An investigation of knowledge transfer practices within the Muslim business community in Edinburgh.

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A Thesis
Submitted to the school of
Business Management and Law
in partial fulfilment of the requirements of
Edinburgh Napier University

For the Degree of

Doctor of Philosophy.

November   06th   2012

Abstract

This study seeks to understand knowledge transfer practices within the Muslim business community in Edinburgh. It investigates how knowledge transfer practices are managed on a day to day basis, examines the route of development and justification for these practices into meaningful knowledge transfer processes, and explores the underlying perspective of knowledge from the knowledge transfer practitioners view of knowledge transfer practices in a business context. In particular, the study seeks explanations for such practices with reference to both a knowledge-based and a resource-based view of the firm.

Due to the multifarious phenomena of knowledge transfer, and to allow a scope necessary to establish epistemological and empirical evidence from literature, a two stage literature review process was adopted. The majority of literature expounds an argument in which knowledge and knowledge transfer processes in a business context are embedded within a set of real world dimensions, based on causal relationships. Literature determines that it is overcoming difficulties with this framework which is critical for a businesses ability to manage, utilise and extract value from multiple internal and external sources of knowledge. Four broad themes were identified, from which most literature supported this argument: Psychological, Organisational, Philosophical and Cultural.

The ontology of the study is based on a constructivist paradigm with an interpretivist method of qualitative data analysis. The investigation involved 20 participants and employed in-depth semi-structured interviews. These were carried out across different locations and different hierarchal levels of four businesses and organisations involved in the study. Data collection and analysis were carried out in two phases. Phase one was based on ethnographic participant observation which proved unsuccessful due to an underestimation of the complexity of the participants personal perspective and researcher bias. Phase two was informed by the difficulties encountered in phase one and proved successful in capturing meaningful data. Following a thematic logic, themes were carefully unpacked in an iterative process, so that an understanding of knowledge transfer experiences within the Muslim business community in Edinburgh became clear.

According to the findings in this study, knowledge transfer practices are derived by continuous identification and filling of knowledge gaps from the participants' real world view. In contrast to current literature, participants real world views are governed by an ideological perspective supported by a single knowledge source, the Quran. Knowledge transfer advocacies use this single source of knowledge to fill collective knowledge gaps in relation to knowledge transfer in a business context. In this respect, findings reveal that definitions of knowledge and barriers to transfer have no justification for existence within this sphere of perspective. An overarching theme of religion encompasses the rhetoric of the findings.

In summary, the study provides a deep understanding of the knowledge transfer practices in the Muslim business community in Edinburgh. Through the systematic and dialectic analysis of knowledge transfer participants daily practices, the details and dynamisms underpinning knowledge transfer processes are revealed.

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"Knowledge is power".
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1 INTRODUCTION TO THE STUDY

1.1 BACKGROUND

This project aims to understand knowledge transfer from the perspective of knowledge transfer practitioners in the Muslim business community in Edinburgh. This thesis adds a significant dimension to existing literature, where the importance of knowledge in a business context has been discussed since at least 1945 (Hayek 1945) and has received persistent attention ever since. The idea that knowledge as an entity could and should be managed however, seems not to have been seriously considered until a decade or so later, and the number of studies continues to increase. To date there have been numerous valuable and informative studies which examine the significance of knowledge and knowledge transfer in a business context, as both are needed to support competitive advantage (Kogut and Zander 1992 ;Grant 1996 ;Van Krogh and Roos 1996). The interactive phenomena of knowledge and knowledge transfer in relation to business and organisational development is well understood.

Drucker (1993) emphasises this in his book 'Post-capital Society' and famously argued that knowledge is not just another resource which sits alongside traditional resources, but that knowledge has become _the_ resource, in today's knowledge society. Bartlett and Ghoshal (1995) expand on this view, but argue that to become useful for a business, knowledge must be understood in terms of information, intelligence and expertise. In particular, they argue that in contrast to business capital, knowledge is most valuable within an organisation, only when it is properly controlled and managed. Previous research has also highlighted the importance of managerial demographics such as age, gender, education and experience, all of which contribute to a firms' behaviour (Analoui, Kakabadse & Karami 2006).

This significance attached to knowledge management has consequently directed businesses and organisations to look at ways of overseeing knowledge, which can provide efficient methods for its method of transfer. The simple reason behind this thinking is both survival and growth for the business or organisation. Business and business development can be understood in a very specific context as it is an underpinning facet of *'Occidental business economic mercantilism'* as described by (Wallerstein 1974, pp 347-57) in his world-systems theory. At the core of this theory, Wallerstein describes a multidisciplinary macro-scale approach to world history and social change. Overarching this overall theoretical business position, is the dialectics of the modern *'Occidental premise'* discussed and examined by (Wallerstein 1998). Businesses, according to this view, depend on the relationships between capital accumulation in terms of strategic management and business owners intentions. A direct result of these underpinnings explains why models and theories, designed to understand and control knowledge inevitably spill over and overlap with success and competitive advantage theory.

Understandably, the management of knowledge and knowledge transfer has emerged as a rapidly growing field of literature. Because of the complex sphere of interpretation surrounding this interaction, literature often polarises between the management of knowledge (Kogut and Zander 1992 ;Grant 1996 ;Van Krogh and Roos 1996) and the problems associated with transferring knowledge (Szulanski 1996, Tsoukas 1996). Acknowledgement of this is seen in research streams, which focus on the precise means by which knowledge assets are created, transferred and made useful in a business and organisational environment (Nonaka & Takeuchi 1995; Szulanski 1996). The SECI (*Socialization, Externalization, Combination, Internalization*) model of knowledge management by Nonaka and Takeuchi (1995) is the seminal work in this field. This model epitomises the importance of knowledge in the business environment and

identified a creation point for knowledge using cross-sectional data, juxtaposed to social interaction. This SECI model has become the cornerstone of knowledge creation theory regarding aspects of explicit knowledge and tacit knowledge and how to exploit these categories in a business context.

Other authors expanded on this work by describing how knowledge is created and utilised by a business or organisation, supported by knowledge transfer processes (Cook & Brown 1999, Tsoukas & Valdimirou 2001). Particular attention is directed towards core competencies and capabilities of a business or organisation (Kogut and Zander 1992; Zander and Kogut 1995). Similarly, businesses and organisations which transfer knowledge successfully can be more productive and more successful (Zander and Kogut 1995; Szulanski 1996; Argote, Ingram et al. 2000). This overview encompasses different forms of knowledge management and this view is further described by (Teece 1998, 2000) who argues, that if managed correctly and transferred efficiently, knowledge will be a fundamental source of development and/or competitive advantage. Analoui, Kakabadse & Karami (2006) contribute to the overall argument of managed knowledge by explaining that personal characteristics of key personnel have an indirect impact on business performance.

This position affirms that management strategies should consider characteristics when devising performance related infrastructures. Analoui, Kakabadse & Karami (2006) further explain that this impact on business performance is mediated by decision-making speed, decision type, and strategy formulation. Blumentritt and Johnston (1999) support this argument by emphasising that strategic potential of knowledge management can only be realised through directed practices, at all operational levels within a business or organisation.

The development of various knowledge transfer theories to increase the efficiency of the transfer schema has been the focus of a considerable amount of research, driven by the construct of success and competitive advantage in a business context (Inkpen 1996, 1998, 2000; Inkpen & Kogut & Zander 1992, 1996). In this regard, debate within the literature is extensive as there are proponents who believe that knowledge creation and acquisition must be managed to attain desired efficiency levels (Inkpen & Dinur 1998; Szulanski, 1996; Zollo & Winter 2001), and those who argue that the complex, social and embedded nature of knowledge means knowledge is unable to be managed efficiently (Spender, 1996; Tsoukas 2002).

Within this body of literature there are two widely accepted arguments which are central to current theories and models of successful knowledge transfer and particularly relevant for this thesis. The first is that knowledge creation can be managed to achieve a desired outcome. The second, is that created tacit knowledge can, and must, be converted into explicit knowledge in order for it to become useful for a business or organisation. Underlying these views however, exists fundamental disagreements on the definition of knowledge, the ability of tacit knowledge conversion into explicit knowledge and which knowledge transfer scenarios best reduce barriers to knowledge transfer efficiency. The implications of this argument are significant, as existence of a dual position of knowledge then undermines theories and concepts which are central to both theory and practice within the resource-based view and knowledge based view of the firm. Further, this position of duality polarises the acceptance of creation and acquisition of knowledge, suggesting that without expert management, knowledge is unable to be created or to have value in a business context.

To date, detailed literature and studies have not fully examined any underlying significance relating to an originating perspective point of knowledge, that is, in what

form does knowledge exist before a creation point. From a theoretical position, interpretation of knowledge prior to transfer, which may be mediated by knowledge transfer practitioners perspectives, is not comprehensively debated within the main body of current management literature to fully explain this. Moreover, the degree to which any personal perspectives to knowledge apply influence on the practitioner cannot be fully identified from this current literature position. As such, there is no in depth examination of the knowledge transfer practitioners view, relating to subjective or objective interpretation of knowledge from this point of existence. Further, there is little in the way of literature which explains the interactive phenomena of perspectives of knowledge, involving not only practitioners cognitive positioning but personal interpretations surrounding knowledge transfer success or failure.

From this position, this thesis would argue that whilst there are many meaningful and detailed studies on knowledge and knowledge transfer from a business context, detailed elucidation of alternative perspectives directly relating to knowledge transfer practitioners has not been fully investigated within current literature. Additionally, elucidation of knowledge and perspective as justified entities is not given a construal space, specific enough to evaluate fully the relationship to a business or organisation of knowledge transfer practitioners interactions.

This thesis would argue that it is not enough to simply categorise knowledge as a constituent of required business practice which exclusively supports epistemic repute in field success and competitive advantage. The position of this thesis is that, in contrast to the core of existing literature, a central focus for this study is the justification of knowledge which supports knowledge transfer, but not exclusively within the realm of previously discussed Occidental business principles or cultural underpinnings. From this position, this thesis would further argue that perceptual and memory retorts, related to

subjective experience and a priori intuitions play a pivotal role in the relationship with knowledge and cannot be simple barriers to knowledge flow. In this respect however, the distinct relationships between culture and context are not core analysis of this study, because it is not the intention of the research to highlight dialectical tension between two reciprocally related orientations. Specifically, it is not the purpose of this thesis to provide a comparative study between Western and Eastern business practices, but to acknowledge the significance of the individual within a knowledge transfer scenario.

This thesis recognises that knowledge experience is not presumed as enclosed within the individuals explicit mental realm of context specific interims such as cultural contexts, and appreciates that it is linked to much wider socio-cultural effects and experiences. However, this thesis would argue that it is a different epistemic proximal which defines knowledge from a personal perspective, and although related to business or cultural contexts, are more importantly relevant to a business from the point of view of the individual knowledge transfer practitioner.

Within this principal sphere, this thesis is able to examine; religious, mythical, aesthetic, perceptual, linguistic and body experiences as a whole, and not as problematic tensions reacting against one another, which require prescriptive attention. To facilitate this approach, a phenomenological consideration was adopted by this study in order to distinguish knowledge as; between knowing a proposition to be true by understanding, or, as attaining an intuitive grasp of a proof of it through social interaction. In adopting this phenomenological position, a central pivot for study then became the critical and deep construal level surrounding personal perspectives of knowledge in a knowledge transfer scenario, and it is this phenomenon which will be the focus of this research.

By embracing this phenomenological archetype, this research acknowledges that phenomenology is a procedure to detect new states of consciousness in which basic

concepts used in the interpretation and transfer of knowledge can be understood from the practitioners perspective and not as a development of contextual based arguments. This position allows the perspective of the knowledge transfer practitioner to become significant as a researchable entity and not be overshadowed by a business perspective which responds solely to problematic remedial actions or as part of boundary cultural context discussions.

1.2 RATIONALE

The rationale for this research is informed by 20 years interaction this researcher has with Muslim businesses and organisations, both as a working manager and as an advisor or consultant. This researchers work was primarily in IT, but overlapping to HR and Business Development. Over the years this researcher was aware that some businesses and organisations accomplished achievements normally associated with formal business models and frameworks such as business growth, organisational development and economic stability. The view from this researchers interpretive, but informed position, was that some of these businesses and organisational entities did not exhibit knowledge transfer practices, associated with this phenomena. Specifically, there were areas of daily business routines and social interactions involving knowledge transfer practitioners which I could not identify in relation to current literature, despite an obvious attachment to a business or organisation by the practitioner.

A systematic review of current literature surrounding knowledge and knowledge transfer theory and practice revealed very little in the way of definitive explanation for this phenomenon, although was very informative with respect to knowledge transfer in general. Hsieh et al (2009) for example, argue that knowledge is vital to gaining and sustaining competitive advantage as it is tacit, inimitable and immobile. Davenport &

Prusak (1998) described knowledge as a multifaceted concept which can be conceptualised as a *'justified belief'*. Others argue that knowledge itself enhances an organisations ability and effectiveness (Nonaka 1994), authenticates information (Foss 2007) and improves capability with the potential to empower future decisions and actions (Hsieh et al. 2009). It is evident that problems attributed to knowledge transfer have become the focus of business and organisational resource, since these resources are aimed at reducing the problematic barriers associated with a knowledge transfer scenario (Nonaka & Takeuchi 1995; Szulanski 1996). This may also be why the largest proportion of management literature focuses on processes and practices which are seen to directly affect competitive advantage.

With this in mind, it should have been relatively easy for this researcher to distinguish the focus area for business resource and recourse within these businesses and organisations and observe them as identifiable knowledge transfer practices, however, this was not the case. This suggested to this researcher that the underlying framework for managing knowledge and knowledge transfer in these businesses and organisations, may not be wholly attributed to the same theoretical models described in current literature. If this is true, then this position questions fundamental concepts relative to both management theory and practice within the resource-based view (Penrose 1959, Grant 1991) and knowledge based view of the firm (Alavi and Leidner 2001).

This thesis explored approaches to the management of knowledge transfer, specifically from the point of view of knowledge transfer practitioners within these Muslim businesses or organisations and this leads to the following aim and objectives of the research.

1.3   AIM AND OBJECTIVES

The aim of this research is to provide a deeper theoretical understanding of knowledge transfer practices within the Muslim business community in Edinburgh. This research fulfilled this aim by addressing the following objectives.

1.3.1   Overview

The first objective is to establish a practical, working definition for knowledge transfer in a business context underpinned by a philosophical episteme of knowledge.

This objective is crucial in allowing interpretation of symmetry over current knowledge transfer practices from the knowledge transfer practitioners perspective, since to fully understand knowledge transfer, a definition of knowledge must be understood.

The second objective is to critique and explore business management models and theories which can be utilised by knowledge transfer practitioners in this Muslim business community to support knowledge transfer practices.

This objective is necessary to ascertain factors which contribute and impede the adoption of knowledge transfer business practices which align strategic management frameworks necessary for the business or organisational environment. For this objective to be met, the research will need to establish which standard business models are utilised within the businesses and organisations under study and which of these facilitate meaningful knowledge transfer in a business context.

The third objective is to establish if a methodology investigating contiguous knowledge transfer practice overarched by a phenomenological lens, will allow the data collected to become meaningful in a business context.

This an important objective since no empirical study to date has established if a person centred approach involving interpretation and significance to forms of knowledge which support knowledge transfer has any significant impact on the data collection method.

The fourth objective is to identify personal perspectives within this Muslim business community which relate to current business practices associated with knowledge transfer.

This objective is necessary to understand any personal perspectives which support the existence of knowledge transfer practices in this Muslim business community, such as economic, cultural and personal drivers as this will have an impact in forming personal objectives within any knowledge transfer practices and will underpin associated decision making processes.

1.3.2   Linking Broad research questions to Aim And Objective

To allow a complete and full data set to be generated, research questions must be relevant across a broad spectrum of experiences, practices, processes, interpretations, understandings and perspectives (Creswell 2009). This view by Creswell explains that a qualitative study seeks to learn why or how, so research must be directed at determining the why and how of the research topic. Therefore, when developing broad questions for this study, consideration was not simply given to a why or how question about the topic of knowledge and knowledge transfer, but also derived from definitive aim and objectives.

To support this position, the establishment of a literature locus based on research which indicates knowledge and knowledge transfer processes are embedded within a set of real world dimensions and are critical for a business to manage, utilised and extracted value from internal and external knowledge sources. In this respect, four broad themes were identified from which most literature supported theoretical arguments: Psychological, Organisational, Philosophical and Cultural. This further supports a robust framework for broad research questioning aligned to the original aim and objectives of the study, which is, to understand knowledge transfer practices within the Muslim business environment in Edinburgh.

To further sustain this interaction, consideration was given to Creswell's (2009) example of a script for a qualitative research central question which shows: *"How or what"* is the *"meaning of"* the phenomenon or phenomenology of the *"culture-sharing pattern"* of *"central phenomenon"* for *"participants"* at *"research site"*. In relation to this study the following *'How'* and *'What'* aspects of the script where augmented by my own *'Why'* aspects to allow a deeper exposure to the knowledge transfer experiences involved from the knowledge transfer practitioners perspective.

Table 1.1a Question considerations

HOW do practitioners	*WHAT practices support*	*WHY are / is / a*
Define perspectives	Perspective definition	Perspectives important
Utilise methods of transfer	Knowledge transfer	Knowledge important
Define a framework	Business frameworks	Framework important
Determine governance	Governance implementation	Governance important
Associate knowledge with value	Business development	Development important
Define success	Business success	Success important

With respect to this analytical positioning, analysis of congruence across knowledge transfer participants in the Muslim business community daily practices can now be situated at the core of the research. Theoretical implications sought from data will allow detailed examination of practices to emerge in relation to knowledge gaps in the literature.

The following research questions will generate sufficient data surrounding both the phenomena of knowledge transfer and also the philosophical positioning of the knowledge transfer practitioners. This will enable a full and detailed picture of knowledge transfer practices and perspective to be constructed through analysis and interpretation of the data collected, this will allow the identification of factors which influence knowledge transfer practitioners daily routines. Any similarity between standard practices identified within the literature in relation to practices amongst knowledge transfer practitioners in the Muslim business community in Edinburgh should then emerge. An overview of this is shown in the following table.

Table 1.1b Research Question alignment to aim and objectives

Objective	Focus	Derived Research Question
1	Literature interpretation of knowledge	Literature:RQ1
2	Application of competitive advantage	Empirical: RQ2
3	Methodological asymmetry/ Methods	Methodology: RQ3
4	Locus of understanding and interpretation	Research: RQ4

Research Question 1:

Chapter 2 described the philosophical underpinning given to knowledge. The perspective position regarding how this philosophy permeates Occidental business communities is also made clear from the literature review in chapter 3. The literature however was uninformative regarding a personal philosophical perspective adopted by knowledge

transfer practitioners in the Muslim business community. In relation to this, the first objective seeks to establish a practical, working definition for knowledge transfer in a business context underpinned by a philosophical episteme of knowledge. Derived from this position, the following constructed research question will expose the relationship to knowledge from both a philosophical position and personal perspective and highlight the ambivalence of its management.

HOW DO KNOWLEDGE TRANSFER PRACTITIONERS IN THIS MUSLIM BUSINESS COMMUNITY DEFINE KNOWLEDGE ?

Research Question 2:

The literature in chapter 3 describes how and why Occidental businesses use theoretical business models to identify efficient methods for knowledge transfer and justify resource management accordingly to ensure competitive advantage. The literature was uninformative regarding the use of business models adopted for use within this Muslim business community. The second objective is to critique and explore current business management models and theories which may be utilised by knowledge transfer practitioners to underpin knowledge transfer practices to support this view. From this combination of critique and underpinning analysis, drivers which maintain management of knowledge diversity may be exposed, and the following research question will support the generation of data to establish if a relationship exists between theoretical models and daily knowledge transfer practice.

ARE BUSINESS MODELS AND THEORETICAL FRAMEWORKS ADOPTED BY KNOWLEDGE TRANSFER PRACTITIONERS IN THE MUSLIM BUSINESS COMMUNITY USED TO DRIVE KNOWLEDGE TRANSFER PRACTICES ?

Research Question 3:

Business success described in the literature was clearly articulated and defined as being able to attain commercial success through successful business practices, driven by the management of knowledge. Further, successful business practices are measured by their ability to comply with governance relating to utilisation of knowledge management resources. Current literature was uninformative regarding the defined metric for success by the Muslim Business Community. In relation to this, the third objective seeks to establish if a methodology investigating contiguous knowledge transfer practice, overarched by a phenomenological lens, will allow the data collected within this community to become meaningful in a business success context specifically focused from the individuals point of view. The duality of this position, supporting a view of success associated with underpinning methodology will ask if the methodology applied is appropriate for generating data to facilitate discussion and draw specific conclusions from.

HOW DO KNOWLEDGE TRANSFER PRACTITIONERS IN THIS MUSLIM BUSINESS COMMUNITY IDENTIFY BUSINESS SUCCESS ?

Research Question 4:

From an Occidental perspective, the problematic nature of knowledge is debated at length within the literature and it was concluded that knowledge has an inherent problematic nature from the point of creation. Current literature was uninformative regarding the implications of this position with respect to the Muslim Business Community. In this regard, the fourth objective will identify personal perspectives within this Muslim business community which relate to problems with knowledge. Linked to the fourth

objective, this cumulative position examines a position of knowledge both as a singularity of subjective being and as an inherent practical incumbent, in as much as the question will attempt to draw out clarification towards knowledge diversity within the organisation which generates and uses it. It is only from this cumulative position which theoretical implications may be drawn .

HOW DO KNOWLEDGE TRANSFER PRACTITIONERS IN THIS MUSLIM BUSINESS COMMUNITY DEAL WITH   PROBLEMATIC KNOWLEDGE ?

1.4 STRUCTURE OF THE THESIS

1.4.1 Overview

Because of the complex nature of knowledge the overall structure of this thesis is more theoretically orientated than practical research based. This is because knowledge transfer in a business context cannot exist without two things. Firstly knowledge has to exist and secondly someone has to transfer it to make it become useful. Although a simple enough concept, the complexity underpinning this concept is detailed and multifaceted. In this respect, this study first of all needs to examine what constitutes knowledge and then how and why it needs to be transferred to become useful for a business or organisation. Detailed examination and critique of theoretical positions relating to the conceptual understanding of knowledge is a necessary starting point and needs to be first established before any empirical position relating to transfer can be justified.

1.4.2 Structure

Chapter 1:

This chapter gives an outline of the whole thesis

Chapter 2:

The literature review for this study has been split into two distinct chapters. The reason for this is that before identification of management practices relating to knowledge transfer practitioners can be recognised, an understanding of knowledge must first be established. Whilst it is clear that majority of literature seeks to understand knowledge transfer as a 'whole', only by detailing the constituent parts of what knowledge 'is', will

allow a complete critique of knowledge transfer practices to be undertaken. Epistemology, in this sense is an important starting point for this study. This first literature review chapter will consider what knowledge is, what does it consist of and where does it come from. That is, the philosophical underpinnings for which the definitions attached to knowledge achieve justification in its broadest sense. This chapter will critique and examine literature which elucidates from the following scope: what is the point at which knowledge exists and where does this point come from. How is it justified from a fundamental position of existence and what are the constituent parts which make up this existence.

Chapter 3:

The second literature review chapter will discuss and critique literature surrounding inter-relationship of knowledge and knowledge transfer supported by formal business practices in specific detail. The chapter will begin with a broad look at knowledge management evolution. It will then progress through current concepts and theories which are used to support knowledge transfer practices in a business or organisational environment. This chapter concludes with the drawing together of the two literature reviews as a summary in relation to the core arguments of the thesis chapters which then allows broad research questions to be proposed.

Chapter 4:

The overarching methods for data collection are split over two chapters. The reason for this is because, at a theoretical level, knowledge as an entity does not exist in an observable form and does not have variables metrics which are easily identifiable with its study. The first part of the research paradigm is concerned with the theoretical

underpinnings which give justification for the examination of something, which may not exist in a single observable form. This position becomes more complex if the consideration of personal perspectives given to knowledge also becomes part of the data to be collected.

Chapter 5:

This chapter outlines and discusses in a practical capacity, the data collection methods and analysis informed by the theoretical view from chapter 4. This chapter also includes an explanation of why thematic analysis was considered as the most effective method for data analysis and details the use of new and innovative methods of data collection.

Chapter 6:

This chapter details and discusses the key findings from the data. This chapter also includes an analysis of the findings by iterative examples from the interview transcripts.

Chapter 7:

This chapter puts forward conclusions and discussions for the whole Thesis

2 PHILOSOPHY& KNOWLEDGE: Literature Review Part I

2.1 INTRODUCTION

This first chapter of the literature review offers an outline and critique of knowledge philosophy, theory and definition, and at the same time places the context within the realms of a business context. It explores literature which discusses the actual epistemic principle of knowledge.

The chapter begins with section 2.2 and explores the epistemic reasoning which becomes evident in current theoretical interpretations surrounding knowledge, surrounding the interplay of philosophical quantifiers and epistemic concepts. Section 2.3 examines knowledge taxonomy and interpretations of knowledge related to a philosophical context using an interrogative model of inquiry and the conceptualisation of tacit and explicit knowledge supporting complex knowledge. Section 2.4 discusses the principle of communication and how this interrelates with a notion of knowledge and knowledge transfer. The conclusion section 2.5, draws together the key points of the chapter and this is used to inform the depth of the scrutiny and critique in the next chapter, which explores knowledge transfer in detail.

2.1.1 Literature Review Scope

For this research, the thrust of the main argument is that personal interpretation of knowledge has implications for knowledge transfer. This is because, if knowledge must be both understood, shared and received, then this is an interpersonal communication phenomenon. At the interpersonal level, this research is then concerned with how personal interpretation of knowledge may influence cognition and information

processing amongst knowledge transfer practitioners. For example, the absorptive capacity, discussed by (Cohen and Levinthal 1990) and personal capabilities, examined by (Grant 1996). To allow a deep understanding of knowledge as something which is to be transferred, the identification of axiological foundationalism supporting human interpretation of knowledge is a significant factor which needs to be explored. Additionally, analysis of contributing factors which support personal interaction with this understanding would then become necessary for a full and deep elucidation.

The literature inclusion criteria comprises specific elements which can determine the significance of knowledge from a philosophical perspective. This broad scope will allow a useful critique to take place since this scope can be thought of as examining epistemic logic in its broadest sense and not simply in its axiomatic-deductive form. This position also includes dimensions which can then allow knowledge definition to become a central tenet of knowledge transfer. To encompass this broad and complex phenomena, the literature scope consists of the following sections.

- *Philosophical underpinnings of knowledge*
- *Taxonomy*
- *Types of knowledge*
- *Knowledge Communication*
- *Relevance to Knowledge transfer*

Any English language articles which were included are predominantly concerned with knowledge transfer in a business context. This encompassed, research reports, review articles of research studies, articles which commented on research studies and discussion of any associated outcomes. A variety of search terms with different, overlapping or interchangeable meanings, including: *"knowledge", "knowledge philosophy", "business philosophy", "business knowledge", "knowledge communication" and "knowledge definition"*, were all used in the literature search constructs to help

categorise knowledge contexts. Any content which did not exclusively refer to knowledge transfer in a business context in the abstract were excluded, unless it was also specified that principle focus of the research was directed towards personal interpretation of knowledge.

2.2 PHILOSOPHY AND KNOWLEDGE ANTICENDANCE.

Literature surrounding knowledge and associated philosophical perspective encompasses a breadth of scope little seen in academic or management literature realms. To understand the importance of knowledge, the philosophical significance or the reasoning behind any interpretive position of the knowledge is necessary. The purpose of this section is to fully examine literature which discusses philosophical underpinnings to something which may exist in an unobservable form, but which is identified as knowledge.

For clarity and focus, foundationalism is used as the underpinning caveat supporting critique of the literature and hermeneutics is an assumed part of the axiom for analysis. This is an important position to adopt within the sphere of knowledge understanding from the position of this study as foundationalism is a normative posit about how beliefs are related to one another (Rockmore 2000, p 195) and hermeneutics', is a descriptive posit about human cognition and is also used as a synonym for interpretation (Rockmore 2000 p 195).

2.2.1 Aristotelian underpinning

As a focus for scrutiny within the literature, understanding of knowledge existence is crucial to support any philosophical perspective or justification, in this respect, Drayfus et al. (1983) give a view from Foucault:

> *'By episteme, we mean . . . the total set of relations that unite, at a given period, the discursive practices that give rise to epistemological figures, science, and possibly formalized systems . . .The episteme is not a form of knowledge or type of rationality which, crossing the boundaries of the most varied sciences, manifests the sovereign unity of a subject, a spirit, or a period: it is the totality of relations that can be discovered, for a given period, between the sciences when one analyses them at the level of discursive regularities.' (pp   44-78)*

This initial position of knowledge is important because to be able to use knowledge in a business context, requires the understanding of complex interactions and philosophical caveats which account for the very nature of knowledge and allow it to connect to other entities.

From a philosophical position in occidental society and occidental businesses and organisation, the understanding or episteme of knowledge can generally be regarded as falling between two distinct arguments. The first is Rationalism examined by (Descartes 1644; Leibniz 1684; Kant 1787) which postulates a proposition can be known from reason alone without the need for, or indeed independent from, experience. The second is Positivism (Aristotle, Berkeley 1710, Hume 1739), which postulates propositions can only be known directly from experience. It is also important to mention logic according to Kant's definition, which looks like the beginnings of a formal knowledge transfer theory:

> *'Our knowledge springs from two fundamental sources of the mind; the first is the capacity of receiving representations (receptivity for impressions), the second is the power of knowing an object through these representations spontaneity in the production of concepts.' (see Kant 1781; 1787).*

Together, rationalism and positivism inextricably link knowledge and knowledge transfer as a course of action which aligns to Aristotle's four causes theory, discussed by Lindberg (1992, pp 45:65). In this discussion Lindberg explains that in Aristotle's theory, causes can be grouped into divisions. These divisions are based on ways in which the question *"why"* is answered and the account of causes are based on the fundamental principles or general laws, wherein the whole is simply the sum of its parts. According to Aristotle, causes derive from four divisions to establish a basis for knowledge justification:

Material cause

Formal cause

Efficient cause

Final cause

Although Aristotle's theory of causality is developed in the context of his science of nature, for this thesis, its philosophical applicability goes beyond the boundaries of natural science. In the next example the four causes are used to explain a relationship with fundamental human action incorporating knowledge. This is a necessary starting point for critique since human action is required in understanding knowledge and participation in a knowledge transfer scenario. In this case the four *Causes* can be seen to resemble a knowledge transfer process :

Figure 2.1: Knowledge relationship to Aristotle's condition for cause, adapted from Lindberg (1992, pp 45-65)

Aristotelian Condition	*Human Interpretation*	*Related to knowledge transfer*
Material cause	Elucidation	The material used to fulfil the final clause is knowledge
Formal cause	Ability	Cognitive capability of the transfer practitioners to understand the concept of knowledge and knowledge transfer
Efficient cause	Framework	Framework within the transfer can take place and be measured for success
Final cause	Desire	Business Success

In this schema, scepticism, materialism, and positivism stand on the one hand, idealism, and theology stand on the other, all are separate or derivatives, but which make up the justification for knowledge existence. The philosophical position given to knowledge at this point is that it is free from individual subjectivity, but cannot exist as an entity in a single form, as there is a requirement of constituent parts to make a whole.

