in knowledge network 1409067
SNETM: Influence/clout acquired through central role in knowledge network 1410077
SNETM: Networking to attain synergy and increase productivity 0208059
SNETM: Prior knowledge of individual increasing likelihood for job selection 1020133
SNETM: Recruitment based on past working relationship 1015104
SNETM: Sustained relationship as encouraging KS 0105039
SNETM: Value of sustained relationship at the organization level 1018119

SNETI use of past relationships 1010075
SNETI: career advancement through networking 0213088
SNETI: Having the right network to enhance mobility within the org 0320141
SNETI: Increasingly obvious value of network as career progresses 0227177
SNETI: Network for enhancement of personal knowledge 0210073
SNETE sharing with industry competitors 0716108

2. Knowledge-related issues

KTRF(+): depth of acquaintanceship as determinant for respect 1118124
KTRF(+): Good social rapport to enable KS and prioritisation of work 0708059
KTRF(+): good social relationship enabling effective teamwork 0114094
KTRF(+): Knowledge shared where individual is given due recognition for contributions 0711080
KTRF(+): Personal experience as encouraging KS 0701006

KTRF(-): Basis for not sharing 0710076
KTRF(-): Competitiveness as basis for not sharing 0720137
KTRF(-): Individual differences as factor hindering KS 0720138
KTRF(-): Sharing for delegation met with resistance 0705037
KTRF(-): Sharing may limit innovation where ideas are not challenged 0723156
KTRF(-): Source/origin of knowledge as hindrance—NIH syndrome 0708061
KTRF(-): Time as a critical factor in the propensity to share 1313090
KTRF(-): Time as a critical factor in the propensity to share 1318122
KTRF(-): Time as a critical factor in the propensity to share 1322148
KTRF(-): Time as limiting factor for KS 0726173

KTRF: Academics plus experience as optimal resource 0516109
KTRF: Academics plus experience as optimal resource 0517118
KTRF: Academics sets theoretical standard for practice 0513092
KTRF: Combination of theory and practice as optimal resource 0512086
KTRF: Desire to receive knowledge encouraged by the existence of a need 0617115
KTRF: Experience as superseding qualification 0511080
KTRF: Experiential knowledge of prime importance 0521146
KTRF: Experiential knowledge of prime importance in org context 0609068
KTRF: Experiential learning as a more productive resource 0513092
KTRF: Need for facilities as indicators of availability of specific knowledge and to direct individuals to the source for further insight 0620136
KTRF: Need to make knowledge context specific for value adding 0709065
KTRF: Non-controlling nature as basis for respect. NOTE: difference in individuals considered influential and those respected! 1125168
KTRF: On-the-job learning ensures context-specific knowledge is shared 0614095
KTRF: Past relationship as avenue for knowledge acquisition 0806045
KTRF: Perception of knowledge as a positioning tool 1406045
KTRF: Perception of knowledge as a positioning tool 1406047
KTRF: Perception of knowledge as a positioning tool 1417117
KTRF: Recipients' ability to handle supplied information 0709066
KTRF: Sharing as a form of experiential learning to prevent recurrence of mistakes 0717115
KTRF: Trust and perception of competence as basis for approaching individuals 0723158
KTRF: Value of shared knowledge is most evident at the time of requirement 0613089