McAdam & McCreedy (2000, p73) described this as the 'knowledge is truth' perspective, where knowledge is equivalent to a consistent canonical body of scientific facts and laws. This perspective is embedded in the philosophy of positivism, since objective knowledge is produced as a result of this argument. An adjacent position can be that of knowledge which is highly personal and bestow subjective insights, intuitions and hunches within its own perspective sphere. Cook & Brown (1999, p 384) simplify this position by stating that knowledge, *'is something that is held in the head'*. From this philosophical point of reference, Cook and Brown further argue that knowledge comes from a route of primarily cognitive processes and is a persuasion or summary of both individual and collective reflection parts. Thompson and Walsham (2004) supported this position by arguing, knowledge, because it is a subjective perspective of an individual's experience, associated problems will be inextricably related to the context of the knowledge itself.

In relating to the philosophical positions' of knowledge, it is important to consider these different asymmetries, since these asymmetries explain that human beings hold a belief of something in two distinct ways, which is basic and non-basic. Non-basic beliefs are based on other beliefs by inference, for example *'I believe that all green apples are sweet'*, is based on my inference that *'all apples are sweet'*. Basic beliefs, are of course not, *'I believe that I am sitting in front of this computer, writing this thesis'*, is based on my experience I am having right now, not by inference of some other belief.

There is however a fundamental problem in aligning these posits regarding their appropriateness for underpinning knowledge in relation to philosophical axioms. Since, both positional inferences presuppose an assumption, in that, they both require interpretive associations, which allow knowledge to exist. This is a very important dimension to consider within the relationship between knowledge and knowledge

transfer, as any inference to what knowledge transfer consists of, will be informed by a summary of this fundamental Aristotelian principle.

This argument, concerning an indefinable philosophical position for knowledge is at the core of Mehmets (1995) argument regarding occidental business philosophy. Mehmet argues that the central logic of occidental business philosophy is that personal knowledge has a purpose and value, but only as a resource, captured for profit-driven capitalism (1995, pp25-9). Mehmet adds that over time, all non-capital resources, including knowledge, will be transformed into new forms of capital and that the philosophy behind the justification for the existence of knowledge from this asset perspective, is for a singular purpose *'for profit'*. Justification for Mehmets position originates from the premise that complex foundational interactions of human nature, scientific parameters and boundaries may define a person's interpretation of knowledge. It does, at the same time induce the notion that knowledge is based on prescriptive logic instead of descriptive context. In this respect the philosophical position supporting Mehmet's arguments is drawn from the core element of Dweck's (1986) motivational theory. In this theory he argues that the fundamental motivational force for the knowledge transfer participant is that individuals implicitly form interpretations about the nature of knowledge at any given point within a transfer scenario.

Dweck (1986) explains that in this regard, participants using knowledge, attempt to form an entity theory, conceiving their personal intelligence in relation to knowledge as fixed ,uncontrollable and constrictive. Dweck continues that others construct an incremental theory in believing that their intelligence is shape-able and controllable. This argument suggests egoistic conceptions of reality would then form the basis of a knowledge transfer practitioners philosophical perception of knowledge. Nussbaum (1999) argues in this regard, and points to the significance of perceived knowledge as the underpinning

subjectivism. From this view however, the knowledge transfer practitioners experiential account of knowledge would be unable to fully justify the putative philosophical position of knowledge. This is because, the practitioners view of knowledge is subjective, any possible relevant mental states must be experiential.

At this juncture, one could ask if the existence of knowledge depends on the interpretation of a foundational normality is true, then all knowledge must derive from a consequence of foundational ethics, which cannot be refuted by accepted moral norms. However, if one were to adjudicate on a philosophical position regarding knowledge at this juncture, one could ask, is it even possible to base the existence of or extend the episteme of knowledge, based simply on conflicting principles. As such, the interpretive praxis for knowledge schema could be debated at length as there is no such thing as 'normal knowledge' from which to position a philosophical argument.

An additional complication, from the standpoint of knowledge as a philosophical justification, is to consider the evidence of knowledge when deciding if it is true or not. This is an important consideration when deciding if something is knowledge or not, since if knowledge understanding was not the originating position in a transfer scenario, it would be impossible to distinguish between successful or useful knowledge transfer and the transfer of empirical cogency. In relation to this position, Blackburn (1987) considers truth and perceived truth in the context of the knowledge relating to knowledge understanding as important considerations. For example, when conceiving as a faculty for distinguishing between truth and falsity, any experiential decision that lacked justifiable cognitive status, traditionally ascribed by Aristotle and discussed previously, would be considered false (Blackburn 1987).

The philosophically identifiable positions of knowledge definition at this point would be to state that knowledge can be experienced, but has to be justified as a true belief

before it can be defined as knowledge. Similarly, to assume any value or relevance of knowledge to the sender or receiver of it, Belief, Truth and Justification (epistemic principle) must also be inferred as an identifiable doxastic position. This is a very important consideration for this thesis, since if there is justification surrounding this axiom, then both hermeneutics and foundationalism are required constituent parts within a dialectic construct for understanding knowledge in its entirety.

In a practical example, research by Churchman (1971) surrounding the use of knowledge within information systems made fundamental interpretations from eminent philosophers such as : Leibnitz, Locke, Kant, Hagel and Singer. The idea was to use a philosophical starting point of knowledge to eliminate problems when designing IT systems for business use. From this research, Churchman's (1971) framework concluded that:

> *'knowledge resides in the user and not in the collection of information… it is how the user reacts to a collection of information that matters'(p 10)*

Literature at this point is now clear on the significance of a deeper understanding of knowledge, in that, without a proper appreciation of knowledge, knowledge attribution to a transfer mechanism cannot be fully established or evaluated. The philosophical caveat which overarches this view of knowledge positioning in relation to perspective, suggests approaches to epistemological issues regarding knowledge definition cannot support knowledge transfer from a pragmatic centre. Therefore, any relationship of knowledge to knowledge transfer, must be as a consequence of causal effect on the part of interpretation.

2.2.2 *Knowledge definition*

This need for knowledge definition is examined by prominent authors such as Drucker (1993) and this view supports the argument that definition of knowledge is very important

for a business or organisation. Clarification from this view also highlights the importance of philosophical interpretation of knowledge for a business or organisation wishing to achieve a desired goal or objective. This underpinning to knowledge definition is similarly highlighted by Nonaka (1984) who defines knowledge as being:

> *'justified true belief", and considers knowledge as "a dynamic human process of justifying personal beliefs as part of an aspiration for the truth' (p 15).*

In contrast to this view, Thompson and Walsham (2004) argue that because knowledge is a subjective perspective of an individual's experience, associated problems are inextricably related to the context of the knowledge itself. This argument supports a view that subjectivity is the defining attribute surrounding the content of knowledge. Continuing on this theme, Alvesson and Karreman (2001) assert that because of this subjective definition, problems associated with knowledge are indeed prevalent. Further, that knowledge is difficult to define and manage because it is an ambiguous, unspecific and a dynamic phenomenon. Alvesson and Karreman (2001) continue that in addition to no agreed upon definition of knowledge within management literature, no structured underpinning commonality can be offered regarding the status of consequent theoretical positioning. This argument though, although clear, would seem to contradict the former, as knowledge has already been defined as a subjective phenomenon (Thompson and Walsham 2004). Assudani (2005) adds a more assertive view and a further dimension to the argument by explaining that in this information age, even though knowledge cannot readily be identified on any balance sheet, it is singularly the most valuable asset for a business or organisation. Foss (1999) concludes that a coherent and generally accepted working definition of knowledge for the organisational environment has yet to be established. As such, many authors try focus on ways to better understand and ultimately enhance knowledge. In doing so, explore various

positions of understanding by using accepted occidental foci, derived from historical concepts of: positivism (Gates 2001), empiricism (Gupta 2006) and rationalism (Katz 2000).

Aligned to this position, Howells (2002) gives vision to the fact that individuals experiences related to knowledge can contribute to retaining a knowledge definition and Von Krogh et al. (2000) retorts that personal resources in the form of cognitive capability can also contribute. In relation to this Boulding (1966) describes knowledge as images related to cognitive content. Further, knowledge from this perspective, either undefined or from multiple definition, can only exist because someone knows it in his mind. This argument makes clear that knowledge is not an independent entity to be transferred, such as any material object might be. For example, a chair cannot be transferred as knowledge, it is not a knowledge, although you need specific knowledge for its construction. This argument summarises the need for knowledge to be placed within the realms of objectivity to make its subjectivity recognisable.

In an attempt to reconcile knowledge definition, studies by Szulanski (2000) defined knowledge simply as a *'causally ambiguous set of routines'* (p10). However, the existence of knowledge justified by association to an empirical framework, however ambiguous, depends on the interpretation of a foundational normality (Sayer 1984). Sayer (1984) further argues that knowledge of the objective world is fallible and theory laden because, whilst it exists, our knowledge of it is unclear, is singular in its focus and can also suffer from borrowed interpretations covering many disciplines. In this sense, interpretations of knowledge vary and are often very broad or very non-specific and this argument holds true for a number of authors. Nonaka (1994, p 34) for example, maintains that a distinction can often be made between data, information and knowledge. Conversely, Castaneda (2000, p 3) defines knowledge as an *'elusive concept'* whereas

Nonaka (1994, p 15) described knowledge as *'a multifaceted concept with multi-layered meanings'*. In an attempt to clarify, Berger and Luckmann (1967) give a broad example of definition as:

> *'the certainty that phenomena are real and that they possess specific characteristics' (p 13)*

However, according to Tell (2004), even the overall characterisation of knowledge has so far been too simplistic. Yet, regardless of this indifference, there exists agreement within many research streams that knowledge, in this dissected form, can be a source of competitive advantage for a business or organisation (Argote and Ingram 2000, p 156). Additional research with a similar focus highlights that knowledge has been further defined in other categorical instances aligned to a business context as: *'organisational manufacturing capabilities'* (Zander and Kogut 1995); *'assets'* (Spender 1996); *'innovation'* (Rogers 1995) and *'best practice'* (Szulanski 1996). Grant (1996b, p 110) underlines these difference between conflicting opines by declaring that knowledge is *'that which is known'*.

Therefore, underpinning the fundamental constituent of any knowledge definition theory lies within the parameters attached to any inference which epistemology brings to the *'knowledge'*, but from the knowledge transfer practitioners perspective. Although difficult and complex, the literature suggests that through reconciliation of foundational and doxastic positions, knowledge and definition form perspective constructs which can become a singular justification, although, knowledge definition is characterised through the lens of multiple definitions and ***not*** as a singular epistemic principle.

2.3   TAXONOMY

The literature on organisational knowledge offers many typologies and taxonomies, each of which is meant to disclose observable aspects of knowledge or observable forms of knowledge. This section discusses the reasoning behind interpretive assumptions to knowledge philosophy, states and inferences.

2.3.1   Classification

Singley and Anderson (1989) argue that knowledge is declarative or procedural and that declarative knowledge is knowledge about facts or, as similarly defined by Tucker (2007) classified as '*know what'*. Procedural knowledge on the other hand is knowledge of procedures and classified as '*know-how'*:

> *Declarative knowledge =   explicit.*
> *Procedural knowledge =   (is mostly) tacit. (p106)*

In addition to this position, classification of knowledge, by means of an applicable and commonly accepted synonym, is forwarded by Badaracco (1991) as a position which is readily accepted regarding the epistemological dimension of knowledge. To expand this dimensioning, Badaracco (1991) defines two different types of knowledge which allows a classification dimension ; embedded and migratory. *Migratory* knowledge, is easily transferable because it is usually recorded in a codified form. *Embedded* knowledge, is less transferable because it is associated with: the culture of an organisation, attitudes and relationships amongst groups and individuals, decision making routines and processes of the organisation. In contrast to this view, Blackler (1995) explains this classification differently and allows a far broader philosophical construct to be developed.

> ***Embrained knowledge**, is that which is dependent on conceptual skills and cognitive abilities. This could be practical, high-level knowledge, where objectives are met through perpetual recognition and revamping.*

Embodied knowledge, is action oriented and consists of contextual practices. It is a social acquisition, related to how individuals interact in and interpret their environment.

Encultured knowledge, is the process of achieving shared understandings through socialisation and acculturation. Language and negotiation become the discourse of this type of knowledge in any enterprise.

Embedded knowledge, is explicit and resides within systematic routines. It relates to the relationships between roles, technologies, formal procedures and emergent routines within a complex system.

Encoded knowledge, is information that is conveyed in signs and symbols, for example, books, manuals, data bases, and codes of practice. Rather than being a specific type of knowledge, it deals more with the transmission, storage and interrogation of knowledge.

Source: Blackler (1995) "Knowledge, Knowledge Work and Organizations" (pp 1021-1046)

This is an important construct for this thesis to consider, as by highlighting the overall concept of knowledge directly in the context of categorisation. This is because, Blacker's position allows knowledge transfer practitioners to validate and satisfy epistemic interpretations to knowledge which, importantly, may be symptomatic of any business or organisation. Because, of the diversity surrounding the theoretical classification of knowledge definition, it is clear why research conclusions form classification incongruities and variations. This situation is acknowledged by Drucker et al. (1993) who emphasises that knowledge must be classified and understood, as it is an essential sustaining platform to business success and competitive advantage. Indeed, this argument from Drucker warrants further explanation and is discussed, in detail, in the following chapter.

Literature at this point now gives the possibility to relate knowledge understanding to a position of classification. In this respect, Winter (1987) identified knowledge dimensions which would enhance the capability to position knowledge as a classified observable entity, and is similar to Blackler (1995) in this regard. Although simple and common-sense like, Winter acknowledges facets of knowledge which are classified as

juxtaposed to each other, thus building a deeper classification dimension: *tacit vs articulable; not observable vs observable in use; complex vs simple; and dependent vs independent of a system*. Zander and Kogut (1995) further developed this concept into constructs of knowledge categories, which constitute distinguishable parts: codifiability; teachability; complexity; system dependence and observability.

In contrast to the Zander and Kogut view, Grant (1996) perhaps simplifies the understanding of knowledge into two separate categories: knowing about '*facts, theories and sets of instructions*' and knowing how 's*kills that are expressed through performance*'. This development of knowledge construal's allowed (Blumentitt and Johnston 1999) to combine these insights into four categories; *Codified Knowledge, Common Knowledge, Social Knowledge and Embodied Knowledge*. The philosophical position of knowledge at this juncture can be seen to partially encompass the fundamental episteme derived from Artistotle's causal position, discussed previously. Davenports and Prusak (1998) expand on this and further define knowledge from this philosophical position as:

> '*Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of the knowers. In organisation's, it often becomes embedded not only in documents or repositories but also in organisational routines, processes, practices, and norms*' (p 5).

Coakes and Sugden (2000) share this view and explain that these positions and definitions in which Davenport and Prusak and other theorists have discussed knowledge episteme is , in their view, *declarative knowledge*. They continue that this categorisation focuses around knowledge about something, which may be a shared understanding of concepts embraced by *procedural knowledge*, or knowledge of how something happens. *Knowledge (causal)* in this respect, is knowledge of why something happens and it is this knowledge in this context which can enable strategy

formulation. In looking at this argument, it is clear that Coakes and Sugden (2000) regard knowledge as something which is only known when information is placed in a particular context, and this context is associated with a specific persons thoughts and actions.

What is now apparent from the literature, is that knowledge, in whatever proximity its classification is derived from, is easier to position in terms of justification, when it is philosophically separated from simple information. This position however, can only be achieved if knowledge is first classified as an objective entity and where categorisation is derived from constituent parts of knowledge understanding and definition. To formalise a justification of knowledge, the main argument from the literature suggests that knowledge can be interpreted from many philosophical and theoretical positions, is multi-faceted, multi-sourced and without origin.

2.3.2 *Explicit and Tacit Knowledge*

To further develop an insight as to why knowledge cannot be easily identified within a justified position of singular existence, the interplay of quantifiers and epistemic concepts which make up knowledge can be looked at in more detail.

In explaining a fundamental constituent of knowledge from a philosophically justifiable position, Coakes and Sugden (2000) describe explicit knowledge as increasingly being emphasised in both practice and literature as a management tool to be exploited. Scarbrough et al. (2005) support this view by linking this position to knowledge repositories, database management and knowledge action networks based on the sharing of explicit knowledge. Nonaka (1991) similarly defines explicit knowledge in this respect as captured in drawings and writing. Nonaka and Von Krogh

(2009) further explain, that explicit knowledge has a universal character, supporting the capacity to act across contexts and is accessible through consciousness:

> '[e]xplicit knowledge is accessible through consciousness. Knowledge tied to the senses, tactile experiences, movement skills, intuition, unarticulated mental models, or implicit rules of thumb is 'tacit.' Tacit knowledge is rooted in action, procedures, routines, commitment, ideals, values, and emotions'.
> (pp 635-652)

Merali (1999) affirms this argument and clarifies that tools such as co-ordinated databases, groupware systems, intranets and internets are seen as the ultimate explicit knowledge management systems. Pan and Scarbrough (1999) continue to support this view by identifying explicit knowledge as systematic and easily communicated in the form of hard data or codified procedures. Further, they state that it can be articulated in formal language including grammatical statements. Kogut and Zander (2003) expand this view further by explaining, explicit knowledge is formal and systematic, which makes it possible to easily communicate and distribute. Christensen (2003) supports this by explaining knowledge transfer is not only about exploiting accessible resources, but also about how to acquire and absorb it well.

Day (2005) argues however that within the logical extensions of how people express their thoughts, viewpoints, and interests, some tacit knowledge must be the basis for explicit knowledge. Fuelling the confusion between the two arguments, Polanyi and Grene (1969) indicated that, whereas the context of action and practice regarding the absorptive action to explicit knowledge may be social, the actual internalisation of the knowledge is an individual psychological process. Taking a specific position in this regard Polanyi (1964) argued that any scientific progress could not be fully explained simply by the accumulation of articulated, universal and formal scientific explicit knowledge. In other words, when explicating knowledge as something which exists, Polanyi makes an assumption that it exists in a real world sense, but only as much as

pertaining inter alia to the actual world, specific to individual understanding at that time. This view, that the impersonal aspects of explicit knowledge return to personal participation in the search for and acceptance of the object to be known, is supported by Jha (2002). Jha concludes that tacit and explicit knowledge are not competing, but rather are two forms of knowledge, assumed on a single continuum, 'oscillating', to mutually enhance each other. Polanyi (1966) underlines this view by acknowledging that whilst tacit knowledge can be possessed by itself, explicit knowledge must rely on being tacitly understood and applied.

This view of usefulness and importance of codification and communication is ubiquitous within the literature and supports the view of the usefulness of explicit knowledge. Similarly, that this kind of knowledge can be transmitted across individuals formally, is easily articulated and communicated to others and therefore clearly sits very comfortably within the 'positivists' realm. However, considering the discussion in the previous section (2.2), it is clear that explicit knowledge cannot be the only identifiable constituent of knowledge as a transferable entity. In this respect, tacit knowledge is defined by Polanyi (1966) as knowledge which cannot be articulated or verbalised, and famously and concisely captures this notion with the phrase:

"We know more than we can tell" (Polanyi 1966, p 4)

A main inclination in formal examination of tacit knowledge derives from the work of Edmund Husserl (1962) which discusses the inter-subjective, constitutive sphere. In doing so, Husserl subjected to examination the frame of reference within which ordinary persons routinely perceive the phenomenal world. Within this frame of reference, a person may take it for granted that things are encountered as they are. To argue that tacit knowledge is never fully convertible to explicit knowledge is consistent with Polanyi's thinking, and following Husserl's discussion, it is easy to see how one

could draw on tacit knowledge to interpret and apply codified knowledge or associated technologies. Tacit knowledge can be assimilated as a result of personal experience and because of this characteristic Nonaka et al. (2000) advise that it is often subjective and notoriously difficult to formalise. Similarly, Nonaka (1994) describes tacit knowledge as personal and difficult to distribute to other persons. Additionally, Assimakopoulos and Yan (2006) explain that:

> *'tacit knowledge often involves activities at individual, group and organisational levels which are often invisible to outsiders of a particular organisational context'. (p 98)*

Nonaka and von Krogh (2009) explain that Tacit knowledge, also called silent knowledge', is often connected to an activity and to how a person relates it to a certain context:

> *'knowledge tied to the senses, tactile experiences, movement skills, intuition, unarticulated mental models, or implicit rules of thumb is 'tacit', and this tacit knowledge is rooted in action, procedures, routines, commitment, ideals, values, and emotions'. (p 210).*

Because of the personal nature of tacit knowledge exchange, tacit knowledge is often learned via shared and collaborative experiences Nonaka and Takeuchi (1995). As a result, personal interpretations will be inferred within the transfer scenario and according to Simonin (1999) this is due to the causal ambiguity of the tacit nature of knowledge. Tacit knowledge is the antithesis of explicit knowledge, in that it cannot straightforwardly be transferred and codified by standard business mechanisms such as documents and procedures (Kreiner 2002). Roberts (2000) opines that social and cultural stimuli should be considered, and that ultimately, any transfer of knowledge, in particular tacit knowledge, being problematic, ultimately relies on the importance of trust in the exchange scenario. This view suggests that the known problems relating to tacit knowledge transfer of risk and uncertainty are reduced by trusting relationships. In discussing this reference to relationship and trust in more detail, Roberts asserts that

elements of any integration of knowledge cannot be governed and defined by contracts, concluding that the very nature of tacit knowledge places it beyond the influence of simple contractual agreements which are used as simple parametric boundaries and constraints.

The problematic characteristic of the tacit nature of some knowledge may be beneficial in a business context however, since, because of its complexity, it is difficult for competitors to imitate. Zander and Kogut (1995) argue that this knowledge will be difficult to transfer to other organisational members. Nonaka and Takeuchi (1995) refer to tacit knowledge as knowledge that comprises experience that resides only with the individual. Blumentitt et al. (1999) agree with this view and further contend that tacit knowledge repositories reside only in intelligent systems, that is, within individuals.

This theme of *tacit knowledge* has informed many theories of routines, practices, and knowledge management in many organisation's. For example, Nonaka and Takeuchi (1995) incorporated this theme in their influential research on knowledge creation in organisation's.

This often-cited definition of knowledge, which is directly relevant to the issue of transferability, was initially proposed by Polanyi (1962), pointing out the common tacit dimension in scientific knowledge and moral judgment, this communicative view was later developed by Nonaka and Takeuchi (1995) in their Socialization Externalization Combination Internalization or SECI model. Nonaka and Takeuchi, illustrated in their model that knowledge is created via a spiraling process of sharing and reflection, composed of conversion of explicit-to-tacit knowledge (*Internalisation*), conversion of tacit-to-tacit knowledge (*socialisation*), conversion of tacit-to-explicit knowledge (*externalisation*) and conversion of explicit-to-explicit knowledge (*combination*). This is an important position of knowledge to clarify since it defines the supporting

consequences of tacit knowledge on business development and is a principle starting point for much theoretical management literature on the subject as justifiable knowledge can now be created through corrective management practices.

2.3.3 Explicit vs Tacit

Tsoukas (1996) offers a counter-argument regarding tacit v explicit implications. In this view he questions the actual validity of a knowledge conversion and in doing indicates he is informed by Shotter and Katzs (1996) discussion on Wittgensteinian psychology. In this argument, Tsoukas posits a mechanism of attention drawing, in which individuals are motivated by specific stimuli that are then personalised by individual interpretation. Tsoukas argues that tacit knowledge is not convertible to explicit knowledge, as described by Nonaka and Takeuchi (1995) in the previous section. Tacit knowledge, Tsoukas argues, can only be acquired through *'numberless experiences'* (Tsoukas 1996, p 17), famously concluding that, *'Tacit knowledge has been greatly misunderstood in management studies ...'* (Tsoukas 1996, p 425). The Nonaka and Takeuchi interpretation of tacit knowledge (Nonaka and Takeuchi 1995), as *'knowledge-not-yet-articulated'*, knowledge awaiting for its *'translation'* or *'conversion'* into explicit knowledge, is however the interpretation which has been widely adopted in many management studies.

Tsoukas (2001) further argues that although it can be categorised theoretically, tacit knowledge cannot be captured, translated, or converted into useful explicit knowledge. Further, knowledge is only displayed and manifested, in what a person does. This argument from Tsoukas is clear, in that, from this view knowledge does not originate at the point where tacit overlaps explicit, but that it is:

> *'when our skilled performance, or, our praxis is punctuated in new ways through social interaction' (p 7).*

In relation to this overlapping view, Nonaka et al. (2000) concede, that while tacit knowledge is rooted in action, procedures, routines, commitment, ideals, values, and emotions, it can be accessible through consciousness, but only if it leans towards the explicit side of a continuum. Regarding this assessment and argument from Anderson (1983) argues that most of the details about individual skills, due to their embodiment, are inaccessible through consciousness. In supporting this view and as a development from his original position, Nonaka and von Krogh (2009) explain;

> *'For example, some tacit knowledge of scientists must be the basis for scientific knowledge, such as experiences with discovery processes, the results of scientists' successful improvisations with instruments in the laboratory, and errors to avoid when replicating the experiment. Thus, some knowledge must move along the continuum from tacit towards scientific knowledge that eventually becomes knowledge independent of the scientist who created it in the first place'   (p119)*

While Hildreth and Kimble (2002) contend that the distinction between tacit and explicit knowledge in organisational knowledge creation theory is a conceptually flawed argument regarding identifiable value. Importantly for this discussion, Tsoukas (2003) maintains that because of this flaw, the actual value of knowledge to a business or organisation may also be debated. Contributing to this argument is a view from Teece (1998) which formalised a position throughout this disagreement by explaining that tacit and explicit forms of knowledge interact to create new knowledge. Further, Teece stated that tacit and explicit knowledge are not separate, but mutually complementary, in that, they dynamically interact with each other. This sort of middle ground approach is consistent with research by Alavi and Leidner (2001) who conclude that knowledge is a distinction *'of'*, as opposed to separate entities *'of'* tacit and explicit.

The underlying concept to this argument is not new, as it is specific to Polanyi's (1966) distinction regarding tacit or implicit knowledge and explicit knowledge, concluding that 'tacitness', establishes two extremes of continuous typology for knowledge. Grant (1996) gives justification to the phenomena by explaining that the Explicit V Tacit phenomena is regarded as inherent in the theoretical development of discourse on the subject of knowledge. Grant continues that it is clearly important for any organisation to fully exploit any resource it has to gain what it regards as a 'competitive advantage' and an understanding of knowledge in its business sense is fundamental to this process. In an effort to allow philosophical positioning of knowledge, a view from Dretske (1985) affirms that the concept of Knowledge information, should not be confused with Knowledge meaning, but knowledge communication should be applied to all kinds of knowledge.

This view from the literature at this point is contradictory and is unclear of the specific interaction processes which constitute and interaction between tacit and explicit knowledge. Similarly an outcome of any interaction although somewhat complex suggests knowledge from this interaction is made up of composite parts of tacit and explicit, which do not follow any agreed rule of governance and the parts make up different kinds of knowledge which culminate from this complex relationship.

2.3.4 Complex knowledge

In an attempt to reconcile the different philosophical standpoints of knowledge as a justifiable entity, Rogers (1995, p 242) states that complexity refers to the degree to which knowledge is understood. As described by Cohen and Levinthal (1990), knowledge can be complex because its acquisition relies upon justified, pre-existing knowledge. Grant (1996) informs that the interaction surrounding the complexity of

knowledge is subject to the integration of personal and organisational capability. This integrational view is flawed however, as it is based on an assumption that complicity is reflective of the specialised knowledge upon which it draws. Grant, continues his argument however by explaining that in the wider the scope of complex knowledge integration in a business environment, lower level communication will be common knowledge and will be more inefficient at integration of knowledge.

Indeed, Reed and DeFillippi (1990) support Grants view by stating that in many cases knowledge is so complex within a business or organisation, few individuals if any, will have sufficient breadth and depth of knowledge to grasp the overall theoretical concept of a transfer scenario as a singularity. This view is also elaborated by Simonin (1999) who explains that ambiguity of highly complex knowledge arises from the sophisticated structure of component interdependencies or constituent parts as identified in all of the preceding sections. This view is an important factor in defining overall knowledge performance, since performance, according to Simonin (1999) will be very sensitive to any internal or external modification to the knowledge.

Nonaka and Takeuchi (1995) further discuss this position in detail and add that although complex, it is the face-to-face enquiries which enables in-depth explanations and interpretations which can lead to the '*fast'* transfer of the knowledge. According to Nonaka (1994), Nonaka and Takeuchi (1995), complex knowledge creation in businesses and organisations is influenced by such factors which provide a social context for the process where people with different knowledge and interests interact. This suggests that there is an acceptance that created knowledge will inevitably be complex at its creation point since, if intervention was not implicated the transfer would be '*slow'* by default.

Contrary to this insight, as discussed by Szulanski (1996), a transfer strategy should aim to maintain existing structure of component dependencies of knowledge without any contextual or social modification. Winter and Szulanski (2001) further explain that employees just need to follow those procedures/instructions to prevent mistakes and inefficiencies. This argument which perpetuates that a combination of codified and personalised mechanisms, together with a managerial strategy, suggests that complex knowledge and information requires to be manipulated in some way to become efficient and effective.

The position from the literature at this point is that, although complex and useful, knowledge cannot be utilised in its originating unjustified state. The useful position of knowledge derives from a comparative of understanding surrounding the mechanisms involved within the transfer practitioners sphere of interpretation. Similarly, that all decisions and adaptations referred to within the sphere of understanding are at an equilibrium.

2.4   PHILOSOPHICAL IMPORTANCE of COMMUNICATION

Philosophy and knowledge interlink through various boundaries of communication, as such, knowledge as an entity intersects with communication theory if it were to be related to a transfer scenario. This interaction may surround the nature of language, subjectivity, experience, epistemology of science and interpretation, or the politics of knowledge and communicative relationships. Communication, in this sphere, is an important philosophical position, as any justified communication presupposes answers to differences between the participants of a communication. Additionally, in this respect allows answers to connect in a meaningful way, in that, knowable constituents,

which are themselves part of the answer, give justification to what is being communicated.

2.4.1   *Communicative Position related to knowledge*

The interaction between communication and knowledge is known to be a historical amalgamation. In his famous English dictionary entry which stated the definition of Epistemological Roots of the Information Concept (Johnson 1755) mentions three uses of the word information, namely:

- *Intelligence given; instruction*
- *Charge or accusation exhibited*
- *The act of informing or actuation.*

Shannon and Weaver (1949) indicated that this definition was insightful to them and that these uses from their perspective were intended to eliminate any problems involved within the concept of communication. This was necessary to establish a measure of information communicated in terms of purely physical quantities. (See, C. E. Shannon and W. Weaver: The Mathematical Theory of Communication 1949). This basic theory of communication was further developed by Deutsch (1952) in his own theoretical analysis of communication. Both these theories rely heavily on much earlier communication work by Martin Buber (1925) in his seminal paper (Ich und du) on existence and linguistic interaction.

From these early theoretical positions one can easily deduce that a simple communication model would result in a sender who transfers a message containing information to a receiver. This model is simple and easy to understand, however, this position can also lead to confusion. This is because semantic and pragmatic levels of the concept, pervades the derivative or analogical use, for example, tacit and explicit positioning regarding communication and subsequent interaction of information. This

unclear position is expanded upon in research by Champika et al (2009 see, *Knowledge communication and translation – a knowledge transfer model*), who attempt categorisation of these theories and contexts into a single insight. This argument for a communicative concept focuses on actions being taken by the knowledge sender and the knowledge receiver to successfully transfer. This view, which itself borrows from similar studies by Kogut and Zander (1996) underlines the importance of communication between the knowledge transfer practitioners and by its simplicity, relevant to any knowledge transfer scenario.