3. Culture-related issues

CULT: Academics as the access key 0514099
CULT: Any correlation between individuals' background and inclination? 0527180
CULT: Cultural capital drawing on personality to establish relationships 0410077
CULT: Community atmosphere creates a sense of belonging and personal drive to see project succeed 0424163
CULT: Correlation between respect and depth of interaction 1017118
CULT: Increasing importance attached to business education 0513091
CULT: Indigenous cultural differences as opposed to national cultures as source of conflict 0415103
CULT: Individual cultural background reflective in the way one works [personality?] 0403025
CULT: Individual Know-how to determine who one approaches for help 0510075
CULT: Individual’s cultural background as a facilitator for KS 0413090
CULT: Influence borne out of official administrative role 1114098
CULT: Influence by virtue of position 1126174
CULT: Influence by virtue of position within organization 1017117
CULT: Influence due to positioning in organization 1118124
CULT: KS at the organization level is only productive when the right culture is in place. This is supportive of Von Krogh’s organization care theory 0719130
CULT: National cultures bring different competences to organizations 0416111
CULT: On initial perception, more significance attached to title than actual know-how 0507056
CULT: Organization culture may tend to prevail on individual culture 0425168
CULT: Organization culture actively communicated to employees. This may lead to organization culture influencing individuals’ cultural capital 0415100
CULT: Perceptions influenced through hearsay? 0414097
CULT: Prioritisation of factors affecting the organization 0817117
CULT: Prioritisation of factors affecting the organization 0820139
CULT: Prioritisation of the organization 0821143
CULT: Prioritisation of the organization 0915104
CULT: Prioritisation: Improved work culture? 0821143
CULT: Qualification as access key but also conferring authority 0508061
CULT: Qualification as an access key 0520141
CULT: Qualification as an access key 0524164
CULT: Qualification as an indicator of capability 0523153
CULT: Qualification as status symbol 0523154
CULT: Qualification important to the extent of serving as a ‘door opener’ 0510077
CULT: Qualification relevant in early career 0524164
CULT: Qualification valid as indicator of competence only 0518125
CULT: Stereotyping: how does this impact work place interaction? 0405040
CULT: Prevalence of organization culture over individual culture. What then does individual culture bring to the organization? 0426174
CULT: Organization no longer closely knit? 0816110

4. Employee dispositions

EMPD(+): Correlation between duration of career and ownership of individual capital 0904034
EMPD(+): Extent of know-how as basis for respect 1113091
EMPD(+): Extent of know-how as basis for respect 1121145
EMPD(+): Individual capital: a joint property 0918122
EMPD(+): Individual capital: an exclusive preserve to which org has limited rights 0905039
5. Reasons for individual action

MOTV(+) competitiveness as hindrance 0720137
MOTV(+) Basis for sharing 0723160
MOTV(+) Basis for sharing - to enable delegation 0502020
MOTV(+) Benevolence as motive for sharing? 0715102
MOTV(+) Cognitive awareness of future benefit derivable from sharing knowledge 1413090
MOTV(+) Coopetition through sharing to raise organization standard 0723157
MOTV(+) External recognition of individual's knowledge may give status 1422149
MOTV(+) Knowledge is power to the extent that it is shared and it is productive 1420140
MOTV(+) KS as a positioning tool 1407054
MOTV(+) KS as a positioning tool 1411079
MOTV(+) KS as a strategy for achieving C.A. 0713089
MOTV(+) KS in order to avoid recurrent mistakes 0719129
MOTV(+) Motive for sharing 0709066
MOTV(+) Personal benefit derived from sharing 0717116
MOTV(+) Personal gratification as reason for sharing 0720138
MOTV(+) Personal motive 0710077
MOTV(+) Reason for sharing 0703025
MOTV(+) Reason: Desire for success 0704031
MOTV(+) Reason: personal benefit 0716111
MOTV(+) reciprocity not a basis for sharing 0313090
MOTV(+) Recognition as a result of sharing know-how 1418122
MOTV(+) Respect due to admiration and competence 1123159
MOTV(+) Respect due to admiration and competence 1124162
MOTV(+) Respect due to admiration, competence and contribution to personal development 1127181
MOTV(+) Respect due to mutual understanding, complementarity and reciprocation 1119132
MOTV(+) Respect due to similarity in style 1114098
MOTV(+) Respect due to sustained relationship 1114098
MOTV(+) Respect due to sustained relationship 1120140
MOTV(+) Sharing creates a sense of achievement and obligation on second party 0721144
MOTV(+) Sharing due to mutual belonging 0713090
MOTV(+) Sharing to create good rep and for positioning within the organization 0701009
MOTV(+) Sharing to enable delegation 0702019
MOTV(+) Sharing to enable delegation 0704031
MOTV(+) Sharing to increase wealth of organization knowledge 0721143
MOTV(+) Sharing to reinforce position of importance in client's value chain 0723157
MOTV(+) The resource is only advantageous where the opportunity exists to engage its usage 0515102
MOTV(+) Where such resource is not used in its original capacity, non-recognition and abuse become probable! 0515102