Blumentitt and Johnston (1999) focus on the information status given to communication by adding, '*information gains further value when it is used in new contexts …. and is transformed into value specific knowledge in the process'*. In doing so, such studies indicate the gap which manifested from the Tsoukas (2003,p 424) arguments on tacit knowledge related to communication. This argument is further supported by Ambrosini and Bowman; *"tacit knowledge cannot be "captured"*, *"translated"*, or *"converted" but only displayed, manifested, in what we do."* (Ambrosini and Bowman 2001, pp 811-829).

This argument contradicts the view from Kogut and Zander (1996) who argued that it is an acceptance of the degrees of explicitness of knowledge which underpins the significance of communication. To affirm this position a more insightful view from Wittgenstein (1968) explains that;

> *'By evaluating both the information available to the leader, as well as the way in which the leader views information, then the leader can analyse this information…. within the context of the decision to be made'.(p 73)*

It is easy to extract the metaphors of knowledge sender and receiver from this context also, from an objectivist perspective, the easy transferability of particularly explicit knowledge represents one of its defining characteristics of communication.

For example (Grant 1996) suggests that:

> *'explicit knowledge is revealed by its communication. This ease of communication is its fundamental property'. (p 111)*

The necessity for understanding complexities of this position is consistent with studies from von Krogh et al. (1994). von Krogh et al. acknowledge that the specific way of understanding communication relative to knowledge has important implications for the construction of propositional theory. In direct relation to this and as mentioned earlier, previous research by Nonaka indicated that any information which was treated as propositionally correct, should be considered as an ingredient for knowledge creation (Nonaka 1987, 1988). This notion of propositionally correct assumptions is also acknowledged in previous work, but in doing so, disproportionately gives emphasis to the status of knowledge structure in direct relation to its information value and position (Nonaka 1991, 1994). Koulopoulos and Frappaolo (1999) add that this communication of information within knowledge management practices depends less on the amount of information than on the number of connections that link information and people.

> *'it is the navigation between information and people throughout a value chain of activities that constitutes a knowledge chain.' (p:101)*

In direct relation to connection within communication, a study by Eppler (2006), identified 27 different barriers to knowledge communication, categorised into five main groups:

- *Expert-caused difficulties*
- *Manager-caused difficulties*
- *Mutual behaviour*
- *Interaction situation*
- *Overall organisational context.*

This position is used as a pre-focusing area for many studies, but it may be quite narrowly focused on a particular communication issue, provide very specific information in relation to static knowledge and inevitably only highlight respondents attitudes towards communication. Additionally, it appears to relate to the investigation

of one particular aspect of validation within understood knowledge management communication practices and disperses the importance of the 'knowledge interpretation' part of the communication process. Jacobson (2006) re-focuses on the importance of more fluid communication channels as:

> *'a starting point for a more systematic and scientific approach to understanding knowledge sharing problems'.*   (p 512).

The dyadic communication model espoused by Jacobson considers the similarities surrounding knowledge transfer practitioners in relation to both fluid and static knowledge. From this position, the argument for the justification of duality with communication and knowledge is apparent.

However, this pre-determined belief justification supporting a communication scenario from this view, precludes the ability to exhibit alternative relationships which may co-exist with experience and which may interact and develop knowledge understanding as part of the communication process. For example, in certain knowledge transfer situations, there may be many stems of communication in operation. This could be a knowledge transfer practitioners cognitive relation to the environment supporting the transfer or as a simple visual perception or visual knowledge. If this were the case, the communication experience and visual identifiers then prospectively connect the participants. In other words, prospectively identified objects can be extended to represent other kinds of knowledge in a fairly straightforward way. Because of the presence of two, or many, communication streams, there is a requirement for associated quantifiers, corresponding to, or relying on, the communication to express knowledge. Knowledge, from this cross-identification mode of identification, would be communicated with a descriptive mode of identification. With a different kind of quantifier, intuitive terms may contrast between the two different cross-identification methods and would be a different identification of the same knowledge. This complex

position supports the argument that communication is an undeniable constituent of a knowledge transfer scenario. Communication, derived from this information base would however entail difficulties in definition of knowledge content, if one were to simply reduce the whole process to the physical action of sending and receiving signals. Communication and/or knowledge within this perspective cannot be considered idealistically as something which has a justifiable existence as a singular entity, since the two are inextricably linked.

This duality is important both epistemologically and psychologically. Epistemologically, the clear distinction is the contrast between knowledge by description and knowledge by acquaintance (Russell 1917, p153-167). In psychology, similar contrast can be seen to exist between semantic and episodic memory retorts as well as a distinction between the visual systems given in the previous example. Russell summarises this and a communication comparison may be drawn from it:

> *'We have acquaintance with sense-data, with many universals, and possibly with ourselves, but not with physical objects or other minds'.(p 167)*

Though most management literature on communication of knowledge has chosen to disregard this duality of quantifiers and modes of cross-identification of knowledge, it remains one of the most important phenomena in the field of knowledge transfer for this thesis. This is because, how communication is understood within a business or knowledge transfer perspective becomes an important additional facet to consider when examining theory related specifically to knowledge transfer.

2.4.2 *Communication and Transfer*

It is clear from the previous discussion surrounding communication that most, if not all, businesses have a vested interest in encapsulating knowledge into a tool which

can then be used. To do so however requires much more than a simplistic attitude to a communication. Specifically, efficient use of a mechanism to move knowledge and not simply to communicate information is required and is an important concept to consider. According to King (2006), knowledge transfer is in this context can be defined as:

> 'the focused, unidirectional communication of knowledge between individuals, groups, or organizations such that the recipient of knowledge has : a cognitive understanding; has the ability to apply the knowledge, or applies the knowledge'. (p 254).

This definition, which introduces the notion of uni-directionalism and cognitive perspective, supports much of the previous discussions by highlighting the importance between communication and cognitive abilities. In this respect, Kings definition is drawn from the work of Argote (1999), reinforcing the understanding that knowledge transfer involves communication of knowledge from a source to a recipient. While defined in many different ways, knowledge transfer and the management of it generally refers to how well organisation's create, retain, and share knowledge Argote (1999). Knowledge transfer, within this caveat is inherently similar in context to communication as discussed previously, in that it involves the transmission of relationships between components of knowledge but suggests adaptation of sorts at three stages: the transmitter, interpretation and receiver of knowledge.

In addition to simple communication however, communication of knowledge has a source and a recipient unit which interact to form a contingency of transfer, suggesting a contingency notion parallel to Ambos and Schlegelmichs (2007) empirical review:

> 'Contingency theory emphasizes the (task) context of organizational subunits and suggests a differentiated response to diverging contextual demands'. (p 474)

This view is supported from many noted and detailed studies, for example, Argote, Epple, and Murphy (1996) and Darr, Argote, and Epple (1995) confirm knowledge transfer as the process through which one unit is affected by the experience of another. So in this respect, entirely different from communication. Nonaka and Takeuchi (1995, p 33) add to this description:

> ' through this[transfer] process, people can synchronise their physical and mental rhythms and share their experiences', (p 33)

In this context, the word 'experience' is seen to justify both an existence and understanding of knowledge and distinguishes the transfer of knowledge from the transfer of anything else such as cogency of the transfer scenario. Knowledge transfer may be conceptually understood from the literature at this point as a process of exchange of both explicit or tacit knowledge between two participants, the sender and receiver, during which one participant purposefully receives and uses the knowledge provided by another.

The ability to transfer knowledge from one organisational unit to another or from one organisation to another (Argote and Ingram 2000), has been identified as a major contributor to organisational performance, which in turn observes competitive advantage. As such, many researchers agree that knowledge transfer, if managed correctly, should be a valuable source of organisational competitive advantage (Brown and Duguid 1991; Conner and Prahalad 1996; Grant 1996; Spender 1996). In addition to this, Darr and Kurtzberg (2000) clarify and explain, that by defining knowledge transfer as an event through which one entity learns from the experience of another, thereby suggesting that the effect of one unit on another is in terms of the learning that the second unit experiences. In this explanation, '*entity*' can refer to an individual, a team, an organisational unit, the organisation itself or a cluster of organisation's. The '*transfer*' process surrounding this '*entity*', involves two

corresponding acts and without either act, the process of knowledge transfer cannot be completed.

> *'Firstly the act of giving or delivering knowledge by one agent (the source).*
> *Secondly the act of receiving and using knowledge by another (the recipient.*
> *(p 97)*

This interaction is further explored by Ranft & Lord (2002) who describe it as a *'Cultural convergence'*. This convergence facilitates communication between knowledge transfer practitioners by reducing differences in assumptions and cognitive positions. Communication surrounding the knowledge value, hopes to reduce uncertainty and helps to create a climate of mutual understanding for knowledge transfer. Gupta and Govindarajan (1991) integrate this view to develop a model of the organisation that categorised subsidiaries as a good example of the knowledge transfers to and from the rest of the organisation. They argue that the key variables affecting organisational knowledge flows are the broad task environments in which the flows occur. Further, that it is the organisational structural characteristics that can affect the relationship between the parties and organisational cultural norms with respect to a willingness to accept outside knowledge and to keep any knowledge proprietary. Hansen (1999) further explains the strength of relationship ties between the parties is fundamental and important to the transfer process. Simon (1957) reports that there is an internal social process within an organisation which links up with the socio-economic variables.

Davenport and Prusak (1998) conclude that relationship activities are relevant within the knowledge transfer process in as much as, the relationship for transfer can be affected by past experience of the knowledge transfer practitioners involved, including characteristics such as previous interaction and communication. McEvily et al. (2003) reveal that the relationship of trust affects the degree of knowledge in relation to

knowledge and knowledge awareness and is seen to reduce the degree of concerns about knowledge complexity. Moreover, trust increases the veracity of knowledge, thereby facilitating its acceptance by knowledge transfer participants. From this position, Blois (1990) study of business to business relationships agrees with the argument attributed to trust in a business context:

> *'The fundamental difference between reliance and trust is thus that reliance is dependent on proven capability while trust is dependent on stated commitment. I know that you have the capability of delivering this item as ordered and can rely on you to do so. However, if I know that you have the capability of making the delivery, I may also trust that if unforeseen events occur you will go beyond your contractual obligation to ensure delivery'. (p197-215)*

This view would generally agree with the epistemic principle proposed earlier in the discussion, in that, knowledge and knowledge transfer may be justified as a combined construct from a philosophical proposition, however the value attachment, in this case complexity in the form of many variables, is an individual principle in itself as it is contributory to and not derived from communication. This would mean that not only the constituent parts of knowledge would need to be transferred, but the complexity of interaction would also need to be transferred for the knowledge to make any sense to the recipient. This would then add to the overall complexity of the scenario.

Szulanski (1996) accepted this in previous research but only in as much as confirming that variables exist, are important and may affect the knowledge transfer process in some way. Cummings and Teng (2003) identify additional variables in this respect, which may affect knowledge transfer: *Articulability; Embeddedness; Physical distance; Learning culture; Project priority; Organisational culture; Historical Transfer Activities and Transfer Success Expectations*. Piktials & Greenes (2008) acknowledge these variables and add that the best methods to capture and pass knowledge are to

customise knowledge transfer methods to match present practitioner needs, and to understand learning capabilities within the knowledge transfer practitioners.

In this sense, most literature supports a view at this point that studies agree on the benefits of knowledge transfer in a business context, but, infer that knowledge transfer involves a panoply of procedures and techniques surrounding the interaction of different kinds of knowledge. The interpretation of knowledge could be either tacit or explicit in construction or a combination of both (Teece 2000). Although slightly ambiguous, much of this research can be traced back to the original work of Piaget (1976) who discusses personal attributes and characterisation's within the correspondence doctrine. Von Krogh et al. (1994) explain that this doctrine deals with the sub-symbolic levels of cognition and many scholars share this view, including (Hansen 2002; Inkpen and Pien 2006). This agreement within the literature indicates that knowledge must be an inherently fallible entity which requires specific management for it to become useful.

2.5 Chapter 2: CONCLUSION

This chapter has focused on critique and assessment of current and historical knowledge philosophy, theory and positioning, but at the same time, placed it within the realms of a business context where it concentrated on the epistemic principle of knowledge. The literature in this section indicated that the epistemic principle of knowledge is important as, at its core, the study of knowledge transfer is concerned with the process of moving useful knowledge from one place to another. The literature shows that at present there is no agreed justification of knowledge, but justification can be constructed through causal association with communication. Constructed knowledge in this respect, receives justification through the imposition of boundaries and parameters derived from Aristotelian principles of cause and effect. The literature ignores the perspective of interpretation of knowledge from the knowledge transfer practitioners point of view.

This view supports the on-going argument for assumed perception of knowledge existence as a unitary object. Similarly, a presumed assumption that knowledge being transferred will be able to somehow automatically choose and travel by the path of least resistance from the sender to the receiver. From this position, the literature implies that heterarchical groups are somehow able to implement an autonomous knowledge transfer strategy because of an originating communication strategy between participants in the scenario.

This literature position is shown graphically in fig (2.2) on the following page,

Figure 2.2: Simple Knowledge communication or transfer pathway:
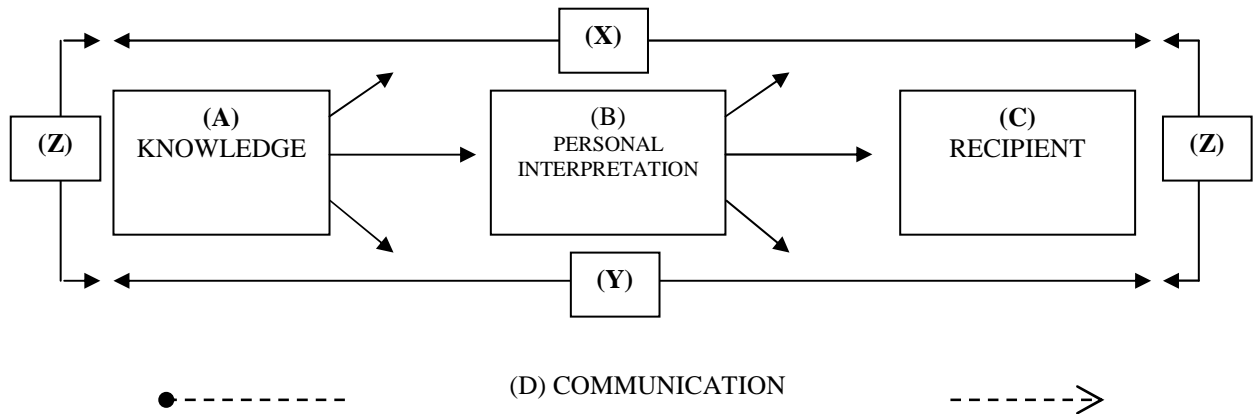
(D) COMMUNICATION

Figure 2.2 illustrates a desired knowledge communication as a transfer (**D**), where, it is presumed that knowledge (**A**) can move inevitably and un-problematically via interpretation (**B**) to a recipient (**C**) . This flow can only take place within a process which is managed (**X**), (**Y**) from start to finish, but practices to do this are multiple, variable and inconsistent. Knowledge from this perspective only has existence as an entity between the two boundaries of the transfer scenario as an imposed justification of cause (**Z**) (see Aristotle 4 causes section 2.2.1) and does not exist out-with this boundary. From this view, knowledge cannot exist anywhere else in the exact same form since it is governed by a cause/effect relationship. Since at least some of the knowledge will be of a tacit and complex nature, it is known in a precise form only by the transferor (**A**) and the recipient (**C**). The human characteristic of interpretation (**B**) allows knowledge to be understood from a personal perspective and is dynamic according to the transfer scenario as a whole. At present there is little in the way of research to indicate perspective significance in relation to a transfer scenario other than an influential acknowledgement of latent characteristics. It is this omission within the literature which relates back to the central argument of the thesis, discussed in section 2.1.

3   KNOWLEDGE AND BUSINESS INTERACTION: Literature Review Part II:

3.1   INTRODUCTION

The role of knowledge, relative to the knowledge transfer process in a business context cannot be conclusively defined from the literature as a singular entity, but the interaction of knowledge and communication is shown to exist in many forms. This chapter will engage its critique of literature from this informed view and from this, the study is now able to define a literature review scope relative to knowledge transfer in a business context to include; Evolution of knowledge transfer management (3.2). Theoretical dynamics (3.3). Problems in knowledge transfer and associated error correction control apparatuses (3.4). Business success and competitive advantage related to the creation stage of knowledge in a business context is also discussed in detail (3.5).

This broad scope will allow the previous philosophical testimony to inform the literature critique and relate to the starting point of the literature review part two, which is the evolution of knowledge transfer interacting with business practices.

3.1.1   Literature review Scope

The inclusion for this part of the literature review consists of the following scope.

- *Business practices*
- *Theoretical dynamics*
- *knowledge transfer problems*
- *Business Success & Competitive Advantage*

The importance of this literature scope is that it will centralise the consideration of epistemology and the functional ontological effects of formalised knowledge transfer

business practices. This is a vital pivotal point to consider, since, as identified in the previous chapter, knowledge understanding for the most part, means the discerning and differentiating influence regarding justified or unjustified episteme of knowledge. Additionally, influencing these classifications is the indeterminateness of human experiences between truth and falsehood and these precepts are also rendered to rationalistic thinking surrounding knowledge.

Governance of interpretive discrepancy is reduced to a cognisant understanding of facts and the critical evaluation of possibilities invoked by cognitive capabilities interpretation of experiences. Underpinning this starting point for the literature and supporting the context of business in this thesis is the inclusion criteria of Occidental economic mercantilism, or 'Modern World System' defined by Wallerstein (1974, pp 347-57). This is descriptive in the interrelationships between knowledge transfer practitioners in a business context, such as a hierarchical formation criterion for the perspective given to knowledge. Overarching this position is the interpretation of the Wallerstein (1998, pp 43-62) view on the dialectics of the modern Occidental business and commerce. According to Wallerstein, businesses depend on the relationships between the accumulation in capital standing and the shareholders motivations. This is an important establishment for this part of the literature review, since this position will allow an overall view to be attributed to business and organisational discussions central to the main argument of the thesis. Additionally, in seminal work by Teece (1981, 1982) and Nelson & Winter (1982), knowledge has assumed an increasingly legitimate and important role in organisation science. Dinur et. al (2009) identifies additional key areas which affect knowledge transfer in a business context in this respect.

Table 3.1 Factors affecting knowledge transfer: Source adapted from Dinur et. al (2009)pp 432-446

Culture	Argote et al., 2003; Ashkanasy et al.,2000; Bhagat et al., 2002; Collins and Smith, 2006; Gordon, 1991; Inkpen and Tsang, 2005; Kogut and Zander, 1992	Fit between culture and knowledge Culture clash and differences among units Organizational and national cultures
Strategy	Andrews, 1987; Christensen, 1997; Eisenhardt, 1989; Helfat and Peteraf,2003; Inkpen and Tsang, 2005; Kotler, 2000; Meek, 1988; Peter and Olson,1993; Peteraf and Bergen, 2003; Tsai and Ghoshal, 1998	Choice of a strategy Stated goals and objectives Strategic group or niche
Structure and processes	Gupta and Govindarajan, 1991; Rajagopolan et al.,1993; Snell, 1992; Stevenson and Gilly,1991 Davenport, H. T., Prusak, L. (1998). Alavi, M., Leidner, D. E. (2002). .	Formal hierarchy Power structure Communication and leadership styles Team work, Formality, and Incentive systems
Environment	Bartlett and Ghoshal,1989; Carroll, 1993; Dyer and Hatch, 2006; Hansen and Lovas, 2004; Snell, 1992; Szulanski and Jensen, 2006; Davenport, H. T., Prusak, L. (1998).	Uncertainty, and Causal ambiguity Industry volatility and life cycle Location Relationship with other firms as well as with political and legal agents

Informed by the view from Dinur et. al (2009), the broad scope of literature inclusion encompasses the nature of knowledge, knowledge transfer, value of knowledge and the practical association between business success and competitive advantage. In accepting the position this literature direction encompasses epistemologically commonly acceptable realms of knowledge transfer in a business context. Insofar as these will be perceived by this thesis to support understanding of knowledge transfer practices and processes. From this literature scope, this chapter overviews the evolution of business practices relating to knowledge transfer in a business context. This scope allows the literature critique to concentrate on the foundational episteme of rational exogenous and endogenous business theories and models relating to knowledge transfer practices which can be examined thoroughly in relation to practical business context.

3.2   EVOLUTION OF KNOWLEDGE TRANSFER MANAGEMENT

Current literature suggests that whilst there is an agreement on the importance surrounding knowledge, knowledge can only be made useful if it is bounded by specific management processes. This section will examine literature from this view and will draw

attention to and critique relative topics and discussions from spheres of literature highlighted in the literature review scope section.

3.2.1   Practice and Process Overviews

When assessing the evolution of business practices relative to knowledge transfer in a business context, Alavi and Leidner (2001) begin by informing that the 'transfer' process of knowledge should involve the full comprehension of both micro and macro level forces within the business environment. This premise would incorporate technological changes indicating knowledge transfer techniques and process and governance, by means of the transmission of knowledge value through interactions between social markets. This view infers that the influence of knowledge transfer on business success is entrenched at all levels within a business. This view is clearly informed by Wallerstein' (1998) discussion in which he argues that business as the result of an eternal movement of the dialectical business development that always intensifies, never assuages. He refers to the eternally governance-conflicting nature of the occidental system as its 'permanent nature', 'recursively repeats'. Governance, in this business context or organisational concept is also informed by Arrow (1974) who writes:

> *'An organization is a group of individuals seeking to achieve some common goals, or, in different language, to maximize an objective function. Each member has objectives of his own, in general not coincident with those of the organization. Each member also has some range of decisions to make within limits set partly by the environment external to the organization and partly by the decision of members. Finally, some but not all observations about the workings of the organization and about the external world are communicated from one member to another'. (p   224)*

Choudhury (2006) acknowledges this position by stating:

> *'The very first objective of corporate governance is to define and attain an objective criterion by means of understanding the relations between critical variables supported by policies, programs and strategic coalitions'. (p 117)*

Elaborating on this, particularly the importance of governance surrounding knowledge transfer practices, Argote and Ingram (2000) explain that governance is functional inside any business or organisation. Further, as it incorporates cause and effect (see section 2.2.1, Aristotelian Underpinning) parameters such as: laws, regulations, norms and values, possesses the ability to affect the transfer success in some way. Simon (1987 , pp 202-23) referred to this simulative approach of decision making supporting governance in a firm as satisfying behaviour'. This position or view can be directly related to the inference of justification attached to knowledge, where the combined cognitive interactive behaviour along with the competing governance of individual members decides global value parameters for knowledge transfer practitioners. Simon also supports the idea of cognition and decision making, declaring that this interaction happens in the heads of the individuals and that an organisation can learn from this knowledge. This view would suggest that both collective and individual knowledge are linked to each in such a way as to allow knowledge to go from the individual level to organisational un-problematically. This imposition of parameters and boundaries to induce a corrective ontology is an interesting position, as it suggests a governance issue from which to extrapolate the notion of knowledge value or usefulness is a direct relation to the concept process. Probst, Raub and Romhardt (1999) discuss this process creation view by explaining, business managers need to be aware of the difference between data and knowledge in this respect. Additionally, they recognise that instead of a strict separation between data, information and knowledge, the transaction process between all parts would provide more benefit for a business or organisation if it were seen as a single continuum. In this respect, Chini (2005) supports this view by referring to a creation of knowledge through social interactions processes within groups of people which can take into account new knowledge:

> *'knowledge is embedded knowledge and comprises belief systems, collective memories, references and values' (p 10)*
>
> *'knowledge reflects individual experiences and constitutes the basis for the development of organizational knowledge' (p 10)*

Martinez (1998) also confirms this by way of a supporting position, explaining that process environments and systems for sharing, organising and capturing knowledge, within the business or organisation must be considered from a theoretical as well as practical point of view. Further, Martinez states that facilitating intelligent organisational processes are necessary to ensure the organisations chances of survival and success. Consequently, to develop a theoretical framework for characterisation of knowledge transfer practices is not a simple task and a broad spectrum of practices, which are designed to create, enhance, exchange and manage the asset of knowledge need to be formulated into a useful tool. This overall view can be seen to associate practitioners individualistic preferences and, importantly, experiences, and can also be seen to be affected by the imposition of governance.

Weber et al. (1996) interject a note of caution by suggesting that from an organisational management position, causes of organisational problems, such as increased acculturative stress and change resistance are specifically due to these impositions. Within this acknowledged arena of knowledge management practices, Alavi and Leidner (2001) restate that the organisational knowledge residing within a business clearly involves both people and context. They continue that its comprehension depends on people who interpret, organise, plan, develop, execute and use tools to facilitate the phenomena. This view emphasises the general literature consensus that knowledge transfer practices are rooted in multi-faceted and inter-linked processes. Kikawada and Holtshouse (2001, p201) agree with this position but highlight that with the addition of a communicative interaction, this process can create a thriving working and learning environment which

fosters continuous knowledge creation. The relevance here to continuous knowledge creation and communication being the sole purpose of the cognitive experience between knowledge transfer practitioners could be interrogated differently from the position of the knowledge creation theory described by Nonaka in the previous chapter.

Kikawada and Holtshouse view appears to be a development from Quintas et al. (1997 pp385-391) who in turn discuss *'repressive knowledge management practices and how they influence knowledge transfer practitioners'*. This view, considers these practices to be the process of continually managing knowledge of all kinds to meet existing and emerging needs and demand processes to enact this request. Further, processes are needed which can identify and exploit existing knowledge and additionally acquire knowledge assets to develop new knowledge. Interestingly for this thesis, this view interjects, that by assimilation and collaboration of differentiating knowledge sources, a new knowledge will be created and this aligns with the view from Nonaka (1995) surrounding this phenomenon. Bhatt (2000) adds to this argument by explaining that it is the interplay between the different types of knowledge which creates a rich and continuous cycle of knowledge development brought about by co-ordinated practices and processes.

Alavi and Leidner (2001) explain that it is within the principality of these interactive and complex knowledge processes and practices that the ritual management of knowledge creation now becomes so important. In this respect Alavi and Leidner (2001) argue that the transfer of organisational knowledge is useful to a business, but to be regarded as useful, knowledge has to be governed properly, to be contextually justified and must be understood from the perspective of all knowledge transfer practitioners involved. Cohen and Levinthal (1990) take a differing view to this and argue that knowledge cannot remain static, it must be transferred at some stage to allow a business to take full

advantage of its usefulness. Presently literature surrounding business practices continues to evolve around this core view and retorts that examining practice and process form a dynamic and intuitive arena for discussion and research direction. The fluidity and framework for knowledge transfer processes and practices remains central to the development of theory and arguments, in which new and more efficient knowledge transfer practices may be justified.

3.2.2   Infrastructure

The necessity for a formal framework to support practices and processes for successful knowledge transfer has emerged as a generally agreed opinion in most current literature. Davenport et al. (1998) for example explain that a trusting and open organisational culture is necessary for business success. Wang (2002) agrees with this position but adds that correct information systems and supporting infrastructure are necessary. Slagter (2007) reports` that knowledge management is underpinned by many concepts and debates which help convey knowledge in a universal fashion. Sveiby (2001) however, argues that knowledge cannot be managed, knowledge management is a poor terminology as a concept and knowledge requires a mind-set of activity not objectivity (Sveiby 2001, pp 1-10).

Moffett et al. (2003) propose a slight variation on this by arguing that although knowledge structure is recognised as exhibiting primary importance with an organisation there must a consideration of other indicators to give it meaning, for example: Employee involvement, Employee training, Teamwork, Employee empowerment. Tsoukas (1996) broadens the argument by stating that:

> *'This is because organisations operate as distributed knowledge systems'.*
> *(p 11)*

Von Krogh and Roos (1995) support this in a similar context:

'Organisations contain within them various streams of knowledge'.
(p 57)

The previous discussions indicate that there is general agreement within the literature that a framework of sorts, buoyed by a criteria of governance and management , will support successful knowledge transfer. Krogh ,et.al. (2000) add to this argument by stating that for knowledge transfer to be effective within a business or organisation, people are an important ingredient to this effectiveness and human cohesion is demanded. This view is also underpinned by much of the philosophical discussion developed in the previous chapter (Chapter 2). This view also restates that the cognitive position of the knowledge transfer practitioners involved with any infrastructure is fundamental to the knowledge transfer success. Clearly in agreement, Brown (1992) summarises this by importantly reflecting on multi-faceted resources within a business and indicating that ultimately they must be within existing social context and are additional structural' features that augment complexity. Previous studies in this area suggest however that national cultural differences related to social interaction can create fundamental problems for social structure and for knowledge transfer.

It is clear that appropriate techniques and strategies are needed to officiate the multi-faceted nature of knowledge and knowledge transfer and support the subsequent paradigms needed to orchestrate its usefulness in a business context and Simonin (1999) suggests, complex knowledge and knowledge transfer scenarios from the literature usually refers to the number of interdependent technologies, routines, individuals, and resources linked to a particular knowledge or knowledge transfer framework. Although, in a business context, infrastructure may be desirable, the assumption from these arguments within the literature is that, given the correct framework of governance in

whatever form it is described, knowledge derived from a governance framework will be valuable.

A counter argument from this position would be, whilst the resultant transfer of knowledge will be useful to the business in terms of resource efficiency, any value of the knowledge will derive from the success of the transfer practices or supporting framework not as an episteme of its inherent value. However, emphasising the importance of infrastructure and governed frameworks regarding knowledge transfer mechanisms is an understandable position to elaborate from , since unless this position is fully understood, business success will derive from the value of the infrastructure and not knowledge or the transfer of it.

3.2.3   Mechanisms

Mechanisms needed to move useful knowledge around in a meaningful and purposeful way is a clear extension of an encompassing framework of process or practice. It is important to examine literature deliberating integration of these positions, which form the basic mechanisms of knowledge transfer. Inkpen and Dinur (1998) broadly summarise these supporting mechanisms by explaining that the transfer of knowledge usually involves either codification or personalisation or a fusion of the two extremes. The *Codification Mechanism,* involves the dissemination of written documents as a means to transfer knowledge. Codification is defined as the recording of knowledge using words and texts, and transferring the knowledge through the use of written or electronic documents. The main advantages of codification include easy access, wide dissemination, low costs, and good preservation of knowledge. The *Personalisation* mechanism, involves person-to-person interaction and is in the form of personal advice or personal training. The main advantages of this personalisation mechanism can be seen as

its ability to articulate non-codifiable knowledge and enhance in-depth understanding

(Inkpen and Dinur 1998, pp 356-367).

To transcend this broad categorisation into useful management direction (Dixon 2000)

explains that there are key knowledge transfer mechanisms and dimensions to consider

within this combinative structure:

- ***Serial Transfer***, *frequent, non-routine tasks including explicit and tacit knowledge.*
- ***Near Transfer***, *frequent and routine tasks using explicit knowledge*
- ***Far Transfer***, *tacit knowledge transferred socially; frequent and non-routine*
- ***Strategic Transfer***, *once-off projects, where tacit and explicit knowledge is shared among managers to complete a task.*
- ***Expert Transfer***, *generic and explicit knowledge is transferred from an expert source inside/outside to solve problems. (p 10)*

In agreement with this position, but at the same time, attributing parameters which relate

to an exact transfer scenario Huber (2001) considers that the integration of knowledge

transfer will be affected by the opportunity for knowledge transfer and exchange. The

expectation is that it will be worthwhile to do so for both parties and both parties being

motivated to pursue efficient mechanisms to do this. Clearly, there is an on-going

acceptance within the literature that efficient mechanism which will assist the knowledge

transfer process. Von Krogh et al. (2001) however reflect a different view, in that, there is

a need for this overall situation to be valid from the participant understanding of the

situation. Further, it is a necessity to have concrete targets in which both sender and

receiver of knowledge can assess the usefulness and applicability of transferred

knowledge. This view underlines the significance of personal capabilities and thus

personal interpretation of knowledge value and is similar to Huber (2001) in that respect

but is defined differently.