MOTV(-): Knowledge as a positioning tool 1416112
MOTV(-): Non-flexibility of personal opinion as hindrance to sharing/ knowledge reception 0725167
MOTV(-): Organization factor – restrictions applied to sharing commercially sensitive knowledge 0306044
MOTV(-): Personal dislike as basis for not sharing 0717117
MOTV(-): Personal rift as hindering KS 0706048
MOTV(-): Reason for not sharing 0709066
MOTV(-): Reason for not sharing 0715105
MOTV(-): Reason for not sharing 0721144
MOTV(-): Selective display of knowledge to those that matter 1414099
MOTV(-): Use of knowledge as determinant of extent of power 0608060
MOTV(-): Prioritising sharing due to obligation 0703022

MOTVI reciprocity – borne out of obligation? 0323157
MOTVI: Benefits of sustained interaction 0110074
MOTVI: Bonding through SI 0115105
MOTVI: Bonding through SI 0117116
MOTVI: Bonding through SI 0127178
MOTVI: Knowledge is powerful to the extent that one is able to draw out the resources of others to achieve both individual and common goals. The classic master-servant relationship 1419131
MOTVI: knowledge of individual’s ability fosters recruitment for upcoming jobs 1006043
MOTVI: knowledge of individual’s ability fosters recruitment for upcoming jobs 1015103
MOTVI: knowledge of individual’s ability fosters recruitment for upcoming jobs 1015104
MOTVI: Past relationship as a form of knowledge reservoir 1008060
MOTVI: Past relationship as a form of knowledge reservoir 1015100
MOTVI: Past relationship as a form of knowledge reservoir 1016107
MOTVI: Past relationship as a form of knowledge reservoir 1025165
MOTVI: Past relationships to foster SC building 1010071
MOTVI: Personal benefit of past relationships 1010072
MOTVI: Previous working relationship enabling career development 1021141
MOTVI: SC as a resource for advancement 0111078
MOTVI: SI as a factor in fostering working relationship 0118119
MOTVI: SI as enabling work relationship 0105040
MOTVI: SI for political reasons 0112085
MOTVI: SI to facilitate better working relationship 0120136
MOTVI: Social bonding to improve working relationship 0125166
MOTVI: Socialising as enhancing job performance 0126172
MOTVI: Sustained relationship fostering work progression 1007052
MOTVI: Sustained relationship fostering work progression 1023152
MOTVI: Sustained SI to foster learning 0119127
### Stage II Categorisation

Code: AABB - AA: Respondent number, BB: Interview page number

#### 01. Social Capital/ Interaction

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<td>(Time constraint due to busy schedule hinders networking)</td>
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<td>(Social bonding as possible factor in enhancing productivity)</td>
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<td>(Example of social interaction resulting in individual’s resource development)</td>
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<td>(Interaction dependent on mutual interests)</td>
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<tr>
<td>14094</td>
<td>(good social relationship enabling effective teamwork)</td>
</tr>
<tr>
<td>15105</td>
<td>(bonding through SI)</td>
</tr>
<tr>
<td>17116</td>
<td>(Bonding through SI)</td>
</tr>
<tr>
<td>18119</td>
<td>(SI as a factor in fostering working relationship)</td>
</tr>
<tr>
<td>19127</td>
<td>(Sustained SI to foster learning)</td>
</tr>
<tr>
<td>20136</td>
<td>(SI to facilitate better working relationship)</td>
</tr>
<tr>
<td>25166</td>
<td>(Social bonding to improve working relationship)</td>
</tr>
<tr>
<td>26172</td>
<td>(Socialising as enhancing job performance)</td>
</tr>
<tr>
<td>27178</td>
<td>(Bonding through SI)</td>
</tr>
</tbody>
</table>