Von Krogh et al. (2001) argue that personal interpretation is an important factor as it has

the potential to either enhance or to inhibit the practitioners to act appropriately to support

the transfer scenario. Further, the identification of this cognitive importance will presumably assist in making precise decisions with regards to the transfer mechanism and the theoretical underpinnings thereof. Trompenaars (1998) offers a view about the mechanism to solve a problem in relation to knowledge sharing by stating "culture is the way in which a group of people solves problems and reconciles dilemmas" (1998, p 6). Von Krogh et al. (2001) expand on this view by explaining that whilst this may be apparent from a static knowledge point of view, there are significant cognitive conditional attachments that must be satisfied for efficient and effective knowledge transfer to take place:

'Both parties must expect the knowledge transfer to be worthwhile'
(p 223)

There is little doubt that this type of mechanistic assessment, which could reduce inherent knowledge transfer errors, has clear benefits in an organisational or business context. The literature suggests at this juncture though that for this to be achieved, it has to be managed or governed correctly.

Although similar to Von Kroghs view of mechanistic interpretation, a view from Kokinov & Petrov (1998) slightly confuses the argument, as they suggest introducing a dimensioning factor to the mechanism which will absorb a perceived problem and thus encompass the problem in a new governance framework.

This means that any mechanism must incorporate two frameworks to work (A) and (B) which both encompass the same set of problem/answer space (C) and are now irrespective of any epistemic value.

The following diagram summarises this position and is a development from the simple transfer diagram in the previous chapter (Fig 3.2).

Figure 3.2, Complexity of Transfer Mechanisms & Error Correction Governance informed by Kokinov & Petrov (1998, pp 124-134)

Starting Point of Knowledge **(A)**

Transfer Actor **(B)**

Cognitive Process:
Prior Knowledge
Mapping
Generating
(C)

Original Knowledge.

Personal
Interpretation of
Problem

PERSONAL
Error
Correction
Capability

Cognitive Process:
Prior Knowledge
Mapping
Generating
(C)

Receiving Actor **(C)**

End Point of Knowledge **(A)**
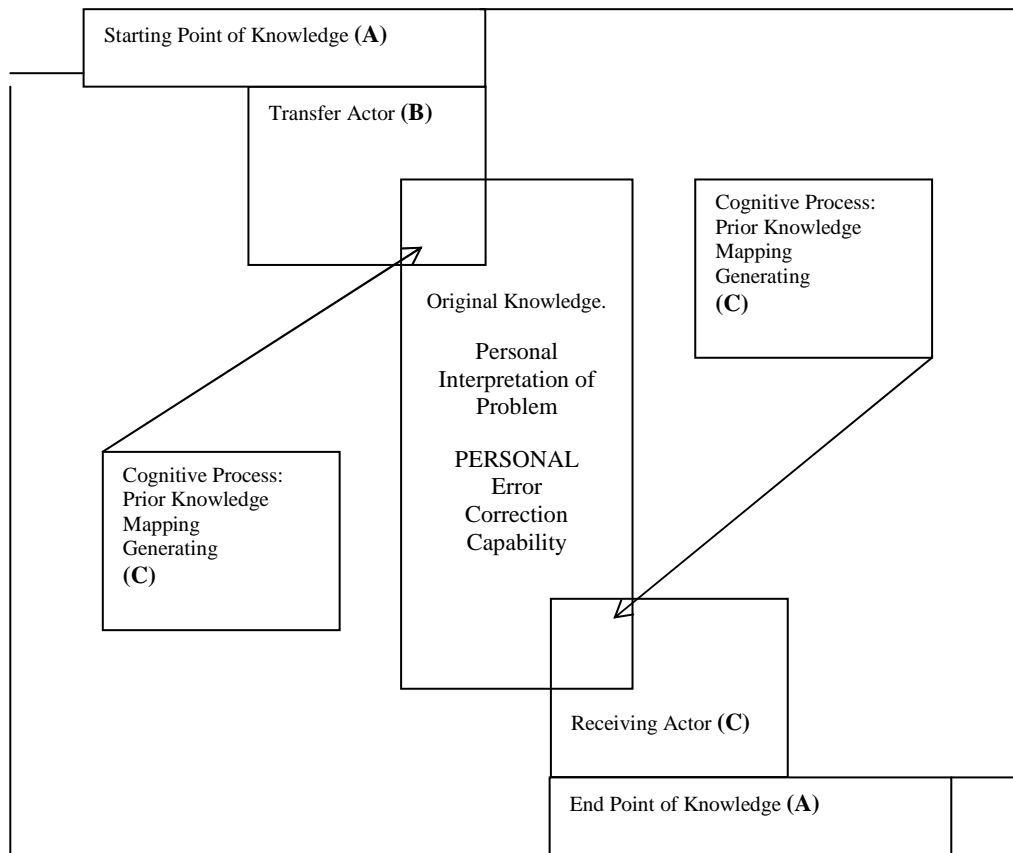
Therefore, error correction in terms of mechanisms and knowledge compilation in terms of cognitive interaction, is additionally required to be understood to encompass frameworks, boundaries and parameters to support the overall transfer scenario. Understandably, this now complicates the original simple definitions and frameworks previously outlined by Von Krogh et al (2001).

Gentner (1983) coalesces these views by explaining that for error correction in the transfer scenario to exist, knowledge transfer practitioners must have declarative knowledge of the constraints supporting a particular problem domain. This is an important and fundamental argument, as Gentner explains that knowledge which consists of declarative representations and description, may also include procedural parts relating

to the transfer. This position would indicate that the distinction of declarative knowledge is that it can help focus on the cause of error epistemically and importantly suggests the transfer is the method by which errors are resolved. Conversely however, this position would contribute to the knowledge transfer practitioners definition of the problem being addressed. This is because a problem definition stems from personal interpretation and must be conducive to personal perspective definition. Thus would support the argument from Von Krogh (2001) that, in order for knowledge transfer mechanics to work efficiently, it is the satisfaction of cognitive conditional attachments that must be satisfied, not the underpinning descriptions of the knowledge and as such, complexity of errors within a transfer scenario remain constant.

3.2.4   Analogical mapping

The theoretical argument overarching the complexity of mechanical transients of knowledge can now be seen. An argument at this juncture is introduced however, in that, although transferred knowledge may be declarative to a complexity statement or an error attribution, it may also include procedural characteristics. If this is the case then, the problem absorbing framework, would produce another dimensioning framework. This duality explains the confusing framework analogy proposed by Kokinov & Petrov (1998) in the previous section.

This of course interjects a fundamental problem when trying to attribute a corrective focus on knowledge transfer since it now introduces the notion that knowledge may derive from multiple sources, hence, problems may require multiple remedies. Gentner and Toupin (1986) agree with this view when discussing the use of structure mapping theory for complex systems and note that there is extensive empirical evidence to support this type of analogical mapping in relation to knowledge transfer efficiency, importantly,

within the constraints of transfer mechanisms. Catrambone (2002), counters this argument by asserting that although people are capable of mapping relational structures, the analogue retrieval is heavily dependent upon matches between the features of the current problem and prior problem solving experiences of the knowledge transfer practitioners. This view infers that personal experience and interpretation support key dimensioning constituents which align knowledge transfer practitioners to problem solving frameworks. In that, additional to each transfer mechanism using different cognitive processes, each mechanism has also been hypothesised from the practitioners position, it is operational on specific types of prior knowledge structures and as a result may actually contradict the effectiveness of the mechanism (Catrambone 2002, pp318-334).

This position though is inconclusive from an analogical mapping standpoint, in that, the mainstay of corrective procedures from this combined position is that, whilst determined by theoretical constraints, a corrective procedure is reliant on knowledge transfer practitioners cognitive processes and capabilities. Additionally, if related to the previous discussions of mechanisms, may simply translate and interpret advice, instructions, and strategies into a set of more complicated procedures.

What is clear from the previous discussions is that there is a fundamental agreement surrounding the mechanics involved to get 'knowledge' moved to the place where it can be most useful and in the most efficient manner. This view is countered argued, in as much as, any corrective measures supporting the mechanisms involve subjective interpretation from the knowledge transfer practitioner. This is understandable dyadic position, since the error or problem is interpreted from a cognitive stance.

To reciprocate mechanistic instruments to both move knowledge and correct the transfer of knowledge, an effective underpinning strategy which is both flux like and adaptive should be implicit from the literature, however, at this stage, this is not the case.

3.2.5   *Strategies (Replication and adaptation)*

Allowing the flow of knowledge in the most advantageous direction for the knowledge transfer practitioners and stakeholders involved is clearly desirable and a number of key strategies remain prominent in this area which are discussed in this section.

Current literature infers that there are fundamentally two kinds of strategies identified as predominantly advantageous for knowledge transfer to take place – replication and adaptation. When deciding a platform for how knowledge is to be transferred, replication and adaptation strategies present subtle differences. Replication efforts aim to preserve the existing structure of interdependencies among components (Winter and Szulanski 2001), whereas in adaptation it is more a concern of how the performance of the practice can be best sustained. (Jensen and Szulanski 2004).

3.2.5.1 *Replication*

In a business setting, replication refers to those knowledge transfers where a particular practice is copied in as much detail as possible (Eisenhardt and Martin 2000; Winter 2000; Winter and Szulanski 2001). It is defined by (Teece, Pisano and Shuen 1997) as the transfer of knowledge to other recipients without any modification of the knowledge, regardless of the different context in which it is to be applied.

For example, when the knowledge is highly tacit, it is difficult for the sender to codify and communicate it (Polanyi 1967; Nonaka & Takeuchi 1995). Inkpen and Dinur (1998) suggest that people-to-people interaction can reduce the communication problems.

Therefore, replication should reduce the confusion brought about by the complexity of knowledge by the preservation of component interdependencies. As a result, this will also enhance the willingness of the receiver to apply the transferred knowledge meaningfully, due to easy accessing and foreseeable performance. Winter and Szulanski (2001). Further elaborate that replication involves two different phases which are *exploration* and *exploitation*. Replication clearly includes some re-thinking of historical routines and practices, and efforts of refinement in order to pursue the best template. Subsequently this will provide a set of standardised organisational routines for all knowledge transfer practitioners to follow. Winter and Szulanski (2001) describe it in this way:

> *'Replicators (knowledge holders) create value by discovering and refining a business model, by choosing the necessary components to replicate that model in suitable geographical locations, by developing capabilities to routinise knowledge transfer, and by maintaining the model in operation once it has been replicated... The replicator has to decide when to stabilize the business model, abandoning efforts to refine it further, and beginning large-scale replication '. (p   730-743)*

Replication is a precept in deciding which instruments are used in defining the best, most efficient method of knowledge transfer.

3.2.5.2 Adaptation

Looking at this from a corrective stance however, Bartlett and Ghoshal (1989) note that adaptation allows the receiving unit to modify the knowledge template and make changes according to idiosyncrasies of its context (Jensen and Szulanski 2004). Jensen and Szulanski (2004) also point out that: 'The goal of adaptation is typically to alter the asset (knowledge) being transferred so that it works within existing local cultural and market frameworks… allowing local knowledge transfer practitioners (knowledge receivers) to accept the asset (knowledge) more easily'. Thus, the more complex the tacitness of the knowledge , the more difficult it is to transfer and replicate (Dreyfus and Dreyfus 2005) and there is inherent difficulty identifying rules and procedures to follow (Szulanski and

Winter 2002). This position is acknowledging that tacit knowledge is idiosyncratic, making it difficult to be usefully applied in a different context or by a different individual. This is extremely useful from a business view since it is both difficult and ineffective to develop and replicate a template for highly tacit knowledge. Thus, from a knowledge transfer point of view, this imposition of tacit knowledge will inevitably invoke adaptation on the sender and the receivers interpretation of the knowledge. Jensen and Szulanski (2004) clarify this by explaining that adaptation will necessitate modifications according to the context, this again supports personal interpretation as a key parameter. Werr and Stjernberg (2003) agree that in this sense, adaptation would allow more room for changes in how the knowledge would work using different contexts. Since the most important thing for mastering tacit knowledge is experience (Polanyi 1967), allowing receivers of knowledge to discover how the knowledge can be applied in their personal context is critical for them (Dreyfus and Dreyfus 2005). This therefore allows a higher degree of adaptation when transferring highly tacit knowledge could reduce the ambiguity of the receiver and any difficulty in understanding the knowledge. Hence, the process of understanding knowledge and any subsequent replication or adaptation is continually interactive and dynamic during the transfer process. Since the ultimate aim of an organisation is to be competitive, then any relationship caveat regarding knowledge and the transfer of it, should ultimately identify the facilitators and barriers to the use of knowledge. Developmental guidelines and parameters depend on transparency of the dynamic nature relating to adaptation for improving transfer, not adding to the complexity of it.

3.3   THEORETICAL DYNAMICS

The theory surrounding practice and process is extensive and has been successful in delivering many useful and recognised frameworks in this regard. Similarly, authenticity for managerial governance and/or remedial programmes for business efficiency and delivery derive resource legitimacy as a direct consequence of theoretical strategy. Although this position or direction is supported by Nonaka and Takeuchi (1995), they focus their view from a point at which businesses and organisations cannot create knowledge on their own and stress that supporting dynamisms are required to develop created knowledge from within simple frameworks to more elaborate functional business models.

3.3.1   Conceptual relevance of theoretical modelling

A starting point for discussion comes from Birkinshaw (2001, p 12) who states that knowledge management can be seen as a set of techniques and practices that facilitates the flow of knowledge into and within the firm and Buckley and Carter (1999) refine this further by declaring that knowledge management constraints are:

> *'the internal mechanisms for coordination, that is, for pooling the key information garnered by managers whose task it is to monitor external volatility and discover new opportunities'. (p 82)*

It is clear from this argument that support for knowledge management can come from various standpoints, business models in this context help stakeholders to understand the knowledge environment and represent a possible remedial solution for knowledge transfer problems. To investigate this view further is justified by this thesis, since it will justify the interaction between knowledge and knowledge value from the business point of view. Theoretical models and perceptive positions are helpful for detailing,

comprehending and communicating both business and knowledge transfer complexity. Davenport et al. (2001) argue that justification for theory and modelling is not as easily defined as this, and that Knowledge management in this context is only the:

> ' *capability to aggregate, analyse, and use data to make informed decisions that lead to action and generate real business value '(p 117)*

They continue that it does not have the capability to implement something as a working theory. For knowledge transfer effectiveness and efficiency to be a purposeful point for management resources, a selection of applicable resources must align a process of efficiency through their usability. This is defined by Stewart et al. (2000) who posit that:

> *'The premise is that knowledge assets, like other corporate assets, have to be managed in order to ensure that enterprises derive value from their investment in knowledge assets'. (p   42)*

Additionally, each organisation will have its own interpretation of how it will make best use of the resources under a theoretical umbrella and will most likely be a unique sequence of selection to each business or organisation. Justification for focused resource in this way can be seen as use of a theoretical models to identify variables which may be adjusted. Moore (1998) supports this argument and explains that such models are necessary for paradigm shifts within a business environment as they are critical for tapping the opportunities in 'white spaces' which lie between existing markets and operations. Consequently, Landau and Stout (1979, p 150) support this by arguing that the notions of '*best practices'* and '*benchmarking*' relate to the modelling of organisational controls that are , '*built a priori, on the principle of closure'*. Similarly, Flamholtz et al. (1985) find that this phenomena is relative in seeking compliance to, and convergence of, the organisational decision-making processes and would seem to justify the emphasis on resource for this management direction. Chenhall (2009) underpins the previous argument by describing a set of parameters to justify the position surrounding theoretical modelling in the context of knowledge transfer.

Advantages of conceptual modelling

- *Helps articulate, clarify and analyse the studied situation and influences the development of new theories.*
- *Makes explicit the assumptions behind theories*
- *Provides a basis to defend theories*
- *Clarifies variables to be studied*
- *Refines construct meaning within the study domain*
- *Raises issues of measuring constructs*
- *Shows the way studied variables connect*
- *Simple linear, complex nonlinear, dynamic, chaotic.*

Source : Chenhall 2009 (pp 176-206)

Limitations of conceptual modelling

- *Models may simplify reality and that reality is then fitted to the mode (e.g. equilibrium)*
- *Important or appropriate questions are not asked.*
- *Models solve problems but they may not be the problems we face.*
- *Original simplifying assumptions can be easily forgotten*
- *Encourages a level of precision when things are vague and not under stood.*
- *Encourages routine approach to non-routine problems*
- *Encourages a lack of responsiveness*

Source : Chenhall 2009 (pp 176-206)

Hamel (1994 pp 83-103) argues that, when considering a theoretical modelling posit as a starting point for conceptual strategy, it is the governance rules embedded in 'management practices' which assume the character of predictive modelling. Further, these posits are those which draw their legitimacy from the vested authority, not because they provide adequate solutions. As Landau (1973) points out, in practice challenges to these decision making theories tend to be perceived as challenges to the authority embedded in 'management practices' not a subscription to a theory or model as a process or practice guide. Bartlett and Ghoshal (1995) support this argument and agree that '*best practices'* in relation to management governance ensure conformity by warranting task definition, measurement and control but inhibit creativity and initiative. The core of this argument is clear, in that is supports the view that the modelling process would appear a

useful strategy, however the implication for the usage and interaction seem complex. In this respect Barlett and Goshal (1995) comment that this complexity may even have a negative or undesired effect. What is apparent form the literature at this juncture is that the concept of an effective tool which can organise theories for best use relative to a systemic problem is desirable. Unfortunately whilst this concept is relatively easy to understand, the process is complex. To reduce this complexity, a strategic direction or informed view is needed to establish a resource friendly root to the desired outcome of a conceptual model.

In order to provide a contribution to fill the identified gaps in management practices and processes related to knowledge transfer, theoretical modelling offers a proposal which can demonstrate how process-orientation, which supports knowledge transfer, may be utilised. In this respect, Weiss (1979) identifies categories of context and purpose which can be used to dictate a framework for model inclusion and can be related to knowledge transfer in a business context:

Knowledge-generation models:	*(knowledge is used to define new things)*
Problem-solving models :	*(knowledge is used to solve problems)*
Interactive/Communication models:	*(based on exchanges between the partiesinvolved*
Politicalmodel:	*(knowledge is used for justification andlegitimization)*
Tacticalmodel:	*(knowledge is used as a pretext)*
Enlightenmentmodel:	*(knowledgeis used as aninputto build more knowledge)*

Source: Adapted from Weiss 1979 (pp 462-31)

From this originating concept, it is clear that a direct correlation from resource to processes to capabilities is in order as a supporting model. A core relationship is defined by Hamel and Prahalad (1996) which concerns the integrated application of other capabilities related to structured models in this context. Further, that theoretical support to relate the concept of "*process*" to that of "*capability*", suggests a hierarchy of several levels, namely "*process related*", "*combined*" and "*main*" capabilities, besides those

related to the different process levels. Informed by this framework, and the necessity relative to knowledge transfer in a business context, several models feature prominently within the literature.

From the perspective of knowledge transfer the concepts discussed in relation to these models may be considered fundamental to reciprocating theories, which use a combination or overlap of definitions to support them. The following table summarises this view and denotes the conceptual overview for the following sections.

Fig 3.3 Literature direction strategy.

CONCEPT	STRATEGY	CRITERIA	Literature Direction
Efficient process and practice	Systematic stages which providing the knowledge needed for a business or organization to achieve a desired goal through specific criteria. (Yang et al., 2010, pp. 273-289)	Generation	Nonaka & Takeuchi (1995) Boisot (2002). Probst et al. (2002) Tannembaum et al. (2000) Heisigs (2001)
		Communication	Shannon (1948) (Szulanski 1996) Inkpen and Dinur (1998) Harris and Moran (1996) Haworth and Savage 1989).
		Sharing/Learning	Huber (1991); Choo(1998) Argote et al. (1999); (Vandenbosch and Higgins 1996).
		Utilisation/ Management	Inkpen and Tsang, 2005; Kogut and Zander, 1992; Hofstead 1994 Brown and Duguid (1991) Teece (1981, 1982); Winter (1987)

3.3.2   Knowledge generation

Influential work by Nonaka and Takeuchi (1995) elaborated a theory of organisational knowledge creation, which is referred to as the SECI model (Socialisation Externalism Combination Internalisation, Figure 3.4). In this model, Nonaka and Takeuchi explain that *'A spiral is created when the conversion of tacit and explicit knowledge results in higher epistemological and ontological levels.'*

Figure 3.4. (Source: Nonaka & Takeuchi 1995, pp 57, 62, 71)
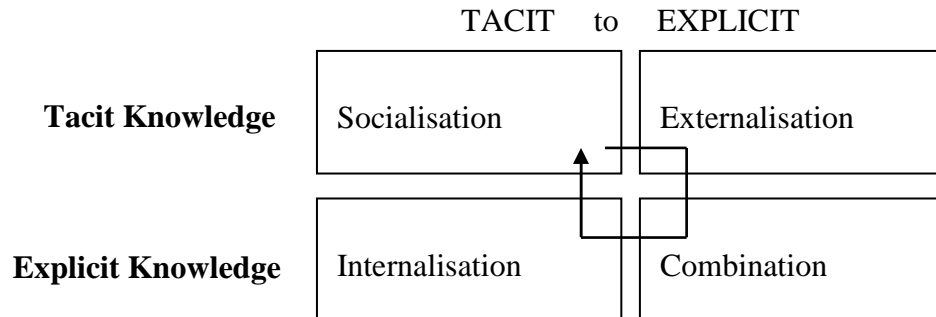
The basis of this theory is the distinction between tacit and explicit knowledge, which was in itself developed from original work by Michael Polanyi (1966). According to Nonaka and Takeuchi (1995) these two types of knowledge cannot be separated from each other, they are interchanged into each other through activities of human beings through interactions which are described as knowledge conversions. The result of the conversion process, is a knowledge expansion or growth between the individuals, both in terms of quality and quantity. Thus the mobilisation and conversion of tacit knowledge is regarded as the key to the creation of knowledge within any organisation. Nonaka and Takeuchi identify the four modes of conversion, which contribute to the knowledge creation process:

> *socialisation is a process of sharing experiences and thereby creating tacit knowledge such as shared mental models and technical skills.' (p 62)'*

> *'Externalisation is a process of articulating tacit knowledge into explicit concepts.' (p 64)*

> *'Combination is a process of systemising concepts into a knowledge system.' (p 67)*

> *'Internalization is a process of embodying explicit knowledge into tacit knowledge.' (p 69).*

Although used to support countless research streams, criticism of this model could be that knowledge transfer in organisations is more complicated and elaborate than suggested by this simple description. This model also assumes an unproblematic merging of tacit and explicit knowledge, which may not always be the case. A less ostentatious version of Nonaka's model is shown in figure 3.5

Figure 3.5 : Hedlund and Nonaka Knowledge Management Model 1993(pp 101)

	Individual	*Group*	*Organisation*	*Domain*
Articulated knowledge	Knowing calculus	Quality Circles documented analysis of its performance	Organization chart	Suppliers patents and documented practices
Tacit knowledge	Cross-cultural Negotiation Skills	Team coordination in complex work	Corporate Culture	Customers attitudes to products and expectations

Source : Hedlund and Nonaka (1993)

This model assumes there are four different levels of 'carriers', or 'agents', of knowledge in organisations, namely the individual, the group, the organisation and the inter-organisational domain (customers, suppliers, competitors, etc.).

While the above model is more helpful by relating the carriers to the types of knowledge, it still remains challenging in a knowledge transfer structure as it assumes the carriers, like knowledge, can be un-problematically segregated.

A different argument is proposed by Boisot (2002). In this model, Boisot considers knowledge within an organisation as codified or un-codified, diffused or un-diffused.

Figure 3.6 : Boisot Knowledge Category Model 2002, (pp 65–77)

Codified	Propriety Knowledge	Public Knowledge
Uncodified	Personal Knowledge	Common Sense
	Un-diffused	*Diffused*

Source: Boisot (2002, pp 65–77)

In this context, the term 'codified' refers to knowledge that can be readily prepared for transfer, such as financial data. The term 'un-codified' refers to knowledge which cannot be transferred, such as experience. The term 'diffused' refers to knowledge that is readily shared while 'un-diffused' refers to knowledge that is not readily shared. The top left area signifies Knowledge is categorised as both codified and un-diffused and is referred to as propriety knowledge. In this case, knowledge is prepared for transmission but is deliberately restricted to a selectively small population, on a 'need to know' basis. Bottom left signifies knowledge that is relatively un-codified and un-diffused is referred to as personal knowledge (insights, experiences). Top right signifies knowledge that is both codified and diffused and is referred to as public knowledge (journals, books, libraries). Bottom right signifies knowledge which is relatively diffused but also un-codified and is labelled common sense. Boisot, considers such knowledge as being built up slowly by a process of socialisation, harbouring customs and intuition and in this respect would seem a more efficient approach to the concept of knowledge generation.

Using a variation on the original theme from Nonaka and Boisot, Tannembaum et al. (2000) do not define the different stages of an organisational knowledge creation process. They assert that there are four major aspects of knowledge management that affect the creativity process which collectively determine its effectiveness. Suggesting a much

more systematic view pertaining to the effectiveness of knowledge management practices. Knowledge *Sharing* from this view is the *extent* to which people share their knowledge. Knowledge *accessibility* is the extent to which people have access to the information they need to make decisions, solve problems and perform tasks. Knowledge *assimilation* is the extent to which people learn or assimilate the knowledge they need. Knowledge *application* is the extent to which people apply or use knowledge to effectively make decisions, solve and perform tasks. In a further development, supporting the same theoretical direction as Nonaka and Takeuchi's model , Probst et al. (2002) see the knowledge creation process as being routed within knowledge management. The (Probst et al. 2002) model called '*the building blocks of knowledge management*', is somewhat more complicated, in that, it involves different components that form two cycles, one inner cycle and another outer cycle. At the same time, it is more comprehensive as an evolutionary base line for research themes. Thus, by definition, the inner cycle is composed by the building blocks of identification, and is the process where external knowledge for analysing and describing the knowledge environment is identified.

- *Acquisition refers to what forms of expertise that can be acquired through relationships with customers, suppliers, competitors and partners.*
- *Development is a building block which complements knowledge acquisition. This block focuses on learning but is also relevant to knowledge creation, in that, it is specifically focused on development of new skills, new products, better ideas and more efficient processes.*
- *Knowledge development affirms management efforts consciously focused on knowledge development derived from the creative and other processes.*
- *Distribution is the process of sharing and spreading knowledge which an organisation already has within it.*
- *Utilisation ensured that the internal knowledge is used for beneficial applications.*
- *Preservation is the selective retention of information, deemed useful and purposeful.*
- *Knowledge Goals and Knowledge Assessment, both apply evolutionary direction to the initial knowledge creation processes.*

An additional model by Heisigs (2001) presents similarities with the components of the inner cycle of Probst model as the Heisig model is composed only of four processes among which a different process, called Create, is found. In this sense Create refers to the ability to learn and communicate which gives a creative significance to knowledge but, importantly, with underpinning requirements of communication and learning at its core.

From the outlook of these studies, the core requirements of successful concepts and theoretical modelling point to a goal of implementation which is defined holistically and within a single empirical endeavour. However, concentrated within the realm of knowledge creation in this way, definitives seem to be rather limited. Many authors align to the same direction, that is, knowledge creation only lies within the capability of certain employees who are able/instructed to create and disseminate knowledge towards achieving the main objectives of the business or organisation. This view seems, on the face of it, to be a little short sighted, as it ignores internal conceptualising of the participants in relation to knowledge interpretation and perspective. Nonetheless, this section supports the argument for management of conceptual understanding from which resources can be efficiently managed.

3.3.3   Communication

Perhaps one of the most important theoretical models relative to knowledge in a business context is the one developed by C. E. Shannon (1948). Simply put, this was a theoretical communication model which describes the process of sending and receiving a message. According to Shannon (1948) a communication system consists of five crucial parts that a sent message has to go through:

- *(A)The information source generates a message or at least a sequence of a message which will be communicated to the receiver.*

- *(B)The transmitter functions as a system that produces a transmittable signal.*

- *(C)The channel is responsible for transmitting the signal from the transmitter to the receiver.*

- *(D)The receiver turns back the transmission done by the transmitter. As a result the original message is reconstructed from the transmitted signal.*

- *(E)Destination: the destination is the person or group of persons for whom the message is designed.*

Figure 3.7: The communication model
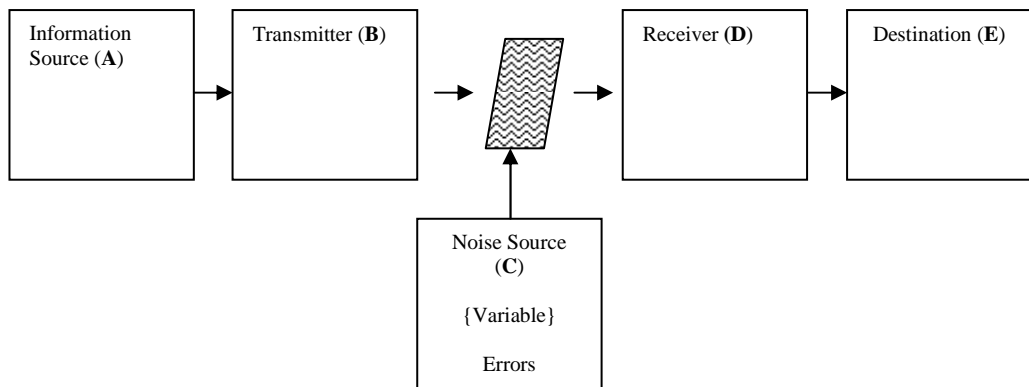
Source: (Shannon 1949)

As seen from this diagram, communication (*knowledge transfer*) process can be influenced by the occurrence of a variable , termed as 'noise'. This noise can be anything that affects the transmission of the message (*knowledge*). The greater the differences between the information source and the destination, the more likely that the received message deviates from the original message (Rogers and Steinfatt 1999).   According to Chini (2004) noise can transform or even destroy a message, that is why the encoding and decoding phase (sending and receiving) are the two critical stages. In his article 'Exploring internal stickiness' (Szulanski 1996) was one of the first theorists who applied the concept of the communication model to the field of knowledge management,

indicating that internal stickiness impedes the transfer of best practice within the firm. Both (Chini 2004) and (Inkpen and Dinur 1998) are informed by the Szulanski ideas of source related knowledge transfer practitioners and recipient related knowledge transfer practitioners.

Harris and Moran (1996) further contend that when establishing a partnership, knowledge transfer requires functional communication between both sender and receiver. However, they also note that communication differs on verbal or non-verbal levels, whether it is an intended/unintended message, an intended/unintended behaviour, or conscious/ subconscious behaviour.

To develop a mode of clarity regarding this position, Haworth and Savage (1989) devised the Channel-Ratio Model of Intercultural Communication in a development to Shannon and Weavers model, described earlier. This Channel-Ratio model also relates to Barlo (1960, in Haworth and Savage 1989). In this discussion, Barlo recognised that using a psychological perspective, interpersonal communication was complex, mutually interactive and often a subtle process between human beings (Haworth and Savage 1989).

The following model (3.8) shows the senders coded message, or part of it, in a channel. Senders encode messages verbally or non-verbally using their choice of channels to receivers who decode them. Senders affect the communication process because, among other things, they have different communication skills, come from different cultures, and have different attitudes toward receivers. Receivers affect the communication process because they have prior information about or attitudes towards senders, different skills, knowledge, social and cultural systems, communicative interpretation from both sender and receiver happen within this section.

In practical terms this means that any message and channels influence the communication process because senders choose how to encode and send the message (**A**) . The message

in the channel contains an explicit and an implicit component which is shown by the division of the channel (**B**). On the receivers side, the channel is divided to show one part as implicit message inferred (**D**) and the other part as explicit message apprehended by the receiver (**F**). Finally the intersection area (**E**) shows an overlap between the phenomenal fields of the sender and receiver.

This overlap area (intersection area) shows the amount of knowledge common to both sender and receiver (Haworth and Savage 1989). The phenomenal field (**A/C**) is the on-going combination of conscious and unconscious influences on the individuals communication behaviour because it provides the broader context for inferring learning and meaning to the transfer scenario.

Figure 3.8:   Cultural communication
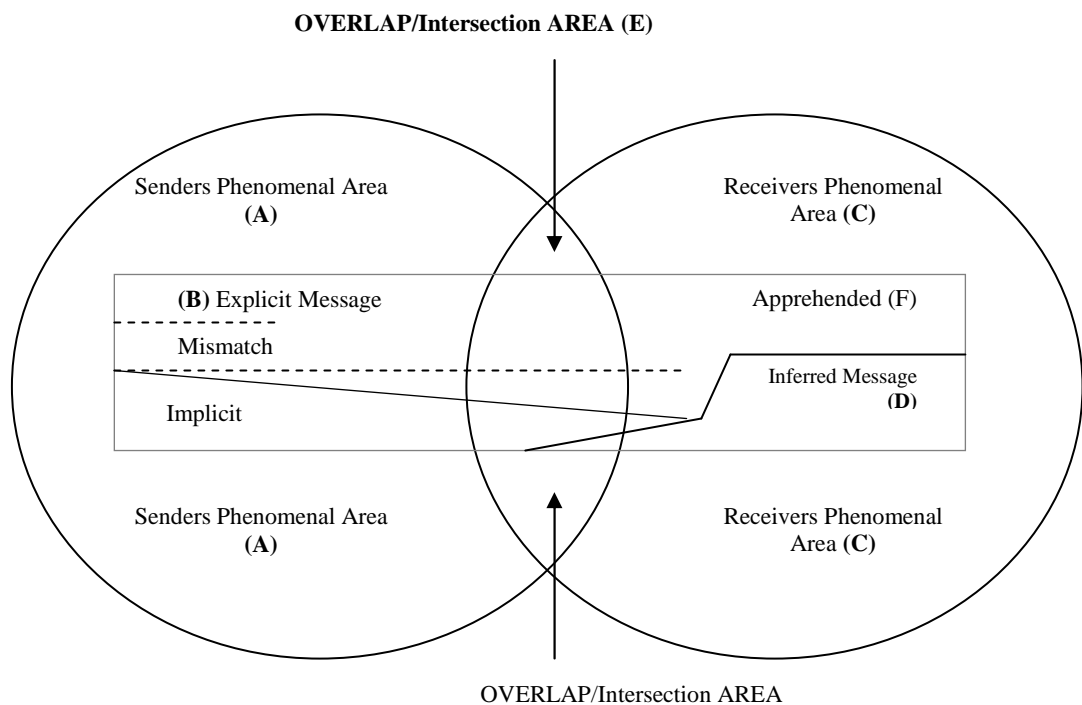
Source Hawthorn and Savage (1989)

The influence of learning is a major factor in this model and this position represents an argument to support how the message is received, interpreted, and assimilated by the

receiver. When the message is apprehended (**F**) in this sense, it influences the receivers

behaviour (**C**), an inferred message (**D**) will be more difficult to apprehend due to the

invisible embedded information and assumptions (**E**) associated with it.

As such, from the previous discussions, literature agrees that communication becomes a

critical point to comprehend manage and control, as from this view, the sender is both the

medium and the type of communication. This agreement, exemplified by Hawthorn and

Savage , identifies both communication and communicator from an individual

perspective and both are used to justify personal interpretations.

Literature dictates that without a strategic criteria for concept and management under the

structure of theory and modelling, the interaction between the two modes of concept

would become so complex that the desired outcome would ultimately be difficult to

establish. Due to these reasons, communication from the context of a unified model,

condenses business or organisational problems, as necessity accrues concerning time,

facts and human resources. In other words, to avoid the problems of knowledge

management in a functional structure, process-oriented concepts such as communication

concepts discussed in this section, can be developed which are able to prioritise the

management of the knowledge transfer processes.

3.3.4   Knowledge Learning

As discussed, any transfer scenario will be inherently complex and difficult. This is

shown to be because knowledge transfer is based on individual interpretation,

cognition and behaviour. Huber (1991) links these processes to learning and explains

that organisations and businesses can benefit from this vicarious learning. This view

is echoed by Choo (1998) who also supports learning as an important composite of

knowledge in a business environment:

'A learning organization ... is proficient at creating, acquiring, organizing, and sharing knowledge, and at applying this knowledge to develop its behavior, position, or objectives. [The essential goal of knowledge management is] ... to harness the organizations information resources and information capabilities to enable it to learn and adapt to its changing environment.'(pp 122-88)

Similarly, Argote et al. (1999) express that learning can be:

'a powerful mechanism for improving an organisations productivity and increasing its survival prospects'.(p 17).

Every human has a unique learning style and learning depends on the ability of the individual for the acquisition of information and for using it properly and in a timely way for effective decision-making (Vandenbosch and Higgins 1996). Vandenbosch and Higgins continue:

'The key to better decision-making lies in obtaining relevant, accurate and timely information and using the cognitive capacity of the individual, then translating information into knowledge and decision-making'.(pp 198-214)

Further, to achieve cohesion in a business context, a learning process must exist for the predominant knowledge transfer practitioners involved to acquire and benefit from this infrastructure. Learning from this view can be seen to assimilate, that is, from the interaction of stimulus and the cognitive capability of the learner, this assimilation then results in a change within the learners mental model (Vandenbosch and Higgins 1996). This view is similar to (Kolb 1984), in this respect, Kolbs argument is that learning is a process consisting of phases or assimilations, which form a cycle, as can be seen in the following diagram:
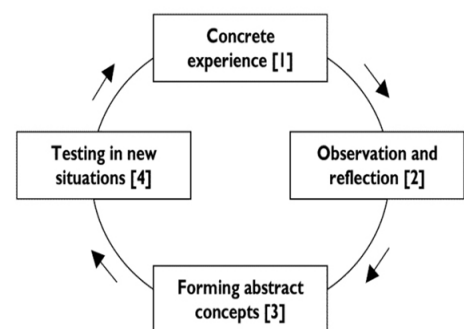
Figure 3.9 : learning circle. (Source Kolb 1984)

Kolbs' model is based on his 'Experiential Learning Theory' and emphasises experience as the source of learning and development (Kolb 1984, pp 21-22). This model outlines two linked approaches toward experiences related to learning, which are: *Concrete Experience* and *Abstract Conceptualization.* Additionally, there are two related approaches toward transforming experience in to learning concepts: *Reflective Observation* and *Active Experimentation.* According to Kolbs model, the ideal learning process engages all four of these modes in response to situational demands. In order for learning to be effective, all four of these approaches must be incorporated. In this respect, it is very similar to the assimilation approach argued by (Vandenbosch and Higgins 1996).   Kolb continues that individuals attempt to use all four approaches, however, they tend to develop strengths in one experience grasping approach and one experience in a transforming approach. The resulting learning styles are combinations of the individuals preferred approaches and can been seen to concur with an assimilation. These assimilated learning styles are as follows:

- *Convergers: are characterized by abstract conceptualization and active experimentation. They are good at making practical applications of ideas and using deductive reasoning to solve problems.*

- *Divergers: tend toward concrete experience and reflective observation. They are imaginative and are good at coming up with ideas and seeing things from different perspectives.*

- *Assimilators: are characterized by abstract conceptualization and reflective observation. They are capable of creating theoretical models by means of inductive reasoning.*

- *Accommodators: use concrete experience and active experimentation. They are good at actively engaging with the world and actually doing things instead of merely reading about and studying them.*

Source: Adapted from Kolb and Fry (1975, pp 35-6)

However this theory is not without its critiques, as Smith (2001) defines exacting problems with this approach. Smith concludes that the model does not adequately address

the process of reflection and similarly that the four learning styles related to one concept are extravagant. He continues, importantly for this research that this model does not sufficiently address the fact of different conditions and experiences. Further, the idea of stages/steps does not necessarily match reality, it has only weak empirical evidence and the relationship between learning processes and knowledge is more complex than Kolb describes it graphically in the model appearance. Jarvis (1995), additionally comments that learning is:

> *'actually about learning from primary experience, that is learning through sense experiences'. He continues to argue against Kolbs' model, 'unfortunately it has tended to exclude the idea of secondary experience entirely'. (Jarvis 1995, p 75).*

Honey and Mumford model

As a direct comparative to Kolb , the Honey & Mumford Learning Styles Questionnaire is a self-development tool which is informed directly from Kolbs Learning Style inventory, by inviting practitioners to complete a checklist of work-related behaviours without directly asking people how they learn. Having completed the self-assessment, managers are encouraged to focus on strengthening under-utilised styles in order to become better equipped to learn from a wide range of everyday experiences. Two adaptations were made to Kolb's experiential model to integrate this in to this model. Firstly, the stages in the cycle were renamed to accord with managerial experiences of decision making/problem solving.

- *Having an experience*
- *Reviewing the experience*
- *Concluding from the experience*
- *Planning the next steps.*

Secondly, the styles were directly aligned to the stages in the cycle and named Activist, Reflector, Theorist and Pragmatist. These are assumed to be acquired preferences that are

adaptable, either at will or through changed circumstances, rather than being fixed personality characteristics.

Szulanski, (2000) adds to the debate by explaining that this co-operative learning theory, which emphasises the importance of cooperative work attitudes in maximising team members learning outcomes is important for businesses and organisations. Further, that co-operative communication and relations among individuals within these organisations enhance shared and common understanding, make individuals aware of the needs of others, and thereby facilitate sharing more useful and understandable knowledge. (Szulanski 2000, pp.9-27)

An important implication which stems from this literature section is that whilst different opines and directions are adopted, what is clear, in relation to knowledge transfer practitioners, is that an absorptive capacity within the learning process is a crucial factor. In this case the recipient is bounded by his/her absorptive capacity to understand the shared knowledge content, context and perspective. The learning models discussed in this section support the view from the literature that this understanding is a controlled addition from experiential learning to managed learning.

This is a difficult concept to easily interpret, because what this argument points to is that a learning cycle should be approached as a continuous spiral. However, this view is contradicted, in as much as the literature suggests that learning processes often begin with a person carrying out a particular action and then reflecting on the effect of this action. The difficulty in this characterisation is that knowledge transfer may involve actions over a wide range of scenarios, and to gain experience beyond the particular instance of knowledge transfer would undermine a general principle of learning a particular knowledge transfer skill. However, what these models do infer is that understanding of a general principle does not imply any ability to express knowledge as symbolic medium,

that is, the ability to transform it from explicit to tacit. Learning, in this context is clearly a useful model, but it implies only the ability to identify connections between cause and effects over a range of incremental circumstances and nothing more.

3.3.5 *Knowledge Management*

Kogut and Zander (1992) are among the first researchers who established the foundation for the knowledge-based theory of the firm when emphasising the strategic importance of knowledge as a source of competitive advantage. Their work is focused on the idea that "what firms do better than markets is the creation and transfer of knowledge within the organization". Teece (1981, 1982) and Nelson and Winter (1982), indicated that knowledge has an increasingly legitimate and important role in management science. In this respect, Knowledge, which consists of information and know-how, is not only held by individuals but is also expressed in regularities by which members co-operate in a social community. Firms as social communities act as "a repository of capabilities" determined by the social knowledge embedded in enduring individual relationships structured by organising principles (Kogut and Zander 1992). The organising principles referred to as "the organisation knowledge that establishes the context of discourse and co-ordination among individuals with disparate expertise and that replicates the organisation over time in correspondence to the changing expectations and identity of its members" (Kogutand Zander 1996). This view was further articulated and empirically tested in Kogut and Zander (1993). They assert that:

> *'firms are efficient by which knowledge is created and transferred,*
> *a common understanding is developed by individuals and groups in a firm*
> *through repeated interaction to transfer knowledge from ideas into*
> *production and markets, what a firm does is not depending on the markets*
> *failure rather the efficiency in the process of transformation relative to other*
> *firms, the firms boundary is determined by the difference in knowledge and*

the embedded capabilities between the creator and the users (possessed with complementary skills) and not market failure.' (p 221)

The knowledge-based view included strategies for managing knowledge assets, Kogut and Zander (1996) further extend their discussion on the concept of identity by asserting that individuals are "unsocial sociality" where they have both a desire to become a member of a community and at the same time also have a desire to retain their own individuality (Kogut and Zander 1996) and provided empirical support for Winters (1987) original conjecture. As firms provide a normative territory to which members identify, costs of co-ordination, communication, and learning within firms are much lower, which allow more knowledge to be shared and created within firms.

Figure 3.10:   Source: Adapted from Kogut and Zanders Knowledge Management Model (1992 pp 211)

Knowledge Creation	Efficient Firms
Knowledge Transfer	
Process & Transformation Of Knowledge	=
Knowledge capabilities	
Individual "Unsocial sociality"	Competitive Advantage

Understanding of the importance attached to theoretical models is clear, in that there are many possibilities regarding prescriptive remedies to knowledge transfer management. Thus, Knowledge management has been seen from the categorical view in which knowledge can be sectioned into discrete elements, as seen in Boisot, Nonaka and Hedlunds models, to the more complicated and complex perspective of knowledge that is a mechanistic and socially constructed orientation. Moreover, these models encapsulate the fundamental attitude to managing knowledge in a useful way, hence their existence in the first place.

For example, the Kogut and Zander model is clearly focused on the strategic importance of knowledge as a source of competitive advantage. Indeed, these

perspectives have indicated that even though knowledge management models have evolved from time to time, basically the models provide a way of translating managerial activities and guiding managerial efforts in managing knowledge in the organisation. Nonetheless, the models aim is to support a dynamic system to reinforce core competencies. Through the knowledge management process, the knowledge management models are clearly useful as a benchmarking tool that can direct resources toward knowledge transfer problems or learning from success. In relating these models to useful business practices, many authors and theorists conclude that a firms primary function is to integrate/co-ordinate this knowledge with useful and purposeful tools (Kogut and Zander 1992; Nonaka 1994; Zander and Kogut 1995; Grant 1996a; Kogut and Zander 1996).

However, in an argument against the model descriptors previously defined, a literature review by authors from the University of Newcastle upon Tyne published in 2004, criticised most of the main instruments used to identify individuals learning styles (Coffield, et al. 2004). In this study 13 of the most influential models were defined for closer study, including most of the models described in this literature review. They examined the theoretical origins and terms of each model, and the instrument that was purported to assess types of learning style defined by the model. The findings reported that none of the most popular learning style theories had been adequately validated through independent research, leading to the conclusion that the idea of a learning cycle, the consistency of visual, auditory and kinesthetic preferences and the value of matching teaching and learning styles were all "highly questionable."

In this section, the dimensions of the literature scope are clear, in that, existing models, in a business related context, are not sufficient to handle knowledge transfer management

and will require new models to be developed, although the actual theoretical underpinning style may be doubtful. Adjustment in theoretical dynamisms is unclear as a model because the existing schemata may be too general or mismatched to a particular knowledge transfer situation. Thus, in the field of knowledge management theory, the view of business identification must give prominence to such components as knowledge resource to support the significance attached to knowledge value, the combination of this view then supports knowledge transfer in a strategic way. As discussed previously, successful knowledge transfer is seen as critical for organisational performance and effectiveness (Argote and Ingram 2000; Kogut and Zander 1996; Nonaka and Takeuchi 1995). Thus, there has been much attention and focus within research to identify the constituent parts which both help and hinder this process through differing models and theories. Although the value and usefulness of knowledge transfer to a business has been well documented and discussed in many studies, the effectiveness of the knowledge transfer varies considerably among organisations (Argote 1999; Szulanski 1996).   The literature suggests that only by focusing management resources more fully, while maintaining the traditional focus on the business collective, can theoretical models reveal the hidden dimensions of knowledge management which may support business success and competitive advantage.

3.4   PROBLEMATIC EPISTEME

This section will discuss the nature of knowledge transfer, in a controlled situation supported by the previous discussions surrounding models and frameworks, by examining literature specifically focussed on knowledge transfer and identifiable problematic and non-problematic parts of the transfer framework. This will allow an in

depth critique of the literature and at the same time allow an examination or assessment of how these issues are viewed from both the business and knowledge transfer practitioners perspective.

3.4.1   Barriers

The issues regarding knowledge barriers associated with an impact on knowledge transfer are wide-ranging. To substantiate the importance of barriers in a knowledge transfer scenario, Reagens and McEvily (2003) argue that insights to knowledge and insights to knowledge barriers are essential to business and organisational function. Kotter and Heskett (1992) also provide a broad view incorporating culture and explain that culture can and does raises significant barriers to business performance. In relation to knowledge transfer barriers, Reagens and McEvily (2003) further identify a series of knowledge transfer practices critical to successful knowledge transfer:

- *Ease of transfer from source to a recipient, with ease from the sources point of view being most important.*
- *Acknowledgement of transfer and proper attribution on the part of the recipient is important but often unrecognized or misattributed.*
- *Absorptive capacity of the recipient, implying that knowledge transfer between a source and recipient with some common knowledge, background, or characteristics is more likely to succeed.*
- *Strength of interpersonal connection between the source and recipient will positively affect the ease of knowledge transfer.(p 66)*

Inkpen and Dinur (1998) pointed out there exist four stages that are essential for the process of transferring knowledge:

- *Initiation: recognition of the transferred knowledge.*

- *Adaption: changing knowledge at the source location to the detected needs of the recipient.*

- *Translation: occurrence of alterations at the recipients unit due to the general process of problem solving because of the adaptation to the new context.*

- *Implementation: institutionalizing of knowledge to become an integral part of the recipients unit.(p 113)*

In a focused study surrounding barriers to knowledge transfer, the Szulanski (2000) process model of knowledge transfer highlights the importance of specific constructs that can become barriers within knowledge transfer at the initiation or creation stage. Specifically, where difficulties or impediments occur prior to the transfer of knowledge, Szulanski refers to this impediment as stickiness'. Importantly for this thesis, noting that the barriers start at the transfer initiation stage.

- *Stickiness at implementation where difficulties occur between the decision to transfer knowledge and actual start of the knowledge transfer process.*
- *Stickiness at ramp-up where unexpected problems arise between start and finish of the knowledge transfer process.*
- *Stickiness at integration where difficulties occur after satisfactory completion of the transfer process.*
- *Ambiguity as reflected by the depth of knowledge transferred.*
- *Unproven nature of what has been transferred and its degree of conjecture.*
- *Motivation of the source of knowledge.*
- *Reliability of the source of knowledge.*
- *Motivation of the recipient.*
- *Absorptive capacity of the recipient.*
- *Retentive capacity of the recipient which differs from absorptive capacity in that the former is an indication of long-term memory and the latter an indication of initial short-term memory.*
- *Organisational context.*
- *Nature of relationship between knowledge source and recipient.*

Source: Knowledge transfer Process Model: Source: (Szulanski 2000, pp 9-27)

Following on from this research, Goh (2002) agreed and identified a framework for the transfer of knowledge , highlighting seven influencing knowledge transfer practices to help elevate the problem of stickiness to a structured position for remedial action.

- *Organisational design that may or may not be conducive to knowledge transfer.*
- *Motivation through a reward system that motivates source and recipient.*
- *Available time for both source and recipient to engage in knowledge transfer processes.*
- *Recipient knowledge capacity (which is the same as absorptive capacity in Szulanskis work).*
- *Nature of relationship between source and recipient.*
- *Type of knowledge being transferred.*
- *Source propensity to share.*

Source: Knowledge Transfer Influences: Source: (Goh 2002, pp 23 - 30)

Lesser and Fontaine (2004) continued on this theme and provided the focus within four barriers to knowledge transfer.

- ***Awareness*** *includes the parallel abilities of the potential recipient to know who might have relevant knowledge and of the knowledge source to know who might be interested in their knowledge.*

- ***Access*** *is similar to Gohs available time in that it evaluates how the recipient is able to get the source to devote time to them, and how the source is able to avoid devoting too much time.*
- ***Application*** *combines the concepts of ambiguity and context so that both source and recipient feel that the knowledge is being properly applied.*

- ***Perception*** *deals with willingness and attribution of the source, and motivation of the recipient.*

Source: Knowledge transfer barriers: Source: Lesser and Fontaine (2004, pp 14-23)

There is no doubt, within current literature the problematic nature of knowledge is an understood and important consideration for a business or organisation wishing to utilise knowledge as a tool. Similarly, it is clear from the literature that barriers are easily categorised and identifiable.

3.4.2   Stickiness

Knowledge stickiness may be defined as difficulties encountered within the knowledge transfer process (Szulanski, 1995, 1996). The notion of sticky knowledge comes from "sticky information", introduced by von Hippel (1994) to describe information that is difficult to transfer. von Hippel (1998) defines stickiness as the incremental expenditure required to transfer specified information in a form usable to the information seeker. Stickiness can be attributed to such factors as the information itself, the way it is encoded, and the characteristics of information seekers or providers. Szulanski (1996) further clarifies that knowledge stickiness can be seen as a transfer barrier because transferring knowledge can be costly, time consuming, and may not always be successful.

Knowledge stickiness, or the inability to transfer knowledge is one factor that keeps knowledge from flowing, and has been cited as the major reason for knowledge transfer failures. (Gupta & Govindarajan, 2000; Levin & Cross, 2004; Szulanski, Cappetta, & Jensen, 2004). Previous studies have also suggested reasons for the success or failure of knowledge transfer relating to a cultural position. These include factors such as type of knowledge (Ranft & Lord, 2002), integration strategy (Birkinshaw, 1999; Buono, 1997), employee reactions (Empson, 2001), communication (Bresman et al., 1999; Buono, 1997). Olie (1994) noted that cultural identification can lead to nationalistic confrontation associated with problems of co-operation of integration processes and Szulanski (1996) states that this type of relationship between firms can be seen as ''arduous''. Further, it is one of the main causes for the stickiness of knowledge as such stickiness hampers knowledge transfer in business contexts and suggests that apparent sticky problems may tend to be accentuated in culturally sensitive settings.

For example, Vaara, Tienari, and Bjo¨rkman (2003a, pp 377-393) found that in a merger between a Finnish business and a Swedish business, the Finns specifically resisted perceived Swedish dominance in knowledge transfer processes. The Finnish employees expressed their frustration in jokes such as ''*Best practice is West practice*'' in this respect referring to Sweden as the West.

Most studies focus only on the antecedents of knowledge stickiness, similarly, the relationship between knowledge stickiness and knowledge transfer success has received tremendous attention. Szulanski (1996) states that '*The sticky nature of knowledge makes knowledge difficult to move among individuals, groups or organisations*', and continues, there are several reasons for any transfer mechanism to fail. However, the effects of knowledge stickiness during the knowledge transfer process are not clearly addressed by this reflective view. Notably, that the transfer may in fact fail for reasons that range from

the quality of the relationship between donor and recipient groups to the characteristics of the knowledge to be transferred. Stickiness, in this sense, can be characterised as a property of knowledge by which it makes its transfer from one mode to another or from one individual to another difficult. Gupta & Govindarajan (2000) argue that higher levels of stickiness in this sense make it more costly to transfer knowledge between different businesses and result in fewer innovative activities within any subsidiary firms. Similarly, Jensen and Szulanski (2004) also proposed that the boundaries imposed by stickiness in knowledge transfer processes may hinder knowledge from transferring within businesses and decrease the probability of business survival. Szulanski (2000) further argued that a firm can learn to cope with knowledge stickiness by learning from the lessons of previous knowledge transfers. People can learn by doing and modifying their routes, which sequentially lead to innovation activities and reduces knowledge transfer problems.

Conversely, according to von Hippel (1994, p 438) stickiness can assist the possessor of the knowledge because it will prevent unintentional diffusion to competitors. Further, that knowledge stickiness can be considered a trigger that facilitates problem-solving activities. Similarly, according to von Hippel, when transferred knowledge is frequently modified to solve recipient problems in relation to stickiness, knowledge transfer practitioners can integrate their background and experience with the transferred knowledge and contribute to knowledge transfer success. The implementation of knowledge transfer routines to avoid sticky problems can provide businesses with opportunities to make adjustments to current knowledge transfer practices which may facilitate better knowledge transfer. This would suggest that the sticky nature of knowledge is a useful thing that may assist knowledge transfer, facilitates innovation through problem definition, alternative generation, evaluation and innovation resulting in the decisive choice of corrective transferred knowledge practices.

Nonaka and Takeuchi (1995) suggest, innovation is a knowledge-intensive phenomenon and that firms need to interpret, internalise and understand different issues, circumstances and situations concerning knowledge transfer to facilitate higher levels of innovation and performance. However, the Jensen and Szulanski (2005) study is based on similar assumptions, does not find much empirical support for these assumptions. Investigating the effect of adaptation on knowledge stickiness or the difficulty of transferring knowledge, they found that adaptation significantly increases stickiness rather than decreasing it. Additionally, they also found that increasing institutional distance decreases, rather than increases, stickiness (p 516). Continuing on this theme, Szulanski (2003) conducted a series of studies into the transfer of best practice within organisations and argues that all knowledge has inherent stickiness. The simple conclusion from these studies is that the three major sources of knowledge stickiness or barriers to transfer of knowledge, were absorptive capacity, causal ambiguity and the quality of the relationship between source and recipient of knowledge. As a consequence, the prime concern has been to identify the contingencies under which knowledge transfer occurs, but not if the knowledge transfer is effective.

A knowledge transfer process in this respect would be time consuming, expensive, and laborious. With an increase in knowledge stickiness, transfer costs as measured by time or budget will also increase (von Hipple 1994). As the incremental costs become greater than the benefits, knowledge transfer programs will no longer be a cost-effective solution. In such cases, the performance of the knowledge transfer process will be constrained by this sticky boundary, when the costs resulting from knowledge stickiness exceed expectation, knowledge transfer will be seen to be less effective. Consequently, knowledge stickiness will have a negative effect on knowledge transfer innovation. Thus, stickiness problems which can be resolved by knowledge transfer practitioners can only

bring benefit or transfer success within a certain threshold. In this context, the existence and sources of knowledge stickiness have been explored extensively (Szulanski, 1995, 1996, 2000; Szulanski et al., 2004; Szulanski & Winter, 2002) and have related to core competencies of transfer implementation, internalisation, innovation and performance. While previous research has enlightened understanding of the determinants surrounding knowledge flows, most scholars implicitly followed a relatively naïve conceptualisation of knowledge as an economic priority (Szulanski and Jensen 2006). This of course seems an odd starting point from which to consider any transfer practice effectiveness. In that, for knowledge transfer to take place under this premise, the three major stickiness sources dictate that individuals must be willing to change the way they do things, however in doing so would clearly expose themselves to the possibility of failure. This would support the notion from Argote (1999) that the effectiveness of the knowledge transfer amongst organisations varies considerably. Although this position is consistent with Goh (2002) it suggested a transfer strategy, which interjects failure as a pre-cursor to the knowledge transfer process, would almost certainly be doomed to a starting point of reduced efficiency.

3.4.3   Transfer Efficiency

Knowledge transfer theorists explain that there is an effectual cause or barrier relating to the knowledge transfer barriers and stickiness discussed in the previous sections. Relating this to transfer efficiency, a study by (Galbraith, 1990) found that 10 out of 32 attempts to transfer knowledge from one manufacturing unit to another within the same organisation failed. Galbraith explains that this is because, even if the business or organisation supports the transfer of knowledge, the transfer may fail for reasons ranging from the quality of the relationship between donor and recipient groups to characteristics of

knowledge being transferred. This broad sphere was discussed by Szulanski (2000) in the previous section. Although (Argote, et al 2000) acknowledge that much of the perspective on knowledge transfer derives from primarily psychological parameters, and as such could be the cause of many differing views regarding the interpretation of knowledge transfer efficiency. This position of conflict affecting transfer efficiency is argued by several prominent authors who broadly concur that obstructions which inhibit efficiency are:- knowledge sharing (Szulanski 1996,2000) capability to absorb knowledge (Gupta and Govindarajan 2000), and the relationship between the knowledge sender and the knowledge receiver (Szulanski 1996, 2004).

The last category, the relationship between the knowledge sender and the knowledge receiver (Szulanski 1996, 2004) is particularly important for this thesis, because it opines that knowledge transfer cannot be successful in the absence of individual co-operation. This dictates that knowledge, as well as being sticky requires significant comprehension from the knowledge transfer practitioners in relation to efficiency. In taking this position however, any argument assumes that the cognitive capabilities of the practitioners involved are sufficiently aligned to support the transfer scenario. This clearly involves the creation of relationships between the receiver and transmitter in a context conducive to transfer efficiency. Szulanski (1996) identifies the complexity of the transfer in this respect:

> *'The exchange of organisational knowledge consists of an exact or partial replication of a web of coordinating relationships connecting specific resources so that a different but similar set of resources is coordinated by a very similar web of relationship'. (p 28)*

In discussing performance Argote and Ingram (2000) expressed the following:

> *'Knowledge transfer in organizations manifests itself through changes in the knowledge or performance of the recipient unit'. (p   151)*

Foss & Pedersen (2002) further examine and explain that efficiency is important because knowledge transfer is not mere replication, but usually involves re-contextualisation of the knowledge in a new context. This position supports the notion that knowledge transfer efficiency can be measured by monitoring changes in knowledge being transferred or changes in performance related to the knowledge being transferred. Problematic knowledge appears to be entrenched within 3 main arenas.

Organisation members: *Knowledge transfer practitioners*
Technical Capabilities :   *Tools/knowledge transfer practitioners comprehension*
Objectives: *Tasks and methods used*

Argote and Ingram (2000) support this position and show the interactions of all three components constitute the necessary elements for knowledge transfer, but agree that because of the complex interaction, there are substantial barriers or resistance identified when it comes to the successful transfer. Moreover, (Inkpen and Tsang 2005) and (Szulanski 1996) conclude that specific differences in organisational/cultural environment and organisational proximity contribute to knowledge transfer problems. In terms of efficiency, Inkpen and Tsang (2005) noted:

> *'For instance, a corporate culture emphasizing participative decision-making may not work well in a high power distance culture. The local culture needs to be understood and accommodated so that when knowledge is transferred from one member to another, the transfer process will not be hindered by cultural conflicts between concerned members' (p   157)*

From the previous discussions, it is clear that there is agreement within the literature concerning the inherent and substantial problems associated with the structure of the knowledge transfer framework and that efficiency was a theoretic goal. Summarising the literature position in this section , the following figure, (fig 3.11) expresses how transfer efficiency **(E)** is reduced because barriers **(b)** support resistance or stickiness **(S)** prior to the knowledge creation point **(c)** and cause problem areas **(m)**. However, if this were the

universal epistemic position, then position (**c**) would introduce a notion that all knowledge is sticky and all knowledge would be inherently problematic regardless of knowledge transfer practitioner perspective.

Fig 3.11: Knowledge Transfer Efficiency Model.