#### 02. Network

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01003</td>
<td>(Geographic dispersion as hindrance to networking)</td>
</tr>
<tr>
<td>07050</td>
<td>(Acquaintanceship opening channel for KS)</td>
</tr>
<tr>
<td>08059</td>
<td>(Networking to attain synergy and increase productivity)</td>
</tr>
<tr>
<td>09066</td>
<td>(Organization networking through a point man)</td>
</tr>
<tr>
<td>09069</td>
<td>(Increased focus on virtual communication)</td>
</tr>
<tr>
<td>10073</td>
<td>(Network for enhancement of personal knowledge)</td>
</tr>
<tr>
<td>13088</td>
<td>(Career advancement through networking)</td>
</tr>
<tr>
<td>15101</td>
<td>(social networking as a channel for sharing)</td>
</tr>
<tr>
<td>19127</td>
<td>(The personality factor in enabling better working relationship)</td>
</tr>
<tr>
<td>19128</td>
<td>(extensive formal support network provided by the organization which could prove both a limiting factor to individuals’ proactive informal networking or could serve as a springboard for such)</td>
</tr>
<tr>
<td></td>
<td>(Networking and KS enhanced by the existence of a 'primal node' serving as a portal through which information is channelled)</td>
</tr>
<tr>
<td>21145</td>
<td>(Friendship/ acquaintanceship network providing a channel to facilitate KS)</td>
</tr>
</tbody>
</table>
### 03. Reciprocity

| 22148 | (Organization momentum for networking may not catch on with individuals) (Organization might consider championing individual-led initiatives/communities) |
| 27177 | (Increasingly obvious value of network as career progresses) |
| 27179 | (Example of 'who you know' enabling career progression) |

#### 04. Cultural Capital

| 06044 | (Organization factor – restrictions applied to sharing commercially sensitive knowledge) |
| 12084 | (dyadic relationship and the effect on 3rd party relationships) |
| 13090 | (reciprocity not a basis for sharing) |
| 14096 | (The friendship factor increases expectation or reciprocation) |
| 14097 | (Friendship factor) |
| 20139 | (Friendship factor as enabling KS) |
| 20141 | (Having the right network to enhance mobility within the organization) |
| 23157 | (Example of reciprocity – borne out of obligation?) |

#### 05. Academics as a Resource

| 02020 | (Basis for sharing: to enable delegation) |
| 06048 | (Knowledge combined with personality as fostering job progression) |
| 07056 | (On initial perception, more significance attached to title than actual know-how) |
| 08061 | (Qualification as access key but also conferring authority) |
| 10075 | (Individual Know-how to determine who one approaches for help) |
| 10077 | (Qualification important to the extent of serving as a 'door opener') |
| 11080 | (Experience as superseding qualification) |
| 12086 | (Combination of theory and practice as optimal resource) |
13091 (Increasing importance attached to business education)

13092 (Academics sets theoretical standard for practice)
(Experiential learning as a more productive resource)

14099 (Academics as the access key)

15102 (The resource is only advantageous where the opportunity exists to engage its usage)
(Where such resource is not used in its original capacity, non-recognition and abuse become probable!)

16109 (Academics plus experience as optimal resource)
17118 (Academics plus experience as optimal resource)
18125 (Qualification valid as indicator of competence only)

19126 (There is a perceived period by which individuals are expected to have gathered experience beyond qualification and at which qualification seizes to be of prime importance)

20141 (Qualification as an access key)
21146 (Experiential knowledge of prime importance)
23153 (Qualification as an indicator of capability)
(Qualification with experience yields optimal benefit)
23154 (Qualification as status symbol)
24164 (Qualification relevant in early career)
(Qualification as an access key)
26175 (Decreasing importance of qualification with career progression)

27180 (Any correlation between individuals' background and inclination?)