KNOWLEDGE TRANSFER EFFICIENCY MODEL

EFFICIENCY of Knowledge Transfer (*E*)

Barriers:
Quality of the
relationship

Barriers:
Absorptive capacity

B

Barriers:
Causal ambiguity

m

S

c
Creation Point

c
Creation Point

m

e

Resistance Caused by Sticky Influences (*S*)
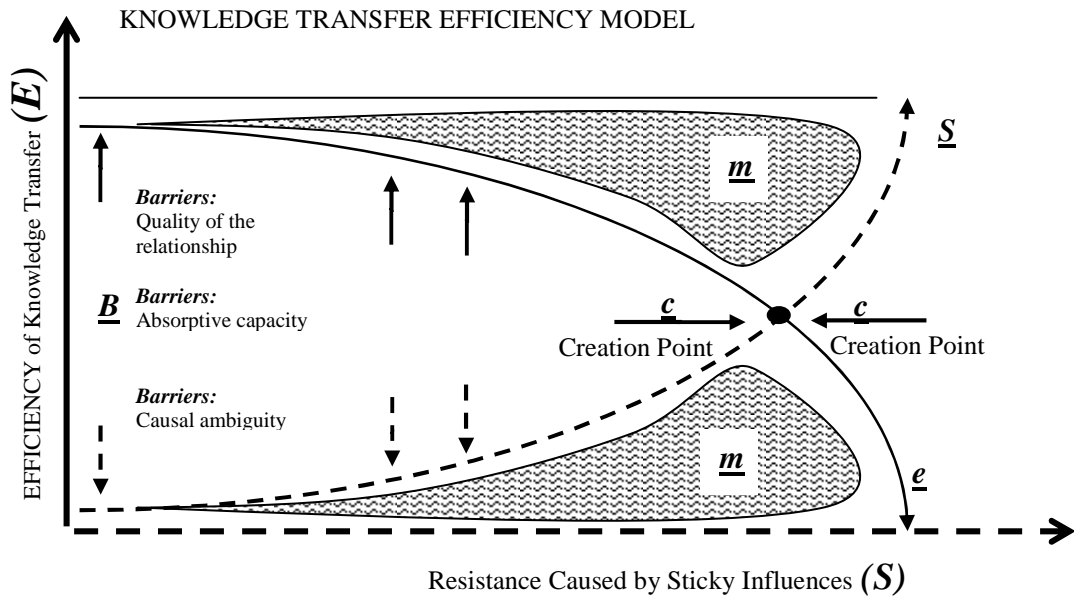
The literature makes clear at this juncture that to understand if the relationship between efficiency and stickiness is applicable to all knowledge in a business context, a justifiable goal under the premise of organisational and business development must be supported by knowledge transfer. This allows the nature and meaning of efficiency as an entity to emerge and brings clarification to the business perspective related to knowledge transfer problems. The literature shows that whilst this is an agreeable perspective to understand, an overview of barriers, stickiness and transfer efficiency is not enough to inform legitimate corrective procedures which completely eliminate problematic episteme. Definitions and explanations of exacting and prescriptive techniques to support elimination of obstruction to knowledge transfer do not appear in the literature at this time.

3.5   BUSINESS SUCCESS and COMPETITVE ADVANTAGE

As seen from the previous sections, the importance of knowledge to a business is not disputed and is agreed by most if not all commentators. It has been important to clarify and discuss the value attributed to knowledge and the problems of extracting usefulness from knowledge from a business point of view. This section will expand this examination and critique of the literature surrounding knowledge as a focus for businesses resources and further discuss why it is opined as singularly important for businesses and organisations to manage it effectively in reaching objectives or goals associated with success and competitive advantage in a business context.

3.5.1   Resource and knowledge based views

Penrose (1959) is considered the starting point for what is called the resource based view of a firm (business). In that, he conceptualised a firm as 'an entity endowed with a broad set of resources which render services that lead to strategic advantage'. This view aligns the 'firm' resource base for its existence since it has multiple resources. A recognised contribution to the view comes from Wernerfelt (1979). Wernerfelt built upon Penrose original concept by specifying context for the discussed resources. Intimating that the aforementioned strategic action requires a specific set of, financial, human, physical and organisation resources. The resource-based school of thought focuses on core competencies which are defined as '*collective learning in the organisation*', Campbell, Stonehouse and Houston (2000, p   324) explain that '*competences are core when they become the cause of the businesses competitive advantage*'.   Underpinning both these points is the capitalistic idea of mercantilism discussed by Wallerstein (1974). Wallerstein explained this in two ways. In this work Wallerstein defines the world-system

as the capitalist order within which every other global sub-region copies the capitalist paradigm in respect of trade, development, institutions and markets Wallerstein (1974, pp 347-57). Additionally, Wallerstein (1998) explains the emergence of the capitalist and occidental world-system in terms of a historical evolution of organic behaviour in its political economy. Wallerstein explains the sociological phenomenon of rationalism as if it is continuously rooted in *'loci of chaos out which new orders are constantly regenerated'*. Capitalism is seen to copy its competing dynamics within this kind of bifurcated pattern of its historic evolution. The Wallerstein view regarding the dialectics of the modern Occidental business and commerce regime overarch acceptance of this position as the mainstream occidental business perspective (Wallerstein 1998, pp 43-62). This view supports the argument that the ability of a business to perform and maintain competitive advantage, is determined by its ability to manage resources and this ability supports the direction for resource management.

Barney (1991) enforced these views by stating knowledge is a separate resource but it is of equal importance as other resources. According to Pemberton and Stonehouse (2000), knowledge management in this sense has two primary functions: formalising and co-ordinating new knowledge assets and storage distribution and sharing current knowledge assets. Teece (2000) agrees with this view and defines knowledge as an asset and a major part of a firms assets. Peteraf (1993) counters this position by suggesting that the conditions which support competitive advantage are overly resource laden and problematically static. Teece et al.(1990) similarly argue that firms do not depend on multiple resources at all for business success. Further, that businesses need to direct resource attention to apparatuses which allow the firms to learn and accumulate new skills and knowledge. Concluding that focus and attention needs be given to the forces that limit the rate and direction of this direction process.

To support this argument of the knowledge based view of a firm (Teece et al. 1997) developed a theory of firms dynamic capabilities which highlighted the importance of dynamic processes. Teece et al. maintain that competitive advantage of firms rests on managing knowledge asset positions, based on the view that firms are repositories of knowledge and associated know-how. Grant (1996) supports this view by affirming the enhanced status given to the strategic significance of knowledge by businesses and firms. In this sense, value attached to knowledge can clearly be seen as a central tenet within business association to success and competitive advantage. Capron, et al. (1998) acknowledge this view by offering the view that value of knowledge in a transfer scenario lies in the benefits of knowledge transfer to the recipient when the knowledge is usefully reapplied and redeployed across differing organisational functions.

However, it is worth remembering the important context in the previous section regarding the stickiness of knowledge. Although stickiness is not specifically mentioned, Foss (1996) notes the problematic nature of knowledge and at the same time acknowledges its importance for a business. Foss proposes that knowledge-based resources are difficult to imitate and at the same time socially complex. Further, heterogeneous knowledge bases and capabilities among firms are the major determinants of sustained competitive advantage. Adding to this view (Karlsen and Gottschalk 2003) define this specifically by stating:

> *'organisational knowledge is accumulated complex expertise that resides in individuals and is largely inexpressible'.(p 112)*

Supporting this knowledge based view, Gupta et al. (2000) assert that knowledge management is required but is a complex process. In that it helps organisations find, select, organise, disseminate, and transfer important information and expertise for necessary activities. From a differing viewpoint, but still from a counter argument

position, one of the most widely cited articles proposing the existence of the knowledge-based view of the firm is from Nahapiet and Ghoshal (1998). In this, they define intellectual capital to be the sum of all knowledge a firm utilises for competitive advantage and consists of the three main components: human capital, organisational capital, and social capital (Nahapiet and Ghoshal 1998).

In defending this position, Kogut and Zander (1996) argue that firms may exist because people prefer the shared identities and moral communities which they supply. This argument is partially sustainable since firms provide people with a sense of community in which discourse and experience may be structured by identity. This thesis would counter argue though that knowledge of the correct community would be needed. From this posit, the understood view of the firm is to parallel the relationship between social and intellectual capital, not measure how sticky the knowledge is and has some credibility in sustaining this argument. In relation to this viewpoint, but in a slightly differing context, Quinn (1999) acknowledges that a core competence does not simply consist of a product or something a company does well, but rather, it is the collective learning in the organisation. Thus, within this analysis there are distinct assumptions in social capital theory, straying away from the sticky nature of knowledge, in that, large firms can provide useful resources for social action by providing institutional and subsequent dense networks of social capital, and thus facilitate the development and creation of intellectual capital or knowledge.

Relating back to the previous discussions surrounding theoretical models, Quinn contends that co-ordinating this development requires communication, involvement and commitment to work across business boundaries and levels, and this is one of the reasons why any core competence (associated with tacit knowledge) is difficult to imitate. In developing this theme Brooking (1997) suggests that organisations under the knowledge

base umbrella, are actively concerned with the fundamental infrastructure required for managing human centred, assets. To assert this view, work by Barney (1991) discuss the firms inimitable capabilities as a critical source for sustainable competitive advantage and this is developed by Conner and Prahalad (1996) who place knowledge at the centre of theoretical developments. Although we now seem to have come full circle regarding the inherent stickiness attached to knowledge.

3.5.2   Competitive Advantage

The term of competitive advantage is defined by Campbell, Stonehouse and Houston (2000) as 'the ability of an organisation to out-perform its competitors' (Campbell, Stonehouse and Houston 2000, p324). Similarly, Pemberton and Stonehouse (2000) inform that a competitive edge may be created and sustained by organisations which learn quicker than their competitors, because they organise knowledge assets more effectively. Similar research by Bhagat et al. (2002) indicates that knowledge and the processes of knowledge transfer within organisation and businesses are a useful but complex phenomena. Further, that these complex phenomena are crucial for sustaining competitive advantage. Haspeslagh and Jemison (1991) connect successful management of knowledge transfer to internal value creation, which is defined as the 'improvement of a firms competitive position and performance'. Further, that successful management can provides insights into key mechanisms and processes surrounding knowledge transfer. Similarly, Pemberton and Stonehouse (2001) contend that the three central parts in a knowledge-centric organisation; structure, infrastructure and culture are interlinked. They argue that technology can only be a knowledge enabling factor, not the source of competitive advantage.

Abell and Oxbrow (1997) counter these kind of observations of a knowledge based theory by arguing that knowledge management is not really about managing knowledge at all. Rather, it is about managing and creating a philosophy that facilitates and encourages the sharing, appropriate utilisation and creation of knowledge. Further, that it is this philosophy, which enables competitive advantage, requires managerial focus in three protuberant areas: *preparing the organisation*; *managing knowledge assets* and *leveraging knowledge for competitive advantage*. In this sense (Ghoshal 1987; Grant, 1996) support the view that even in different subsidiaries a business or organisation can support its competitive advantage by adapting to specific ways of integrating and organising knowledge. In a similar argument (Nonaka 1994) supports this knowledge-based view of the firm, by suggesting that, supported by a cultural underpinning means that pillories of knowledge are used to determine focus.

This is an interesting and understandable position to adopt, since this position will transcend both the knowledge based view of a firm (Nonaka 1994) and the resource based view of a firm (Barney 1991). Understanding of this position leads to the conclusion that competitive advantage is at the core of the knowledge-based theory of the firm, and this theory has been enunciated and developed by a number of notable authors (Spender 1996; Kogut and Zander 1996; Grant 1996). According to Von Krogh et al. (2001), if knowledge is inherently fluid, social and evolving through experience and practice, then the challenge lies in getting the knowledge domains to work as vibrant, energetic, creative, social arenas to contribute to competitiveness. Furthermore, according to Cummings and Teng (2003), knowledge transfer success can be viewed as the degree to which knowledge is recreated by the receiver but as an interactive process. If new knowledge can replace existing knowledge, then the firms innovation capability can be increased which can lead to competitive advantage.

This conceptualisation of business success and culture coheres with the Hofstede (1980) theories surrounding underlying worldviews that are manifested in a *'collective programming of the mind'* in alignment with the multi-level concept of culture. This would support the argument that understanding of a cultural perspective will support the effective management of critical knowledge capabilities of a business. This would determine the performance of the transfer since it directly reflects core management competencies and superior knowledge which can support competitive advantage. Riusala and Smale (2007) further argue that businesses can attribute their superiority over the external market mechanism in terms of internalising intangible assets through transferring and leveraging of useful knowledge.

Contrary theory however highlights the importance of knowledge underpinning competitive advantage but from the point of view of business strategy not knowledge based strategy (Grant 1996; Argote and Ingram 2000). Conner and Prahalad (1996) conclude that knowledge which is privately held within individuals can be viewed as a potential and basic source of competitive advantage and although similar to Foss, this view perpetuates business strategy as the driving factor, not specifically knowledge. Inkpen and Tsang (2005) support this view, given that, when there is a shared vision or strategy within a firm, the common perceptions, mutual expectations and exchanges act as a bonding mechanism that enhances network knowledge integration. In expanding on this, Goh (2002) considers that culture in a business context can contribute to the knowledge transfer process as culture will enable a set of core values and norms. In terms of competitive advantage, culture in this context will encourage the active participation of group members and will support knowledge transfer within the group. This group-culture interaction is beneficial to a business wishing to assert competitive advantage, as Winter (1987) points out that the more culturally and socially complex the knowledge, the more

difficult it is for competitors to imitate. Similarly Brown and Duguid (1991) add that it will be subsequently more difficult to transfer, thus, constituting a more solid base for competitive advantage (Zander and Kogut 1995; Grant 1996; Szulanski 1996). Additionally, that businesses knowledge strategy should include the allocation of resources to knowledge creation and transfer for the sake of developing existing and new knowledge domains for the benefit of competitive advantage.

Phelan & Lewin (2000) argue however against the Knowledge-based theory of the firm and question if it actually constitutes a theory at all. They posit knowledge as a generic resource, rather than having special characteristics and do not concur between different types of knowledge-based capabilities. This is an understandable posit, as according to one notable proponent of the Knowledge-Based View of the firm (Grant 2002)

> *'The emerging knowledge-based view of the firm is not a theory of the firm in any formal sense '.(p135)*

Similarly, the effect of the firms environment on business strategy has also been a variable of inquiry in international business and strategic management studies from a competitive advantage perspective. Szulanski and Jensen (2004) suggested its importance by stating that a successful business must

> *'Fit with the environment is argued to be essential not only for subsidiary success but also survival and that relevant characteristics of the local environment which typically differ from those in the source environment along a number of critical institutional and market dimensions'.(p 938)*

In a counter argument, Peteraf (1993) argues that conditions which underpin competitive advantage are resource laden and static. In this context, the need for business to adhere to this or that model would indicate that there is no commonality in direction for achieving competitive advantage. In this respect, Peteraf argues that there is no single model which can transpose a position from a non-competitive position to a competitive one. Thus, perhaps understandably, most attention within the literature is positioned to explain how

knowledge is managed and what is the best set of circumstances in which knowledge transfer can be used to an advantage (Nonaka and Takeuchi 1995;. Inkpen and Dinur 1998).

Within the literature, knowledge in the context of competitive advantage appears as a consequence of the varying capacities and interactions between knowledge transfer practitioners encompassed within the transfer arena of a business context. How this understanding translates into business success and competitive advantage is disputed within the literature. What is clear is that a business or organisation will have an assigned objective in associating knowledge into a definitive instrument which can be used as an effective tool to obtain a desired goal or objective. These goals and objectives are clearly useful to any organisation as it presents a focused view for resource management. The reification process supporting this direction from a business or organisation, in the context of success and competitive advantage, is then trying to reduce a set of previously unconnected phenomena regarding knowledge and knowledge transfer solutions, to a combined instance of a single process. This being the case, it is little wonder that within the body of literature on the subject, there appears an insurmountable number of difficulties surrounding the entire knowledge transfer process.

3.6   SUMMARY OF CHAPTERS 2 & 3

Because of the broad scope and depth of content surrounding the literature and the fact that no previous studies were found to integrate all of these key literature criteria, this section will draw together the key themes of both chapters., This study is the first study which brings together the different literature themes identified in trying to discover empirical evidence of knowledge transfer practices relevant to this participant group, and in doing so relates this reflective lens to both the overarching broad research questions and themes identified in the analysis of the findings.

The following sections will highlight key points from the literature reviews and focus them into reflections which allow identifiable themes of the literature to become clear, and at the same time, allow identification of literature gaps to become apparent.

3.6.1   Literature themes

The argument surrounding knowledge definition is augmented by a discussion in chapter 2 in relation to Aristotle. According to Aristotle's argument, all knowledge is underpinned by four causes:

Material cause

Formal cause

Efficient cause

Final cause

In the case of this research, the four *causes* can be seen to relate to a knowledge transfer process :

Figure 3.12: Aristotles condition for proper knowledge

Aristotle	Human Interpretation	Related to knowledge transfer
Material cause	Knowledge	The material used to fulfil the final clause is knowledge
Formal cause	Ability	Cognitive capability of the transfer practitioners to understand the concept of knowledge and knowledge transfer
Efficient cause	Framework	Framework from within the transfer can take place and be measured for success
Final cause	Desire	Business Success

Understanding this position of causal effect, deliberately influencing knowledge is clear from the literature as this allows a framework for knowledge to exist but also gives justification to barriers or stickiness'. While some researchers have focused almost exclusively on the knowledge context (Zander and Kogut, 1995; Winter 1987), others have focused on the relational context (Szulanski 1996), or on the recipients position (Davenport and Prusak 1998). To fully understand this position, chapter 2 undertook a synthesis of epistemological position of knowledge to help support the understanding of knowledge from real world position inside a knowledge transfer scenario. The scope of the literature in chapter 2 encompassed (**a**) Philosophical underpinnings of knowledge, (**b**) Taxonomy, (**c**) Types of knowledge, (**d**) Knowledge Communication, (**e**) Knowledge transfer. This allowed a comprehensive understanding of philosophical underpinnings to emerge. This was followed in Chapter 3 by a delineation of business models and related theories related to knowledge transfer in a focused business context. Chapter 3 undertook a synthesis of the literature which established a direct link between knowledge, and businesses and organisations utilising knowledge transfer as a competitive tool. The literature scope in this instance encompassed (**a**) Business practices, (**b**) Theoretical dynamics, (**c**) Knowledge transfer problems, (**d**) Business Success, (**e**) Competitive Advantage. This view is informed by taking into consideration the key factors which

affect knowledge transfer in a business related context.   A summary from the literature is

as follows:

Table 3.13 Summary of factors affecting knowledge transfer

ORGANISATIONAL	LITERATURE	CULTURAL
involved in the knowledge transfer process. always central to the process of. key actors are generally identified: sender; recipient;	Goh,2002; Cummings 2003; Gupta Govindarajan 2000; Foss, N.J. and Pedersen, T. (2004), Grant, R. M. 1996. Szulanski 1996,	Openness Prior experience and knowledge Motivation Absorptive capacity; Culture difference Uncertainty, and Causal ambiguity
Transferring knowledge is contextually bound, so its transfer is constrained by the contexts in which it is embedded.	Argote and Ingram2000; Nonaka and tenuchi 1995; Alavi, M. and Leidner, D.E. (2001), Hofstede, G. (1994), Inkpen, A.C. & Dinur, A. (1998) Inkpen, A.C. and Tsang, E.W.K. (2005),	Relationship Social capital Organisational infrastructure Nature and content of knowledge
To be transferred between participants and by which the transfer is carried out	Szulanski 1996; Szulanski 2000; Hansen 2004; Bender, S. and Fish, A. (2000), Davenport, T.H. and Prusak, L. (1998)	Language and translation Communication channels Transfer channel
differences among units Organisational Type of business Type of knowledge	Argote et al., 2003; Ashkanasy et al.,2000; Bhagat et al., 2002; Argote and Ingram (2000), Inkpen and Tsang, 2005; Kogut and Zander, 1992; Hofstead 1994 Brown and Duguid (1991) Winter (1987)	Culture Fit between culture and knowledge Culture clash and Relationships Infrastructure
Choice of a knowledge transfer strategy goals and objectives Strategic group or niche Business or organisational hierarchy	Grant 1996; Zander and Kogut 1995(Wallerstein 1998; Amin 1977; Wallerstein 1979). von Hipple 1994). Nonaka and Takeuchi	
Structure and processes Power structure leadership styles Team work, Formality, and Incentive systems	(Bresman et al., 1999). Polanyi (1967) Bhagat et al (2002) (Szulanski and Jensen, 2006). von Hipple 1994). Nonaka and Takeuchi 1995;. Inkpen and Dinur 1998	Structure Leadership styles Team work
Environment Industry volatility and life cycle Location Relationship with other firms political and legal agents	Bartlett and Ghoshal,2006; Szulanski and Jensen, 2006 Peteraf (1993) Conner and Prahalad (1996) Brown and Duguid (1991) Winter (1987)	

Drawing together of literature from chapters 2 and 3 highlights that current studies

defining the intricacies and subsequent characteristics of knowledge transfer in a business

context form two overarching categorisations, each with an independent epistemological

position and each with specific knowledge gaps.

   (A) Organisational;   Incorporating business practices and structure.

(B) *Cultural;* Incorporating knowledge transfer practitioners involvement.

From the combined epistemological positions of organisation and culture, attributes interact to and from a knowledge position which directly relates to the knowledge transfer scenario. This combination of positions is regarded in the literature as the point at which knowledge transfer can be identified in terms of usefulness to an organisation or business, by supporting knowledge as a tool which can underpin knowledge management practices related to business success and competitive advantage. Further, can be interpreted as the point at which knowledge transfer success can be measured from. In the following diagram this process interaction from the knowledge transfer practitioners perspective, shown as position (**C**) is overarched by the epistemological positions discussed earlier , Organisational (**A**) and Cultural (**B**). These positions are supported by psychological (*D*) and philosophical (*E*) attributes, attached to the knowledge by the participant.

Figure 3.14: Formulation of the knowledge transfer scenario
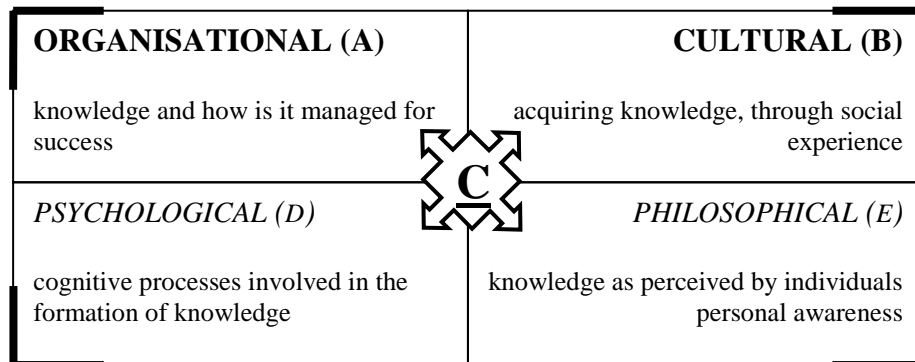
In relation to the position of knowledge and knowledge transfer in current literature, the interaction of these overarching themes is not discussed nor debated from the position of (**C**). Understanding of this position which allows a perspective to be attributed to knowledge from the practitioners real world view is currently silent.

3.7   Chapter 3: CONCLUSION

This chapter focused on developing a conceptual understanding of the parameters surrounding knowledge and knowledge transfer, in relation to knowledge transfer practices in a business context. Because of the broad and varied facets of studies connected with this line of research, some original interpretations were needed to critique the diverse theory and opines, and the length of this conclusion reflects this. Much of the critique, encircled discrepancies between the contending and sometimes analogous points of view, often related to barriers and obstructions surrounding knowledge transfer practices, and this allowed the thesis to form specific literature themes in this respect (Section 3.6.1). This resulted in identification of a typical knowledge transfer scenario which must have associated component parts, (source, mechanism and recipient), all of which are influenced from multiple interpretations and views. Justification for these component parts was discussed in detail in chapter 2, where it became clear that before knowledge is transferred, knowledge is a complex entity. This is because, understanding its existence (*1*) derives from assorted definitions, categorisations and opines (*2*). From this point, this entity can only exist as a causal effect, which forms through an amalgamated communication of the sum of these parts (*3*). Each assemblance potentially resulting in a different entity (<u>4</u>).

Figure 3.15: Assemblance of a knowledge entity
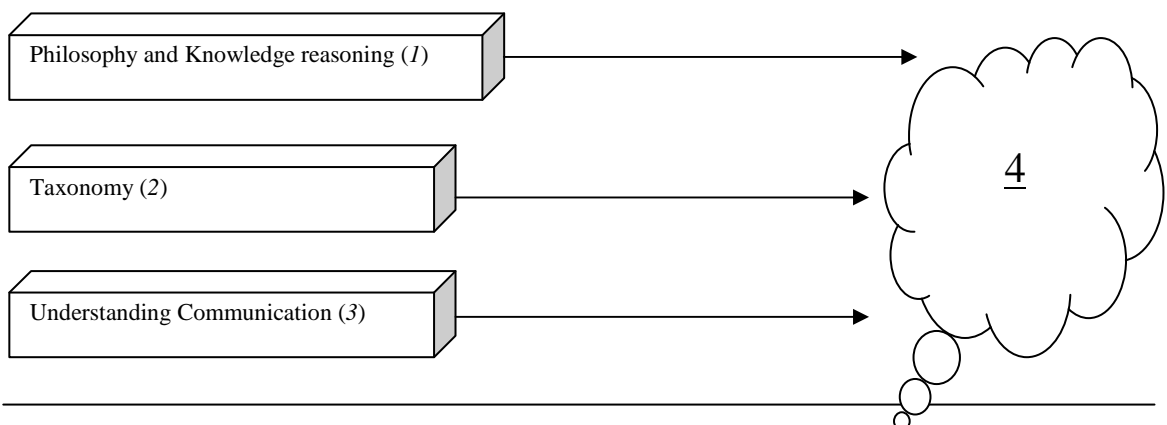
The literature at this point now identifies something which can be brought to the point of creation and which then forms into a constructed source knowledge (*A*). The following diagram indicates what is then transferred (*Y*) is a combination of the constructed source (*A*) additionally influenced through further interpretation (*X*) via an amalgamation of barriers and obstructions (*B*) and this is reconstructed at the recipient point (*C*). As seen from the literature, in a business perspective, this re-construction is overarched by a combined causal effect of managed intent (section 3.2), prior learning, cognitive capability and theoretical implication (Section 3.3), understanding of, and capability to resolve, problems (Section 3.4) and in an environment directed towards achievement of success and efficiency (Section 3.5).

Fig 3.16: Typical knowledge transfer Scenario
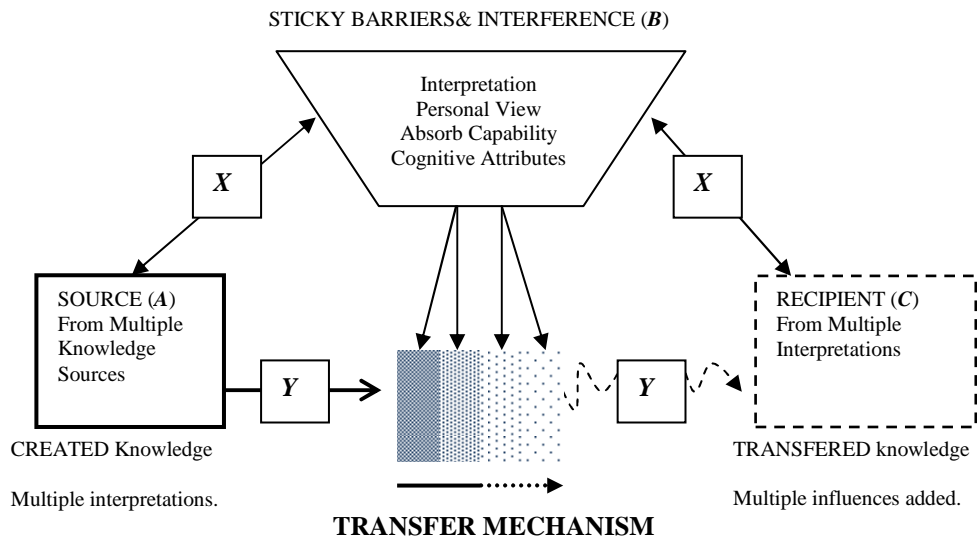
In summary, knowledge transfer in a business context is complex, difficult to achieve and involves multiple sources and definitions of knowledge which are then re-constructed via the transfer mechanism by the recipient using multifarious methods.

4 RESEARCH DESIGN and METHODS

4.1 INTRODUCTION

It is acknowledged from the preceding literature that there is very little published research which explored knowledge transfer practitioners' perspectives, in particular knowledge transfer practitioners from the Muslim business community. In this chapter the methods and methodology used in this study are discussed and developed to support a research design to allow this study to capture data in this respect. The discussion surrounding methods and methodology is split into two distinct chapters (4 and 5). This is to allow a detailed understanding of the theory surrounding methods and methodologies relative to the complexity of knowledge and knowledge transfer to be discussed. In chapter 4, the principle themes which will be discussed are the philosophical grounding of the research compared to other philosophies and the research methodology, research design and data generation considerations. This is followed by a discussion of issues concerned with quality in qualitative research and reflexivity. The qualitative approach to this study and why this approach was chosen on the basis of being better suited to exploring the range, depth and complexity of knowledge transfer practitioners' perspectives is examined in detail. The use of the broad principles of interpretivism as a practical approach to this study are also discussed in this section.

In conjunction with this chapter, in chapter 5 there is a discussion on the practical methods of data collection and how this affected the data collection across the four participant sites. The discussion of some of the considerations and techniques used in phase 1 and phase 2 are incorporated into discussions within this chapter rather that solely

confined to a chapter for each phase. This allows for a significantly better understanding of some of the complex situations which arose throughout the data collection. Section 5.2 discusses phase 1 of the research and section 5.6 discusses phase 2.

Phase 1 and 2 of research collected data from observations across 4 participant group locations and included 20 participants. Phase 2 of the study incorporated the same 20 participants as phase 1 and conducted 37 semi structured interviews which resulted in over 1000 pages of transcribed text.

4.2 OVERVIEW of APPROACH and METHODS

The following sub sections will discuss and detail the methods used within this research design. It will begin with an overview of the participant group selection process and demographic information. This will be followed by a discussion of the methodology adopted and discussion of the considerations regarding data collection and analysis. For this research the consideration of any overlap which exists between social components and personal cognitive components is also important and, as such, dissecting content relating to the cognitive dimension and context relating to the social and material dimension complicated the data extraction issue. This is important for this study in the sense that it approaches the research using interpretation gained from one philosophical position to make decisions on the other, which are then brought together only in the final analysis of the research data. This is an important consideration for the research design since this research will place pivotal importance on the overarching research question rather than on the methods used.

4.2.1 Paradigm Adopted

Although there is an on-going debate regarding which paradigm is most appropriate in a study, a constructivist paradigm can be regarded as the most appropriate for this study. This is because, from a philosophical point of view, all *"knowledge is a compilation of human-made constructions"* (Raskin 2002, pp 1-25) and not concerned with the *" neutral discovery of an objective truth",* as argued by Castelló & Botella,L (2006 p 263).

In respect to this research Jonassen (1991) explains that constructivism emphasises "*how we construct knowledge*" (p 10). In this way, Jonassen shows that constructivism allows definitions for knowledge and justification to form the layers of a paradigm which can be based on the inter-subjectivity of the knowledge transfer practitioners, rather than blunt objectivity. This argument is important for this study because it allows for a regard to alternative methodologies as points on a continuum. This means that a paradigm and associated methodologies being assessed are chosen for this thesis because they '*best suit the task at hand'* (Hussey and Hussey 1997) and are not derived from any particular theory or methodology but informed by them. From this perspective, this paradigm allowed data collection surrounding the transfer of knowledge to not only absorb rhetoric surrounding its transformation but also the context to which it is transferred.