06. Knowledge as context-based

08060 (Use of knowledge as determinant of extent of power)
09068 (Experiential knowledge of prime importance in organization context)
13089 (Value of shared knowledge is most evident at the time of requirement)
14095 (On-the-job learning ensures context-specific knowledge is shared)
17115 (Desire to receive knowledge encouraged by the existence of a need)
20136 (Need for facilities as indicators of availability of specific knowledge and to direct individuals to the source for further insight)

07. Basis for sharing

01006 (Personal experience as encouraging KS)
01009 (Sharing to create good rep and for positioning within the organization)
02019 (Sharing to enable delegation)
03022 (Prioritising sharing due to obligation)
03025 (Reason for sharing)
04031 (Reason: Desire for success)
(Sharing to enable delegation)
05037 (Sharing for delegation met with resistance)
06048 (Personal rift as hindering KS)
08059 (Good social rapport to enable KS and prioritisation of work)
08061 (Source/origin of knowledge as hindrance – NIH syndrome)
09065 (Need to make knowledge context specific for value adding)
09066 (Recipients' ability to handle supplied information)
<table>
<thead>
<tr>
<th>(Reason for not sharing)</th>
<th>(Motive for sharing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10076 (Basis for not sharing)</td>
<td></td>
</tr>
<tr>
<td>10077 (Personal motive)</td>
<td></td>
</tr>
<tr>
<td>11080 (Knowledge shared where individual is given due recognition for contributions)</td>
<td></td>
</tr>
<tr>
<td>13089 (KS as a strategy for achieving competitiveness.)</td>
<td></td>
</tr>
<tr>
<td>13090 (Sharing due to mutual belonging)</td>
<td></td>
</tr>
<tr>
<td>15102 (Benevolence as motive for sharing?)</td>
<td></td>
</tr>
<tr>
<td>15105 (Reason for not sharing)</td>
<td></td>
</tr>
<tr>
<td>16108 (Example of sharing with industry competitors)</td>
<td></td>
</tr>
<tr>
<td>16111 (Reason: personal benefit)</td>
<td></td>
</tr>
<tr>
<td>17115 (Sharing as a form of experiential learning to prevent recurrence of mistakes)</td>
<td></td>
</tr>
<tr>
<td>17116 (Personal benefit derived from sharing)</td>
<td></td>
</tr>
<tr>
<td>17117 (Personal dislike as basis for not sharing)</td>
<td></td>
</tr>
<tr>
<td>19129 (KS in order to avoid recurrent mistakes)</td>
<td></td>
</tr>
<tr>
<td>19130 (KS at the organization level is only productive when the right culture is in place. This is supportive of Von Krogh's organizational care theory)</td>
<td></td>
</tr>
<tr>
<td>20137 (Competitiveness as basis for not sharing)</td>
<td></td>
</tr>
<tr>
<td>20138 (Individual differences as factor hindering KS)</td>
<td></td>
</tr>
<tr>
<td>21143 (Sharing to increase wealth of organization knowledge)</td>
<td></td>
</tr>
<tr>
<td>21144 (Reason for not sharing)</td>
<td></td>
</tr>
<tr>
<td>23156 (Sharing may limit innovation where ideas are not challenged)</td>
<td></td>
</tr>
<tr>
<td>23157 (Coopetition through sharing to raise organization standard)</td>
<td></td>
</tr>
<tr>
<td>23158 (Sharing to reinforce position of importance in client's value chain)</td>
<td></td>
</tr>
<tr>
<td>23160 (Basis for sharing)</td>
<td></td>
</tr>
<tr>
<td>25167 (Non-flexibility of personal opinion as hindrance to sharing/ knowledge reception)</td>
<td></td>
</tr>
<tr>
<td>26173 (Time as limiting factor for KS)</td>
<td></td>
</tr>
</tbody>
</table>

08. Workplace dependence

| 06045 (Past relationship as avenue for knowledge acquisition) |                |
| 16110 (Organization no longer closely knit?) |                |
| 17117 (Prioritisation of factors affecting the organization) |                |
| 20139 (Prioritisation of factors affecting the organization) |                |
| 21143 (Prioritisation of the organization) |                |
| (Improved work culture?) |                |
### 09. Ownership of capital

- **04034** (Correlation between duration of career and ownership of individual capital)
- **05039** (Individual capital: an exclusive preserve to which organization has limited rights)
- **15104** (Prioritisation of the organization)
- **18122** (Individual capital: a joint property)