The constructionist paradigm allowed knowledge transfer context to be identified as social in the sense of involving communicative interactions. The interpretative nature realised data which showed what knowledge transfer practitioners involved in a certain practice do as they manipulate material, social, and linguistic entities surrounding the transfer scenario. This view of context-in-the-making focused procedures by which knowledge transfer practitioners certify results and validate a knowledge transfer process

which involved a host of personal, internal cognitive and external social interest-laden dynamics or elements to be seen.

In this way ,this constructivist paradigm aligns to an argument by Berger and Luckman (1966) who explain that this position highlights understanding by linking and connecting lived experiences to context. This view from Luckman insists that reality is socially constructed by humans and that knowledge is relative to the system which produced it and falls into a similar association to personal knowledge proposed by Piaget (1967). In this sense and importantly for this research, a constructivist paradigm supports a methodology for investigating personal beliefs of individual knowledge transfer practitioners rather than simply investigating the external reality of tangible objects such as economic and technical aspects of knowledge transfer processes. Additionally, an argument by Guba and Lincoln (1994) supports a key consideration for this thesis, in that, it is the understanding that knowledge consists of constructions about which there is a relative consensus, or at least some movement towards consensus, among those competent enough to interpret the substance or knowledge content of the construction. This view allows multiples of knowledge to coexist when equally competent interpreters disagree (Guba and Lincoln 1994, p 113).

Key to this argument, this study agrees with Creswell's (1998) informed view which explains why subjectivity is valued, because humans are incapable of total objectivity, since they are situated in a reality constructed by subjective experiences. Thus, this supports the constructivist argument for this thesis in that that any social phenomena under study were not treated as independent constructs of experiences, rather, they were treated as personal experiences, but importantly, that they were constructed from complex processes of knowledge understanding affected by social interaction. In this

sense the paradigm for this study leans more towards the speciality of social science than a direct business dogma.

The constructionist stance for this thesis therefore maintains Crotty's (1998) idealism at its core, in which people may construct individual meaning in different ways, even in relation to the same phenomenon, which in the case of the knowledge transfer practitioners perspective is knowledge in a business context.

4.2.2 Participation areas

There are four participant areas within the data collection sphere (Appendix 9.1 and 9.14). This was to ensure that knowledge transfer between participants could be observed at all levels of business and social interaction. Each location had a different number of participants, but not all participants were involved in the study at the same time.

The first area of participation was the local Mosque. Within this location, any data collection had to be conducted out-with specific prayer times, because, when organising access to this area, this criteria was stressed by the local Imam as being very important as this non-prayer time, is used for social interaction and discussion among many business and organisation figures and the local community.

The second area was the office of EMC Society, wherein the members interact with local businesses for clarification and direction concerning business matters. Area three and four were two different sizes of retail outlets with corresponding management. Area three was a very large and busy retail outlet in the centre of town, on a busy street. Area four was a small retail outlet, still busy and on a main arterial route.

4.2.3 Participant group

The goal of this participant group selection was to establish a boundary for hermeneutic phenomenological research and allow the development of a rich or dense description of the knowledge phenomenon being investigated in a particular context of business knowledge transfer. A purposeful selection method was chosen to select the participant group as recommended by several authors for this type of research, in order to select information-rich questions for detailed study (Denzin & Lincoln 2000; Patton 2002).

For this study, these were participants who could illuminate the phenomenon under investigation and communicate knowledge and knowledge transfer reasoning within the group. Following on from this position, a scoping study was undertaken with the permission of the key stakeholders to define the participant groups social interaction parameters, the key stakeholders here were either the owner or manager of the business or organisation.

The participant group study consisted of totally male participants, as this research was advised that this is socially acceptable to the group. Men, through their direct social experience and cultural tradition will be the limiting factor as to how this knowledge is interpreted and exchanged both in a family and social group context. Particularly, this research was informed that women were not allowed into specific areas of the Mosque and therefore would not be able to participate fully at this level as this exclusion precluded them from discussions surrounding knowledge and knowledge transfer practices inside a business or organisation.

The age group of 20-72 represents the group to which significance or agency within any business ownership or peer supported decision making process is given. All participants involved are directly relative to decision making process at or around a local business or organisation, although not all members of each business or organisation are involved in

the study. No children or teenagers were directly involved with the study and none were interviewed. Some were in attendance at the observations and interviews and so may have influenced the answers in some way, but this was not directly apparent.

Knowledge transfer practitioners who were invited to participate were approached by the researcher in writing after specific advice had been sought via the local mosque if required. Participants were asked to sign a consent form prior to the commencement of any observations or interviews. Contact with this participant group was through person to person meetings with the relevant owners, leaders or champions of the respective business and organisation locations. This contact outlined who I am, and the nature and purpose of the research, participation, consent, confidentiality and transparency. Participation was entirely voluntary and those involved were fully informed of the purpose of the research.

4.2.3.1   Sampling

Sampling consideration for this thesis was informed by Pickard (2007), who discussed two approaches to purposive sampling: a priori criteria sampling and snowball sampling. A priori criteria sampling is an approach whereby a sample framework is established before the sampling begins. Snowball sampling was used in this thesis because there was no prior criteria, the overall sample grew gradually in the sense that the researcher began with key informants who directed the researcher to other eligible participants.

Snowball sampling allowed enough data to be built up and participation to develop, this incorporated the capability of an individual or group who may receive information from different places through a mutual intermediary such as referrals from existing participants. This sampling was then accessed through observational circumstances and opportunities or convenience/opportunity interviews since this involves the sample being

drawn from that part of the participant group which are close to hand. The adoption of a qualitative research method was relevant to this sampling strategy adopted since this research identified that its intention was to concentrate on in-depth investigation in a small participant group and the group had an added interesting dimension, in that, it was spread over four distinct locations. For this research, the emphasis is on quality rather than quantity, the objective focus was not to have large numbers but to become "saturated" with good quality information on the phenomenon under investigation.

4.2.3.2   Demographics

All of the participants were of Pakistani origin but not all were born in Pakistan. All of the participants were from a Muslim background. All participants except A1 were involved in the day to day running of either retail business or business organisations. All participants were regularly in contact both socially and in a business context. Fourteen participants were married. Participants B1/D1 owned a business outright. Participants B2-B5 owned a business in a partnership   Participants A1-A5 had jobs related directly to running of the mosque, participants A4-A6 helped at the mosque but also ran or helped run a business. Participants B1/C1/C2 were related.

Demographic information about the participants is summarised in the following table 4.1.

Table 4.1:Participant Demographics

Age	Born in Uk	Married	Participant	Occupation
45	No	Yes	A1	IMAM/ No other Business
72	No	Yes	A2	Assistant/Trustee/Business interests
68	No	Yes	A3	Assistant/Trustee/Business interests
42	No	Yes	A4	Assistant/Trustee/Business interests
43	No	Yes	A5	Assistant/Trustee/Business interests
28	No	No	A6	General Assistant
61	No	Yes	B1	Director/Business owner/Business interests
55	No	Yes	B2	Director/ Business owner/Business interests

64	No	Yes	B3	Manager/ Business owner/Business interests
42	No	Yes	B4	Manager/Business owner/Business interests
60	No	Yes	B5	Assistant/Business owner/Business interests
35	No	Yes	B6	Office Assistant
53	No	Yes	C1	Shop Proprietor/Business Owner/Business interests
54	No	Yes	C2	Shop Proprietor/Business Owner/Business interests
70	No	Yes	C3	Shop Assistant/Business interests
23	Yes	No	C4	Shop assistant
26	Yes	No	C5	Shop assistant
36	No	No	D1	Shop Owner
20	Yes	No	D2	Shop assistant
26	Yes	No	D3	Shop assistant

4.2.4   Qualitative Approach

Quantitative and qualitative considerations are vitally important within the methodological schema adopted within this thesis and aligns with Gummessons (2003) view, which states that:

> [w]ords and numbers both require interpretation, Statistical tables need interpretation just as badly as data from in-depth interviews and focus groups. (p   486).

Associated with this argument, Gummesson (2003) argues that hermeneutics, as a general methodology for interpretation is required for all research, taking it through an upward spiral of pre-understanding through interpretation to understanding. Further, this spiral is a cycle with the end of one cycle feeding into another, so that understanding from one cycle becomes pre-understanding for the next and so on until the explanation stage is reached. This is true for this research because qualitative research acknowledges that the complexity of the insights regarding a phenomenon cannot be universal.

The reason for this is that the situations of the knowledge transfer practitioners may be often unique, context specific to the individual and relate to the realities in which they and the knowledge transfer co-exist in (Saunders et al. 2003). Qualitative or phenomenological frameworks, such as interviews or observations within this research

seek data which is drawn from the perspective of the knowledge transfer practitioner in relation to both knowledge and business context. These are factors which cannot be satisfactorily explored by using quantitative methods, such as questionnaire survey methodology alone (Young & Jillings 2000). Questionnaire survey respondents are typically required to answer a series of specific questions by selecting from pre-defined options, which limits the range of answers that can be given and assumes that the full range of possible answers is known (Young & Jillings 2000). In this respect, Fisher (2007) distinguishes between breadth and depth regarding study approach. Fisher argues that an in-depth understanding is more beneficial for opening up the opportunity to both understand and explain the position of the study.

A qualitative approach to this study was chosen on the basis of being better suited to exploring the range, depth and complexity of knowledge transfer practitioners' perspectives than a quantitative approach. This view reflects the complex socio-economic and psychosocial factors which are involved in the provision and use of knowledge transfer within this participant group. This position is relevant for this study because the literature informed that knowledge transfer reasoning and communication are both cognitive and interactive processes, are frequently tacit and subconscious and often occur in specific context. These phenomena cannot maintain their essential and embedded features, if reduced or measured as in quantitative research. For this study, both the social arena and communication process where knowledge transfer occurs are multifaceted, involving multiple strategies, purposes, and interpretations.

There are no perfect interpretations to reasoning or communication because both processes are contextually bound by the practitioners, the social conditions and the real world perspectives involved. What is useful, relevant and meaningful to each practitioner depends on the knowledge transfer situation. Attempting to isolate or measure cognitive

reasoning and communication which support knowledge transfer as a specific, a-contextual process, ignores the complexity, reality, and significances of these activities in practice. Consistent with this approach, this research is informed by Corbin and Strauss (2008), who agree this association of difficult to measure variables is a good reason for choosing a qualitative method. This is why, in this study, the complexities regarding the understanding of knowledge necessitate a qualitative approach.

This is important for this study because, from this qualitative position, the notions of the key stakeholders involved in both the business and knowledge transfer platforms can be *established.* This allowed imaginative exploration of phenomenon, whist at the same time avoids making claims of centralised objectivity. It also allowed the participants voice to be definitive regarding their own personal experience.

In adopting this archetype, this research assumed a perspective of knowledge from the participants viewpoint and also the structures of experience as they present themselves dynamically, but without restrictive recourse to theory, deduction or assumptions from other disciplines.

4.2.4.1   Interpretivism

The view of interpretivism which informed this research was proposed by Glaser and Strauss (1967) as the description and interpretation of social processes in social interactions in order to generate theory or theoretical statements that are grounded in the data. Glaser and Strauss originally developed the interpretivism approach in the 1960s as an alternative to the dominance of positivist approaches and grand theorising in sociology, where data is collected to test the truth of theoretical propositions.

The argument to use this method in this thesis is supported by (Bourdieu, 1993), who states that meanings are relevant to each individual, each individual decides if

interpretation is competent or incompetent. The interpretivist paradigm approach that supports this decision was used to understand the experience of the participants, through investigating how they use communication, language and ideological symbols in deciding knowledge interpretation.

For this study, this ensured that any emphasis was on "making sense" of what is happening in a knowledge transfer scenario and what things are affecting it. The process of interpretivism for this study is characterised by collecting data, such as participant observations and conducting interviews with relevant participants, from which emergent themes or patterns are identified. This involved constructing a coding procedure to group themes into categories. Themes from subsequent interviews were then compared with those already identified, which is a challenging iterative process and a core element of the interpretivism approach known as constant comparison.

These characteristics of themes were then further refined by on-going data collection in a process known as theoretical sampling. The constant comparison technique is used to compare themes identified from further data collection with those already identified to further refine categories (Glaser & Strauss 1967). With these points in mind, the practical approach to this qualitative study is described as having drawn on the broad principles of interpretivism. A description of how this was done is presented in chapter 5 which also discusses data analysis.

4.2.4.2 *Phenomenology*

For this study, it was important to see the phenomenon of interest 'knowledge transfer' from as close to the original perspective as possible and Ashworth and Lucas (1998) called the respondent position a "second order position" or experiential perspective This is because interpretation of the phenomenon can be interpreted differently, depending on

the understanding of the actual essence of the knowledge within the transfer scenario. This interpretive stance, through a phenomenological lens aligns directly to (Husserl,1928) who refined a technique to find the most basic concepts of a phenomena, redefining the concept of experience in the broadest sense.

This position is important for this thesis as it includes religious, mythical, aesthetic, perceptual, linguistic, and body experiences. Husserls' work is based predominantly on the works of Dilthey (1907, see translation of Essence of Philosophy,1954). Relative to this thesis in particular, knowledge experience for Dilthey was not singularly or enclosed to the individuals specific mental realm, but linked to socio-cultural, racial, ethnic and cultural differences or contexts. In this respect a phenomenological consideration was necessary for this study in order to distinguish between knowing a proposition to be true by understanding or as attaining an intuitive grasp of a proof of it through social interaction. By adopting this phenomenological archetype under these informed views, this study assumed a definitive clarification of knowledge meaning, which asserts concentrating more intensely on the experiential conceptions by directing interpretation in a certain way. In doing so this research was able to keep clearly in mind that phenomenology is not a science in the same sense as the other sciences, rather it is a procedure or technique that should direct a new state of consciousness in which one can see, distinctly, the basic concepts used in the interpretation and transfer of knowledge.

These considerations or constraints, helped inform the data collection techniques adopted by the study. The phenomenological lens adopted within the data collection allowed categories of description to emerge which corresponded to differing personal understandings of knowledge and the relationships which were established, between participants. The most fundamental use of this method allowed this research to interpret the individuals understanding of knowledge and the hierarchy of social interaction

attached to it. In doing so, this method revealed ways in which individuals understand, conceive and experience particular aspects of knowledge and knowledge transfer, similarly, adopting this position allowed theoretical conceptions and relationships between participants to emerge from the data collected.

The phenomenological approach to method adopted by this thesis allowed the extraction of holistic variation in individual experience, described within simple descriptions of the experience of knowledge. In aligning the personal experience to the collective experience, hierarchical relationships between the participating knowledge transfer practitioners juxtaposed to the personal interpretation of experiencing knowledge transfer in a business or organisational context emerged as data.

4.2.5 Collection considerations

Because of the qualitative nature of this research, data collection considerations included interdisciplinary, trans-disciplinary, and sometimes counter-disciplinary and intertwined concepts from business, humanities, social and physical sciences. This position resulted in a consideration which necessitated multi-paradigmatic but naturalistic perspective from this researcher. Data collection for this study paid specific attention to interpretative understanding of knowledge transfer practitioners personal perspective and experience and, as explained in the introduction, resulted in a two phase data collection strategy of participant observation and qualitative interview.

4.2.5.1 Participant Observation

Participant observation is relevant for this research as observations of a task or process is an important facet to consider when dealing with personal experiences and interpretations

(Denscombe 2007 p 206). This view proposed by Denscombe is relative for research which is conducted using the data collection method of participant observation, embedded within the methodology of ethnography. This approach to participant observation informed this study. The study was also informed by Llewellyn (1993) who supports this position by advising that the interpretive task in a study surrounds the explication of subjective understandings.

The aim of the observations for this study is to find out how people think and how they react to business issues and knowledge and knowledge transfer scenarios. In this respect, this draws together both views and as Llewellyn explains, the assumptions about how we know what we know are embodied by the theory of knowledge within constructionist epistemology, which may be collected as data through observations (Llewellyn 1993, p60). Similarly, relative to this study, Laughlin (1995) advises that an individual observer is permitted and encouraged to be free to be involved in the observation process, completely uncluttered by theoretical rules and regulations on what is to be seen and how the *seeing* should be undertaken (Laughlin 1995, p 67).

 In this respect , Laughlin informed the study regarding ethnographic research, in contrast to some conventional approaches, because ethnographic research allowed a low level of prior ontological theorising. This was important for this study because there was little in the way of empirical studies for the phenomena under investigation or this method of data collection. Importantly for this research, Wilkinson and Birmingham (2003) proposed an argument in which participant observation has the potential to come closer to a naturalistic emphasis, because the qualitative researcher confronts members of a social setting in their natural environments. This approach, informed this study and allowed for the understanding of   multiple realities, knowledge and values, juxtaposed to knowledge transfer in a business context. The appropriateness of participant observation can be

further justified by matching the research question against criteria of circumstances given by Wilkinson and Birmingham (2003) who concluded that the criteria for using participant observation is,

(1)	*when the ways in which people behave and interact with each other in a social setting are important to the research.*
(2)	*when researching a social settings and what happens in them is of interest.*
(3)	*when the best way to research the unknown is to experience it for oneself.*
(4)	*when the context of the events being researched is important.*
(5)	*as a useful supplement to other research instruments.*
(6)	*when a flexible approach is research is needed.*

Source: Wilkinson and Birmingham (2003, p118)

The theoretical position of observation through dialectical considerations adopted by this thesis was also discussed by (Greene and Caracelli 1997) and this allowed the study to draw together qualitative integration of philosophical principles and constructivist paradigms. Observational interpretation was therefore important for this research since the topic of perspective form the knowledge transfer practitioner needs to be explored, not measured, as any participant interactions such as experience, which could not be accurately measured, must be interpreted.

This position was sustainable throughout the data collection phase since this research is aware of intrinsic characteristics associated with human nature, discussed in the literature review sections 2 and 3:

Consciousness:	*Knowledge transfer practitioners are aware of themselves as unique individuals and their relationship to others*
Action:	*In relation to knowledge transfer in a business context, knowledge transfer practitioners make deliberate choices regarding certain behaviour in certain situations.*
Unpredictability:	*If human behaviour in any context is of an unpredictable nature, then corresponding modes of study are required to interpret this unpredictability.*

Participant observation was carried out as part of ethnographic research and as such was also accompanied by some ad hoch interviews.

For this research, observational data collection emphasising these characteristics considerations was accomplished through an interpretivist lens and was important for this study. This was because interpretivism, related to the qualitative position of the research, utilised analysis around three basic principles at the core of this research (interaction, meaning and justification) and constructed from direct observations and questioning.

4.2.5.2   Qualitative Interview

Marton (1994) advises that one of the main and richest sources of data collection in qualitative research is qualitative interviews. Marton (1994) further emphasises that, semi-structured interviews provide greater breadth or richness in data compared with structured interviews, and allow participants freedom to respond to questions and probes, and to narrate their experiences without being tied down to specific answers.

A semi-structured interview format therefore was chosen for this research to support the additional advantage of both observations and interviews as data collection methods. This position was similarly informed by Morse & Field (1995) who agree that semi-structured interviews provide greater breadth or richness in data compared with structured interviews because this approach allows participants more autonomy to respond to questions. Qualitative interviews are commonly referred to as being structured, semi-structured or unstructured (May 2001, Smith 2002). Classifying the interview type according to the degree to which the interview is structured may be a little misleading however, since even apparently unstructured interviews have some structure and could be described as semi-structured. Interview probes in this study were informed by the

literature form chapters 2 and 3 which was most likely understood and identifiable by both the interviewer and interviewee.

- *Association with business*
- *Association with knowledge transfer practices*
- *Association with business decision making*
- *Interaction of job/faith*
- *Dissemination of information*
- *Guidance on decision making*
- *Interpretation of information*
- *Identification of knowledge cooperation*
- *Business Success*
- *Knowledge transfer problems*
- *Interpretation of knowledge value*
- *Identification of knowledge experiences*

Source: (Kvale,1996, pp 80-100)

Participants were probed (Booth 1997), until they had nothing else to say about their experiences of knowledge, knowledge transfer, business success and competitive advantage. This approach was to allow participants the space to reveal relevant information in a naturalistic way when answering the questions. An informal approach was adopted for both the participant observations and interviewing. The nature of this research required that this research should focus on the interpretation deriving from the knowledge transfer practitioners involvement with knowledge and knowledge transfer in a business context. Bowden (2000) summarised this position by explaining any phenomenological interview has a focus, the way in which interviewees understand the chosen concept, and this focus is maintained throughout the interview. This research phase adopted this philosophy during the semi-structured interviews to allow flexibility for the participants to reveal relevant information in a naturalistic way. This broad approach adopted by this study was informed by Kvale (1996) who explained the importance to different possible philosophical approaches and how qualitative interviews can generate researcher knowledge. Relevant to this data collection, Kvale highlights the importance attached to this position by this research, in that, knowledge which springs

from interviews is related to a post-modern construction of knowledge. He further explains the implications of the phenomenological approach is prevalent in qualitative research and   the focus is on phenomenology. For this research understanding of these philosophies was critical in highlighting different aspects of the qualitative research interview and to support a framework for the different methodological choices which had to be made through out the data collection stage as a whole. In this respect, Kvale (1996) provided a very useful check list which informed the data collection throughout this study.

Knowledgeable:	*is thoroughly familiar with the focus of the interview; pilot interviews of the kind used in survey interviewing can be useful here.*
Structuring:	*gives purpose for interview; rounds it off; asks whether interviewee has questions.*
Clear:	*asks simple, easy, short questions; no jargon.*
Gentle:	*lets people finish; gives them time to think; tolerates pauses.*
Sensitive:	*listens attentively to what is said and how it is said; is empathetic in dealing with the interviewee.*
Open:	*responds to what is important to interviewee and is flexible.*
Steering:	*knows what he/she wants to find out.*
Critical:	*is prepared to challenge what is said, for example, dealing with inconsistencies in interviewees' replies.*
Remembering:	*relates what is said to what has previously been said.*
Interpreting:	*clarifies and extends meanings of interviewees' statements, but without imposing meaning on them.*

Source: (Kvale,1996, pp 80-100)

This was an important pivot for this study to adopt because of the lack of standard techniques or rules for qualitative research interviews, this study followed the structure proposed by Kvale (1996), because it stresses the importance of advance

preparation and interviewer competence. Kvale suggested standard choices of methods to be made at the different stages of an interview investigation and this study followed these interpretations.

- *Thematizing: Formulate the purpose of the investigation and describe the concept of the topic to be investigated before the interviews start.*

- *Designing: Plan the design of the study, taking into consideration all seven stages, before the interview starts.*

- *Interviewing: Conduct the interviews based on an interview guide and with a reflective approach to the knowledge sought*

- *Transcribing: Prepare the interview material for analysis, which commonly includes a transcription from oral speech to written text.*

- *Analyzing: Decide, on the basis of the purpose and topic of the investigation, and on the nature of the interview material, which methods of analysis are appropriate.*

- *Verifying: Ascertain the generalizability, reliability, and validity of the interview findings. Reliability refers to how consistent the results are,, and validity means whether an interview study investigates what is intended to be investigated.*

- *Reporting: Communicate the findings of the study and the methods applied in a form that lives up to scientific criteria, takes the ethical aspects of the investigation into consideration, and that results in an readable product.*

Source: (Kvale,1996, p 88)

The probes or topics of interest that this research intended to cover in semi-structured interviews were drafted into an interview guide prior to the interview and guided by Kvale's method. These topics were introduced into the interview as open, non-leading questions so that further questions could then be based on responses given by the participant. Using this approach allowed the participants to talk freely and gave easy integration of follow-up questions, this allowed the excellent flow of conversation by keeping the questions brief and simple. A brief overview of types of interview questions

with examples is shown next, an interview extract is in appendix (9.9). The following structure is described by Kvale (1996) and was adopted throughout the interview process.

Introducing questions: "Can you tell me about....?", "Do you remember an occasion when...?" "What happened in the episode mentioned?",...

Follow-up questions: Direct questioning of what has just been said, nodding, and repeating significant words, ...

Probing questions: "Could you say something more about that?", "Can you give a more detailed description of what happened?", "Do you have further examples"

Specifying questions: "What did you think then?" What did you actually do when you felt a mounting anxiety?", "How did you react?",...

Direct questions: "When you mention competition, do you then think of a business or a non -business competition?"

Indirect questions: 'How do you believe other people regard knowledge and knowledge transfer in business?"

Structuring questions: indicating when a theme is exhausted by breaking off long irrelevant answers: "I would now like to introduce another topic:..."

Silence: By allowing pauses the interviewees have ample time to associate and reflect and break the silence themselves. With significant information.

Interpreting questions: "You then mean that....?" "Is it correct that you feel that...?"Does the expression.... Cover what you have just expressed?"

Source: Kvale (1996, p 133-135)

Drawing together of these concepts allowed important theoretical considerations to be made in using qualitative interviews as a research technique. This study recognised qualitative interviews were a type of social interaction rather than simply a research method and this attitude gave access to the social reality of the interviewee when discussing personal interpretations of knowledge. The questions in this area were open-ended and deep and each of the participants were probed (Booth 1997), until they had nothing else to say about their experience of knowledge transfer in a business and personal context In this respect, verbal accounts varied according to whom the participants perceived they were giving their account to, and presentation of moral worth, for example, sometimes took precedence over indicative texts and explanations.

Adopting the use of qualitative interviews allowed this researcher space to explore to the reasoning behind some of the answers expressed and the number of topics was limited to allow the interview to be guided by the responses of the participant. In this case a balance was struck so that this study allowed participants to express themselves in their own words and tell their own story, but this required considerable skill on the part of the researcher to interpret meaningfully. This is discusses in chapter in more detail.

4.2.6   *Data Analysis Considerations*

The question of epistemology for this thesis was guided by what this research wanted to find out about the data collected and how this research theorised meaning in respect to the data.

Thematic analysis from the perspective of this study was conducted within a constructionist framework. This was because, from a constructionist perspective, as in this thesis, meanings, experience and understanding are produced and reproduced, rather than totally inherent within individuals (Burr 1995). This view contrasts with a realist approach, in which one can theorise motivations, experience, and meaning in a straight-forward way, because a uni-directional relationship is assumed between meaning and experience and language (Widdicombe & Wooffitt 1995).

Because of the constructivist perspective adopted by this thesis, the study was able to avoid focus on motivation or individual psychologies as static pre-conceived ideas, but allowed data, relative to socio-cultural contexts and knowledge transfer conditions which support the individual accounts provided within the interviews to emerge. The process of analysis in this regard was informed by the Ritchie and Spencer data analysis framework

(1994, pp 20-244) which includes analytical steps of indexing or developing a thematic framework, aligning responses against themes and mapping and interpretation by making sense in terms of concepts, associations and so on.

From an observational perspective this meant that for this thesis codes were used as rules for organising themes into larger and more meaningful strings of themes. This process was an important consideration as this allowed the construction of a coding system, not simply because the coding system represents an exact structure of the process this research is studying, but because it also offered a framework for organising and thinking about the data more clearly. Importantly, codes were not pre-determined prior to actual observation. In this respect, the study was informed by DeMunck and Sobo (1998) who propose that coding be used to select information key enough to record.

From a qualitative interview perspective, Edwards (1993) maintains that at a minimum analysis requires a rigorous and thorough transcript which retains the information needed from the verbal account and in a way which is 'true' to its original nature. As informed by (Klochko 2008a) this meant that for this study, the thematic analysis was based on understanding of the self-development mechanisms of a person as an open and self-organising system and that any personal view or perspective may be aligned to cognitive capabilities and personal experience not derived from or decided by them.

Because of the complexity surrounding the variation of data, the data analysis considerations were only briefly described in this section, they are explained in more detail in the sections relevant to data analysis in phase 1 (Section 5.3) and in phase 2 (Section 5.6).

4.2.6.1 *Reliability of the data*

To understand the meaning of reliability and validity and how these meanings relate to this research, this section will present the various definitions of reliability and validity which informed the study.

For this study this research adopted the criteria proposed by Lincoln and Guba (1985) which was used to evaluate the trustworthiness of research work conducted within an constructivist paradigm, but it is worth pointing out that there is no universal agreement on the terminology used when assessing the quality of a qualitative enquiry. Lincoln and Guba (1985) proposed four criteria for evaluating interpretive research work: credibility, transferability, dependability, and confirmability.

To ensure the credibility of this research and appreciating the complex qualitative analysis used in the data collection stage, this research designed data collection strategies which were able to adequately solicit the representations, but also incorporated transparent processes for coding and drawing conclusions from the raw data. Transferability refers to the extent to which the working hypothesis can be applied to another context. In the case of this research it was not the intended task to provide a complete index of transferability of the data; rather, this research provided data sets and descriptions that are rich enough so that other researchers may be able to make judgements about the findings described in chapter 6 and 7.

Dependability for this research meant that the coherence of the internal research process was dependable by the way the study explained accounts for changing conditions surrounding method approach and data collection. For this research, dependability determined the consistency of the study processes by investigating the possibility of various theories relative to the research questioning and highlighted this process within the thesis. Conformability, in this respect refers to the extent to which the characteristics of the data, as posited by this study, can be confirmed by others who read or review the

research results. The technique this research used for establishing dependability and conformability was through continual audits of processes and findings.

Conformability determined the internal coherence of the research product and this consisted of the data, the findings, the interpretations, and the recommendations. For this thesis, this entailed reading and re-reading of the transcribed interview data, reviewing notes and updating and interpreting coding books until this research was satisfied that the themes and sub-themes could be categorised. This also means that the themes and sub themes changed over the duration of the data analysis.

The materials that this research used in these audits included raw data both recorded and transcribed, field notes, theoretical notes, coding manuals, process notes, diary notes and my own scribbling and memos for and at each location. Phase 1 stage of research collected 20 observations over 4 participant group locations and later a phase 2 stage of 20 participants, 37 semi structured interviews and over 1000 pages of transcribed text. Seale (1999) endorses this context of dependability with the concept of consistency or reliability in qualitative research. The consistency of this data was achieved when this research was satisfied that the steps of the research could be verified through examination of raw data, data reduction and process notes (Campbell 1996).

4.2.7   Reflexivity

Viewing the nature of knowledge as being socially contingent, reflexivity was considered to be a critical part of this study. In approaching data analysis from a critical discourse perspective, and borrowing ideas from critical ethnography, Carspecken (1996) and Geertz (1973), this research is conscious of bringing a value system to the analysis of data, as Finlay et. al. (2003, p 532) describes this sort of process as a *"...continual*

evaluation of subjective responses, inter-subjective dynamics with the research process itself".

This philosophy was an important guide for this research as this research found it necessary to critically examine interpreted meanings because the researchers past position and past experience shaped interpretations. A useful explanation was given by Alvesson and Skoldberg (2000) who maintain:

> *Reflection means thinking about the conditions for what one is doing, investigating the way in which the theoretical, cultural and political context of individual and intellectual involvement affects interaction with whatever is being researched, often in ways difficult to become conscious of.(p,254)*

This researchers reflection for this thesis in this sense is consistent with Wilkinson (1988) who suggested that reflexivity can be looked at from three dimensions, the personal, functional and disciplinary. From this view, personal reflexivity openly revealed interests, values and sources of connection to the research being undertaken and to the participants involved. Functional reflexivity was concerned with the usefulness of the chosen research methodology and the associated ontological and epistemological assumptions. Disciplinary reflexivity, importantly for this thesis, related to wider issues in the social sciences which were and should be considered when constructing a research paradigm.

4.2.7.1 Personal

Regarding my personal reflexivity, this researchers background in IT and human resource management helped this researcher to understand values and arguments which took centre stage in the context of knowledge transfer discussions within this participant group. This related to having attachments to subject, discipline, traditional ideas about

humanistic business concepts and higher education, and also being able to discuss management literature which is consistent with current theories and business methods or practices.