### 10. Past relationships/ relationship benefits

- **05040** (SI as enabling work relationship)
- **06043** (knowledge of individual’s ability fosters recruitment for upcoming jobs)
- **07052** (Sustained relationship fostering work progression)
- **08060** (Past relationship as a form of knowledge reservoir)
- **10071** (Past relationships to foster SC building)
- **10072** (Personal benefit of past relationships)
- **10075** (Example of use of past relationships)
- **13088** (Previous contact motivates knowledge seekers)
- **14096** (Could impact of past relationships be tied to years of experience?)
- **15100** (Past relationship as a form of knowledge reservoir)
- **15103** (knowledge of individual’s ability fosters recruitment for upcoming jobs)
- **15104** (knowledge of individual’s ability fosters recruitment for upcoming jobs) (Recruitment based on past working relationship)
- **15107** (Past relationship as a form of knowledge reservoir)
- **16109** (Despite common trainings individuals are still selective on team members)
- **17117** (Influence by virtue of position within organization)
- **17118** (Correlation between respect and depth of interaction)
- **18119** (Value of sustained relationship at the organization level)
- **20133** (Prior knowledge of individual increasing likelihood for job selection)
- **21141** (Previous working relationship enabling career development)
- **23152** (Sustained relationship fostering work progression)
- **24160** (Acquaintanceship to get new job)
- **25165** (Past relationship as a form of knowledge reservoir)
- **26171** (Working on project basis and ongoing trainings allow for renewal of old acquaintanceships)

### 11. Basis for respect

- **12085** (Influence due to proactivity)
- **13091** (Extent of know-how as basis for respect)
- **14098** (Influence borne out of official administrative role) (Respect due to sustained relationship) (...and similarity in style)
- **18124** (Influence due to positioning in organization) (depth of acquaintanceship as determinant for respect)
- **19132** (Respect due to mutual understanding, complementarity and reciprocation)
- **20140** (Respect due to sustained relationship)
- **21145** (Extent of know-how as basis for respect)
| 23159 | (Respect due to admiration and competence) |
| 24162 | (Respect due to admiration and competence) |
| 25168 | (Non-controlling nature as basis for respect. NOTE: difference in individuals considered influential and those respected!) |
| 26174 | (Influence by virtue of position) |
| 27181 | (Respect due to admiration, competence and contribution to personal development) |

### 12. Personality issues

| 04034 | (Personality as influencing mode of communication) |
| 06046 | (Workplace differences due to individual personality) |
| 09067 | (Personality as a determinant in how one copes with job stress and relate to others) |
| 12084 | (Personality effect on SI) |
| 13091 | (character as a principal issue in the way people relate. But how is character built?) |
| 15105 | (Personality as impacting KS) |
| 23159 | (Personality impacts the way we socialise but individual job roles may influence exhibition of personal traits) |

### 13. Time/ distance effect

| 04030 | (Geographic distance as hindrance to socialising) |
| 09064 | (Geographic distance as hindrance to socialising) |
| 13090 | (Time as a critical factor in the propensity to share) |
| 15106 | (Geographic spread encourages virtual communication) |
| 18122 | (Time as a critical factor in the propensity to share) |

### 14. Knowledge as a political tool/ resource

| 06045 | (Perception of knowledge as a positioning tool) |
| 06047 | (Perception of knowledge as a positioning tool) |
| 07054 | (KS as a positioning tool) |
| 09067 | (Influence/clout acquired through central role in knowledge network) |
| 10077 | (Influence/clout acquired through central role in knowledge network) |
| 11079 | (KS as a positioning tool) |
| 13090 | (Cognitive awareness of future benefit derivable from sharing knowledge) |
| 14099 | (Selective display of knowledge to those that matter) |
| 16112 | (Knowledge as a positioning tool) |
| 17117 | (Perception of knowledge as a positioning tool) |
| 18122 | (Recognition as a result of sharing know-how) |
| 19131 | (Knowledge is powerful to the extent that one is able to draw out the resources of others to achieve both individual and common goals. The classic master-servant relationship) |
| 20140 | (Knowledge is power to the extent that it is shared and it is productive) |
| 22149 | (External recognition of individual's knowledge may give status) |
Bibliography


Constructing Excellence website
http://www.constructingexcellence.org.uk/about/default.jsp?level=0 Visited 21 Sept 2004


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