4.2.7.2 Functional

Regarding functional reflexivity this researcher attempted to be transparent in my reporting of the research process and assumptions as this researcher believes that any and all findings are constituents of a particular reality influenced by the subjective cognitive capacities of both the knowledge transfer practitioners and, of course, this researcher. This researcher was able to do this by relating back to notes and observations which were regularly referred to and updated throughout the research process.

4.2.7.3   Disciplinary

As a final thought on reflexivity for this research, I have to consider the insider, outsider situation of me as a researcher. This was important as this researcher did consider himself an 'insider' at the time of starting the research (Merton 1972, p15). In this respect this research was aware of the position described by Hammersley (1993) in believing that:

> *There are no overwhelming advantages to being an insider or an outsider.*
> *Each position has its advantages and disadvantages, though these will take on*
> *slightly different weights depending on the particular circumstances and*
> *purposes of the research.(p, 219)*

This research was also aware of Denzins (2002) notion of interpretation as a double hermeneutic cycle of interpretation which needed a third part to be added to the interpretive cycle.

This researcher was also mindful of what Anderson and Jones (2000, p 430) have called "the unique epistemological, methodological, political and ethical dilemmas" facing people in my position, meaning the 'insider position'. Since this researcher had over 20 years' experience with some of the participants this was a particularly important position to consider. Understanding of this ensured that the researcher did allow any taken-for-granted understandings of the participants to cause him to confuse strangeness with unfamiliarity, through any of the interactions with the participant group

4.2.8   Ethical Conduct of the Research

Ethical approval for this research was obtained from the Edinburgh Napier University Research Ethics Committee in 2009. Ethical considerations raised by this research were concerned with obtaining informed consent and maintaining participant confidentiality. Informed consent for this research is defined by Sim (1986) as:

> *'the voluntary and revocable agreement of a competent individual to participate in research procedure, based on an adequate understanding of its nature, purpose, and implications'. (p   584).*

Informed consent in this respect may be broken down into four constituent elements: disclosure (providing adequate information), comprehension (understanding of information), competence (ability of participants to make a rational decision), and voluntariness (no coercion) (Sim 1998).

All participants were given the opportunity to ask any questions about the research, and were aware that they could withdraw from this research at any time without negative consequences. Consent was obtained from each participant prior to commencement of data collection.

4.3   Chapter 4: CONCLUSION

This chapter focused on developing a research design and direction by incorporating parameters surrounding knowledge and knowledge transfer from contextual alignments defined in the research questions. While an exhaustive discussion of the differences and implications of epistemological stances is beyond the scope of this thesis, it was useful to outline the salient aspects of these epistemologies. Data collection methods considered intensive deep probing rather than superficial knowledge transfer skills as an important facet. Similarly, this chapter highlighted flexibility, which allowed varied use of methods for data collection, which needed to be inductive to help understand how the Muslim business community utilised standard business models and tools and also intuitive in discerning the capability to interpret personal interpretations of the events.

Because of this, the conceptual foundations of qualitative research in this study were shaped by the philosophy of knowledge informed by chapters 2 and 3. This chapter was then able to explain that this research is based on philosophical assumptions about what is real (ontology) for the participant group and how we came to know (epistemology) this. In this respect, this research is underpinned by a subjectivist ontology and a subjectivist epistemology, which means this study was able to understand that knowledge transfer practitioners can create their own subjective realities and because of this, there is an interrelated and interdependent association between the interviewer and interviewee. In this respect, conceptual dimensions of qualitative research reflected these philosophical assumptions and created the distinctive nature of this research. This chapter defined these aspects as twofold. First, it connected the theory of research to the practice of this research and revealed the limits of truth claims in terms of personal perspective. Second,

discussions emphasised the necessity of remaining epistemologically consistent within the sphere of constructivism.

In supporting a paradigm for this research design this chapter was able to establish that this constructionist research placed all meanings, scientific and non-scientific on an equal basis, they are all constructions or reality from a personal perspective, none of which can be objective or generalisable.

5 DATA COLLECTION and ANALYSIS

5.1 INTRODUCTION:

Due to the complex nature of the phenomena under investigation, this chapter will explain how the data collection was developed as a two phase process and further discuss the structure definitions and difficulties encountered during the two stages of data collection. This chapter will split into phase 1 and phase 2 field work sections.

Section 5.2 explains the data collection carried out in phase 1 of the research and explains techniques surrounding participant observation. This section explains in detail the itinerary used for the observations and the protocols this research used as guidance. Section 5.3 discusses the data analysis used on the data collected and section 5.4 brings the section to a summary of events. Because of problems encountered from phase 1 this summary section is necessary to introduce the concepts for phase 2 of the study.

Section 5.6 discusses and explains phase 2 of the data collection and follows a similar format to the previous data collection phase in terms of format and structure in that both the itinerary and data collection techniques are explained. The data analysis section of phase 2 (5.7) is detailed in its descriptive text, as this section discusses interview transcription and interpretation, thematic analysis and relationship clustering of the data. These detailed section are drawn together in a summary (Section 5.8). Section 5.9 draws together the key points from both phase 1 and phase 2 of the study.

5.2   PHASE 1

This section will explain and discuss the data collection techniques used for phase 1 and follows on from the discussion surrounding participant observations from the previous chapter. This section will also include a further discussion surrounding data analysis techniques but in direct relevance to phase 1.

5.2.1   Overview

Phase 1 of the study incorporated differing locations discussed in the previous chapter and allowed the flow of knowledge to be observed first hand, from a source to a recipient via intermediary knowledge transfer points. The data collection method needed to be intensive, to help probe deeply rather than superficially, into how knowledge transfer practitioners were using knowledge transfer skills in their own environment. It also needed to be flexible to allow a varied use of methods for data collection and it needed to be inductive to help understand how the Muslim business community utilised standard business models and tools.

As discussed in the previous chapter, these objectives led to the suitability and choice of participant observation as the primary research method for phase 1.

5.3   COLLECTION and ANALYSIS

5.3.1   Itinerary

All observations were conducted within the following criteria: Continuously observe what happens during the working day to a maximum of 2 people who work in the same location over a period of approximately 3 - 6 hours. Observation at 15-minute intervals.

For each person being observed record their state of being, engagement, and interaction with people in close proximity. Key points of observation regarding knowledge understanding, knowledge transfer, development of communicative experiences were highlighted in the field diary and observation sheets. Completed data sheets for individual observations given correlation numbers to indicate location, date, time, participant which allowed for cross referencing with field diaries, an example of which can be seen in appendix (9.2 and 9.3)

Participant observation data collection followed the itinerary described in the next table. Over the four observation sites there was a total of 32 diary pages collected and 9 unscheduled interviews conducted. The start date for the observations was December 1st 2010, continuing to December 23rd and incorporated 20 Observation Days.

Table 5.2: Itinerary detail

	Day	Date	Observation Notes	OBSERVATION LOCATION	UNSHEDULED INTERVIEW:	INTERVIEW TIME	Observation time	% of interview time to Observation Time	
		*Participant observation SUMMARY Dec 1_2010 to Dec 23_2010*							
					Y/N	Min	Min		
	Wed	01/12/2010	2	MOSQUE	Y	30	70	43%	
	Thu	02/12/2010	1	MOSQUE	N	0	66	0%	
	Sat	04/12/2010	1	MOSQUE	N	0	74	0%	
	Mon	06/12/2010	3	MOSQUE	Y	27	81	33%	
	Tue	07/12/2010	1	MOSQUE	N	0	89	0%	
	Wed	08/12/2010	2	MOSQUE	Y	23	54	43%	
		6	*10*	*Location 1*	*4*	*80*	*434*	*18%*	
	Thu	09/12/2010	4	MCS OFFICE	N	36	86	42%	
	Sat	11/12/2010	4	MCS OFFICE	Y	0	67	0%	
	Mon	13/12/2010	2	MCS OFFICE	N	0	76	0%	
	Tue	14/12/2010	4	MCS OFFICE	Y	22	51	43%	
		4	*14*	*Location 2*	*2*	*58*	*280*	*21%*	

Wed	15/12/2010	3	LARGE RETAIL OUTLET	Y	16	71	
Thu	16/12/2010	2	LARGE RETAIL OUTLET	Y	15	51	
Sat	18/12/2010	1	LARGE RETAIL OUTLET	N	0	47	
	3	*5*	*Location 3*	*2*	*53*	*169*	*31%*
Mon	20/12/2010	3	SMALL RETAIL OUTLET	Y	8	59	
	1	*3*	*Location 4*	*1*	*8*	*59*	*14%*
		TOTAL	LOCATIONS USED	TOTAL INTERVIEWS	Total Mins	Total Mins	
		32	**4**	**9**	**199**	**942**	
		TOTAL					
	Interviews	_9_					
	Observations	_14_					
	Interview time (Mins)	_199_					
	Observation Time(Mins)	_942_					

5.3.1.1   Structure

A convenient date was arranged with each participant for this researcher to observe the participant group carrying out their normal work tasks for the majority of a working day. Participants were asked to choose a day where they could be observed dealing with customers and interacting with managers and colleagues, with no more than one staff or team meeting during the day. This previously discussed criterion was stipulated to maximise time spent with the participant observing interactions and actual knowledge transfer practices with participants. During the observation, I acted as an observer and also tried to participate in some activities undertaken by the participant. this research made every attempt to minimise any inconvenience associated with my presence.

Observation was used in this respect to access the phenomenon of knowledge being communicated in a business environment and to observe interactions and possible influences on the knowledge transfer practitioners. If any informal interviews occurred

during this process then the topical area would be related to business. The participant would not be asked to justify any of his actions or decisions noted in the observations, but may be asked to clarify any decisions made.

Feedback or prompting on observed behaviours served to prompt recall and awareness of thinking, and enable practitioners to express their reasoning, reflect upon it, and explain the rationale for it.

I became actively involved in the day to day business of all four locations of observation at the request of the participant group.

Mosque: *My Participation role, Honorary consultant to the trustees group. Sit on committee interact with committee members and mosque attendees*

M.C.S: *My Participation role, Honorary Director. Work in the office assisting with the administration*

Outlet1:   *My Participation role, Member of staff. Working in the stock room/customer service*

Outlet2:   *My Participation role, Member of staff. Working in the shop serving customers/ stocking up shelves*

I agreed to this because the importance of participant observation in addition to other data collection methods is that much of the thinking involved in knowledge transfer practitioners occurs at a rapid and subconscious level. In this respect, Tufte and Mefalopulos (2009) underline the importance of uncovering the multiple layers of meaning that may be discovered in the participatory process.

5.3.2 Protocols

This sub section will explain in details the protocols within the observational framework which support the recording and encoding of the observations.

5.3.2.1   Notes

Three types of field notes were used during the research process, these were the transcript file, personal file, and analytical file (Minichiello, Aroni, Timewell, and Alexander 1995) (Appendix 9.2). The transcript file contained raw data from any unscheduled and ad hoch interviews (Appendix 9.3). The personal file contained a detailed chronological account of the participants and their settings, other people present and reflective notes on the research experience and methodological issues (Appendix 9.5). The information contained in the personal file enabled reconstruction of conversations in context rather than simply relying on a-contextual verbal recording. Specifically, any observable evidence of participants' reasoning and strategies that they used to communicate their reasoning to customers and colleagues were recorded. The analytical file contained a detailed examination of the ideas that emerged in relation to the research questions as the research progressed. It also contained reflections and insights related to the questions that influenced its direction. It was an excellent means of prompting and recording reflexive enquiry through unscheduled interviews.

DeMunck and Sobo (1998) advocate using two notebooks for keeping field notes, one with questions to be answered, the other with more personal observations that may not fit the topics covered in the first notebook. This was done to try and alleviate the clutter of extraneous information that occurred. Field notes in the first notebook (personal file) included jottings, maps, diagrams, interview notes but not transcripts and observations. In the second notebook (analytical file), were kept memos, casual "mullings, questions, comments, quirky notes, and diary type entries" (DeMunck and Sobo 1998). This way it was easy to find information in the notes by indexing and cross-referencing from both notebooks by noting such information as "conflicts, gender, jokes, religion, marriage, activities, business relationships, personal relationships," (DeMunck and Sobo 1998).

Each days notes were then summarised and indexed by notebook, page number, and a short identifying description and this research then used the following project outline to encompass note taking.

- *Describe activities in the order in which they occur,*
- *Provide descriptions without inferring meaning,*
- *Include relevant background information to situate the event,*
- *Separate ones own thoughts and assumptions from what one actually observes,*
- *Record the date, time, place, on each set of notes.*
- *Use exact quotes when possible,*
- *Use pseudonyms to protect participant confidentiality*

5.3.2.2   Observations

The phenomenon this research is investigating, knowledge transfer, involved participants in discussion-based tasks in which they have a vested interest. This is too complex a scenario to be constructed and measured experimentally (Billett 1996). Since this research is concerned with how participants view knowledge and how social interaction affect this knowledge being transferred, this research needed to interpret rather than measure the variables involved. Billett (1996). explains that experiences and connections appear constantly during social interaction and this formed the core of the observational positioning of this research.

Observation was also important to gain an understanding of the work setting, to note non practitioners interacting with the participants and to observe the extent to which participants used behavioural strategies in relation to knowledge transfer practices. These observations were used both to prompt reflections by the participants on their current and past experiences and to provide points of reference for interpretation of the data collected. This will also enable individual perceptions and interpretations of knowledge to be readily identified and highlighted. This is an important concept for this study, since the research questions consider cognitive interpretation to have attributed characteristics both

explicit and tacit. Observations were a vital data collection tool for this research, generating details, information and general impressions that were invaluable for later analysis.

Looking at the knowledge transfer participants through observation, it was possible to view how participants may choose to define an experience of a transfer. This is important because, from a participants point of view, they may be influenced from a perspective point, which may be different from where the knowledge originated from. This is because a perception of knowledge could be made up of a large extent of codification mechanism or a large extent of personalisation mechanism, or a mixture of both. From an observational point of view, there were two ends of an intersecting interpretation of the transfer of knowledge on a single continuum of tacit and explicit knowledge. This observation point allowed this researcher to view interaction happening, and interpretations and themes were drawn from it (Crotty 1998).

These observational positions over the four participant areas collected data relevant to the interaction of knowledge, knowledge value and knowledge perspective by observing meanings individuals associate with knowledge and knowledge transfer phenomena in a business context.

5.3.3 Data analysis

Since there were two phases of data collection, the analysis of the data will also take place over two phases and at the four locations discussed in the main text. This section will discuss phase 1 only.

5.3.3.1   Coding

DeMunck and Sobo (1998) suggest that coding can be used to select and emphasise information that is important enough to record, enabling the researcher to weed out extraneous information and focus his or her observations on the type of information needed for the study. For this thesis codes were used as rules for organising data clusters into larger and more meaningful strings of themes (Appendix 9.10). For this researcher this process was important to construct a coding system, not simply because the coding system represents an exact structure of the process this research studied, but because it also offered this researcher a framework for organising and thinking about the data more clearly as codes were not predetermined prior to actual observation.

Codes emerged naturally from observing the daily routines of the participants. Thus, the same activity codes and categories did not necessarily apply to all participants and was a lengthy and very detailed process. The daily codes overlapped in some cases but the final set of codes essentially had these meanings as shown in the following table.

Table 5.2: Participant observation codes

CODE	*MEANING*
-1	Unscheduled meeting or informal discussions
-2	Business related interaction/Problem solving
-3	Knowledge Transfer relationships
-4	Personal Reflection
-5	Knowledge transfer by social action
-6	Knowledge interpretation and understanding

In most cases, this tentative code was assigned alongside the recording of the observation or ad hoch interview which could be linked in some way, this was mainly to help in preliminary organisation of the data. After each workday, the data was tidied up and codes that were more appropriate were given, where necessary. An example of the code in use from a constructed diary page can be seen in Appendix(9.6)

5.3.4   Key Observations

Location 1:   Mosque.

As discussed in the research design in chapter 4, this participant area is a central point for interaction for the participant group was an excellent source of data. The insight regarding the significance of religion to every aspect of life and experience surrounding this area was very clear.

Key Observations:

- Interaction with key participants was difficult due to the intense busy nature of their daily routine.

- Note taking at any time met with discontent, even though they agreed to this research.

- When the most senior member of the group was around participation centred around pacifying his requirements and requests and did not seem natural.

- On more than one occasion I was given a Quran and asked to read it as it had " all the answers"

- Very formal and intense

- I did make excellent contacts for further research interview opportunities.

- Everyone seemed interested in the research.

- Unlimited access to their Library

Data Collected:

14 Diary pages. 2 participant/ semi structured interviews.

Location 2:   Multi-cultural society office

As described in the research design section, this area allowed for excellent observational possibilities regarding the interaction between the participant group . This office employed approximately 10 people and was actively involved in helping start-up businesses and organisations with both financial and non-financial support.

Key Observations:

- Interaction with key participants was difficult due to the intense busy nature of their daily routine.

- Most of the interaction seemed to surround asking the key participant for instruction, but didn't get an opportunity to investigate in detail the whole scenario.

- Daily problems punctuated every possible moment of observations

- Interactive note taking almost impossible

- Excellent opportunities exist for follow up interviews

- Key participant is a keen driver for this research

- Use of office space if required.

Data Collected:

10 Diary pages. 4 participant/ semi structured interviews

Location 3:   Large retail outlet

As indicated in the research planning, this area was supposed to allow this researcher the chance to see how information and knowledge from the two previous locations was used and acted upon in terms of business contexts. The actual reality was a complete chaotic world of person centred perspectives relating to customer interaction and very little else.

Key Observations:

- Interaction with key participants was difficult due to the intense busy nature of their daily routine.

- Participants always tried to answer in a positive way.

- Always related difficult questions to someone senior.

- Did not like to risk anything.

- Opines were stifled.

- Open discussions were difficult

- All participants were keen to help and allow me to interact with them.

- Every person appeared overworked to a degree which seemed almost illegal.

- Excellent opportunities exist for follow up interviews.

- Absolute chaos and easily the worst location for data gathering.

Data Collected:

5 Diary pages. 2   participant/ semi structured interviews

Location 4:   Small retail outlet

As indicated in location 3, this area allowed this researcher to see how information and knowledge from the two previous location was used and acted upon in terms of business contexts. It was very interesting to observe. The interaction was fairly easy to understand given my time at the other locations.

Key Observations:

Not enough time to properly interact with the key participants.

No one seemed interested in discussing daily business practices.

Difficult small cramped surroundings.

Allowed me to participate freely.

Discussions surrounded low income and poor living standards.

Low proportion of knowledge transfer techniques being observed

Most interaction was done with part time staff with very, very poor English

Excellent opportunities exist for follow up interviews

Data Collected:

3 Diary pages. 1 participant/ semi-structured interviews

5.4   SUMMARY of phase 1

The participant group, which was drawn from four locations within the City of Edinburgh, was made up of members of the local Muslim business community. The participant group members were also drawn from differing hierarchical levels of business involvement, ranging from shop floor staff to business owners.

Interpreting the data from in Phase 1 was made especially difficult, specifically because many answers seemed to lead back to reference to the Quran and had nothing to do with business at all. This research was unable to clearly identify if this was directly related to my interview techniques or if this was direct experience regarding previous business interactions by the interviewee. Phase 1 data collection and interpretation was problematic as this research discovered. For this researcher it was easy to assume a simple explanation of how the observations would work. Knowledge truth is an ontic notion and knowledge justification an epistemic notion and this research assumed (incorrectly) that this position would be easy to identify in relation to knowledge transfer in my observation notes and interpretations.

The analysis of the findings from phase 1 indicated two things, either: the participants had a differing understanding as to the concept of knowledge transfer or my understanding of their answers surrounding the interpretation of knowledge transfer was wrong. This research had no idea that the basic understanding of knowledge would cause so much confusion either for this researcher or the participant group Phase 1 did not give this researcher a clear understanding regarding recognised associations between standard business management models, practices, philosophical or political epistemological positions regarding knowledge value or knowledge creation. This research could not

really determine if this was because this research was confusing the group or if I, as an interviewer simply could not understand them properly.

From the summary observations, particularly from the mosque and the multi-cultural society office, it was unclear if epistemological legitimacy indicated that interpretations of perspectives surrounding knowledge transfer are subjected to analytical unanimity as this research expected them to be. None of the observations suggested that the participants experience and encounter experience have cogency over knowledge transfer experience, even if their experience is epistemologically legitimate or not. This research could not identify if this personal perspective contributes to successful knowledge transfer or has any meaning related to business models or theory.

Because of interpretive problems from the researchers original position as an observer, emergent patterns and general trends in the empirical evidence did not materialise, or at least this research could not easily see them. As discussed previously, this research assumed it would be relatively easy to spot any knowledge transfer scenarios in action and interpret either through observation or ad hock interviews, the actions and interaction of the participants relating to the phenomena and to my research question. Unfortunately the answers and observations did not seem to be anything to do with my research questions so some sort of misunderstanding was happening.

What was clear from the observational findings was that the multi-dimensionality of social interaction for this participant group is broken up into ideological, ritual, experiential, intellectual and consequential individual aspects. This position shows that the participants do intertwine daily work schedules and routines although not as this research had anticipated, in the context of a standard business models. In some of the observations, when reviewing the diary notes pertaining to the experiential position of the knowledge transfer practitioners, there were actually some interpretations from a

business context in relation to blame and blame culture. From the literature reviewed, understanding of contextual constants which relate to knowledge transfer in a business context are required for knowledge to be constructed, made ready for transfer and are integral to the transfer process. However, the participant group did not follow this logic when organising themselves to begin transferring knowledge as this research is interpreting it first- hand. Time and time again this research was surprised to hear that this or that scenario had been decided because someone knew the answer, however this research did not see any evidence of interpretive dialogue or debate or how the answer was legitimised. Therefore, it was unclear to this researcher where the 'knowledge' came from.

This was very apparent when observing at the location of the mosque, this research found it difficult to confine even contemporaneous note-taking to simple data recording, since the continuous action of noting the physical position of the participants and how they placed themselves, sometimes contradicted what this research had already noted from other observations and unscheduled interviews. In that, some observations showed that there would be an encircling of an outsider (me) to find out what this research wanted. Or it could be that there was no interest in this researcher at all as in the large retail outlet. It also made this researcher aware of their perception of me as researcher, sometimes occupying a 'higher status' position.

For example, this research may not have noticed the significance of the placing of the seating arrangement in the multi- cultural office, had I not consciously set out to observe and record the scene like a film director would. Had I not read over my prior dual notes from the mosque, and made an informed guesstimate about this, this research probably would not have tried to interpret changes in the group which began to occur in the relationship between the participants and myself during the process of observing. In this

case this research has to conclude that this researcher was becoming somewhat unaware of important behaviours which should have been significant to record , in this regard, this researcher became too familiar with the surroundings and the participants.

After reviewing phase 1 data, it remained unclear if the problematic points encountered with the participant group and understanding of the answers given are mutually exclusive to each other in relation to knowledge transfer. This research could not interpret any of these observations in relation to knowledge transfer in a business context and so it was becoming somewhat confusing trying to discern an observation in that context. Observations did show the flow of information surrounding positive aspects of personal experiential dimensions of religion, although many participants did not or could not engage with reciprocate interaction with this researcher during the observation periods when this research asked about this personal opinion in terms of relationships to business practices.

Active participant observation appears not to be the best method for the data collection in this case. In this research, this method caused this researcher to try and follow different trends as they happened rather than stick to or re-affirm overall aims and objectives relating to the research structure. This dichotomy proved ultimately confusing for this researcher from his own personal perspective, since this researcher had assumed that his grasp of the phenomena, based on and incorporating historical business practice/understanding and knowledge of the participant group was fairly comprehensive. All in all this approach proved too confusing to gather data from, and as a result, this research decided to stop the participant observation after 20 days and try a different approach. Phase 1 did allow reflection on the methods of data collection the research had started with and proved useful in determining modification to the research design. This

situation allowed the study to rethink a position from which to pursue the direction of research and this reflection successfully informed the second phase of research.

5.5   PHASE 2

This section will explain and discuss the data collection techniques used in phase 2 of the data collection, which were informed by the phase 1 part of the data collection. The remainder of this section will explain the data analysis methods used in phase 2 only.

5.5.1   Overview

Phase 1 showed that this researcher cannot simply assume knowledge understanding and justification is mutually understood in context by both the researcher and the participant group. What was needed to conduct more meaningful data collection was a way to increase this researchers sum of understanding of the participants interpretation of knowledge and not from fragmented opines. Phase 2 research direction was re-focused to find out and describe what is going on in terms of relationships to knowledge and knowledge transfer from the knowledge transfer practitioners perspective.

An interpretive lens was required to extract meaningful data in this respect, since it was important to understand structures of experience as they present themselves to individual consciousness, without recourse to theory, deduction or assumptions from other disciplines and other people.

5.6   COLLECTION and ANALYSIS

Because of the limitations found in phase 1, this research focused stage two on in-depth semi-structured interviews within an interpretive approach. This is because, this approach

allowed this researcher to think in terms of knowledge experience and interaction with knowledge transfer practitioners. This position now adopted by the study is informed by the literature review segmentation discussed in chapter 3, which established a relationship between identifiable categorisations of literature, which were:

Organisational: Knowledge transfer practitioners are bound by parameters which will in turn substantially influence any strategy, formulation, implementation of knowledge transfer practices.

Psychological: Human nature and behaviour in a business or organisational context is of an unpredictable and is interpreted in many different ways.

Philosophical: Knowledge transfer practitioners are aware of themselves as unique individuals and their relationship to other knowledge transfer practitioners, situations and experiences.

Cultural:: Knowledge transfer practitioners make deliberate choices regarding certain behaviour in certain situations involving both individuals and groups.

5.6.1 Itinerary

Dates of interviews were from April 1st 2011 to July 3rd 2011 with a total of 20 Participants. The data was collected over the four sites as previously done in phase 1. There was a total of 37 interviews, 1 interview with each participant lasting approximately 1 hour, initial interview/ 1 follow up interview where possible/allowed. The following tables show interview utilisation time (5.3) and the participation interview summary (5.4).

Table 5.3: Interview Utilisation time
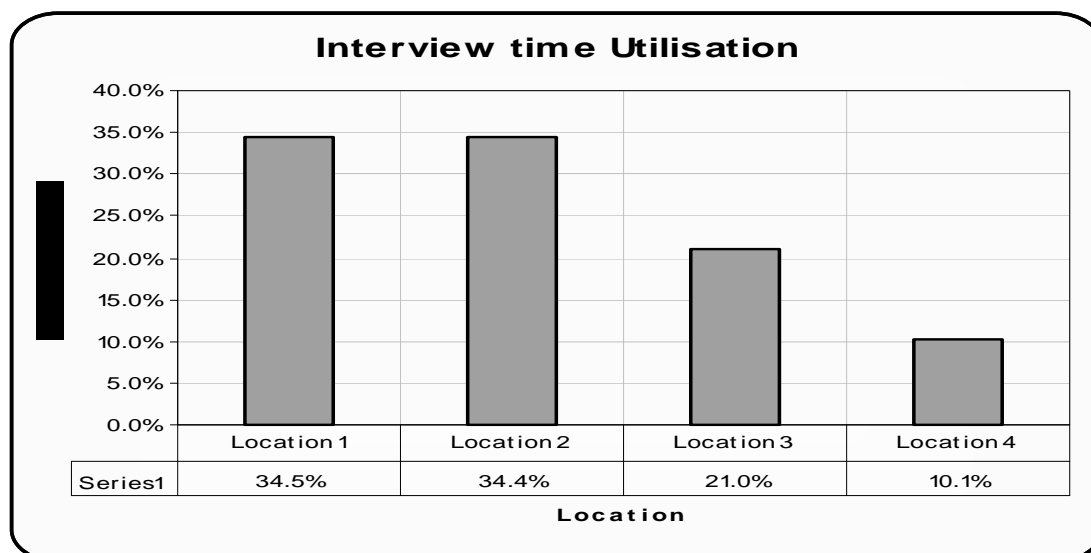
The following table (5.4) show the participation level for each area and each participant and gives an indicator of the length of the interview conducted and on which day the interview took place.

Table 5.4: Participant interview summary

	INTERVIEW PARTICIPATION SUMMARY April 1st 2011 to July 3rd 2011							
Day	Date	PARTICIPANT	INTERVIEW LOCATIONS First/Followup	INTERVIEW:	FOLLOWUP:	TOTAL	% of total Interview time	
				Min	*Min*	*Min*		
Fri	01/04/2011	A1	MOSQUE/Office	40	30	70		
Tue	12/04/2011	A2	MOSQUE/Hall	44	22	66		
Fri	22/04/2011	A3	MOSQUE/MOSQUE	56	18	74		
Thu	28/04/2011	A4	MOSQUE/Hall	54	27	81		
Fri	29/04/2011	A5	MOSQUE/House	53	36	89		
Tue	03/05/2011	A6	MOSQUE/Hall	47	23	70		
			12					
		6	**Location 1**	**294**	**156**	**450**	*34.5%*	
Wed	04/05/2011	B1	MOSQUE/Office	50	36	86		
Wed	11/05/2011	B2	MOSQUE/Office	44	23	67		
Tue	17/05/2011	B3	MOSQUE/MOSQUE	83	12	95		
Wed	18/05/2011	B4	MOSQUE/Hall	54	22	76		

Tue	24/05/2011	B5	MOSQUE/House	51	20	71		
Thu	26/05/2011	B6	MOSQUE/MOSQUE	39	14	53		
			12					
		6	**Location 2**	**321**	**127**	**448**	*34.4%*	
Tue	07/06/2011	C1	MOSQUE/MOSQUE	55	16	71		
Thu	09/06/2011	C2	Shop/House	36	15	51		
Tue	14/06/2011	C3	MOSQUE/MOSQUE	39	8	47		
Wed	15/06/2011	C4	Shop/Shop	61	4	65		
Thu	16/06/2011	C5	Shop/Shop	30	10	40		
			10					
		5	**Location 3**	**221**	**53**	**274**	*21.0%*	
Mon	20/06/2011	D1	Shop	59	N	59		
Wed	22/06/2011	D2	Shop	28	N	28		
Sat	23/07/2011	D3	Shop	45	N	45		
			3					
		3	**Location 4**	**132**	**0**	**132**	*10.1%*	
		Total Participants	No. Of Interviews	Sub total Mins	Sub total Mins	Total Mins		
		20	37	*968*	*336*	**1304**		
	TOTALS							
		Interviews	**37**					
		Participants	**20**					
		Interview time	**1304**					
		Interview Hours	**21.73**					

5.6.2   Transspective associations

Acknowledgement of this re-focused position is of fundamental significance for this research, as it aligned the substantive contexts, identified within the literature review and personal significance, discussed by (Klochko 2008a). Klochko argues that this personal significance is based on understanding the self-development mechanisms of a person as an open and self-organising system and in the case of this participant group supported the ability of the researcher to better understand personal perspectives.

In accepting this position, in relation to the broad research questions, phase 2 concentrated on the phenomenological integration from the participants point of view which form the layers of cultural, faith and belief systems. This allowed the identification

of coherent themes in relation to the main findings from the literature review. This then allowed the combined view of the literature related to any view of perspective to be aligned to cognitive capabilities and personal experience. In addition this research was then able to better understand the important associated social and organisational interaction between knowledge transfer practitioners.

Acknowledging this position helped overcome a fundamental obstacle for this researcher which manifested in phase 1 by delineating any natural knowledge interaction principles in his own mind by informing interpretation of any answer. In this way, understanding personal tendencies of the participants allowed the study to obtain data informed by a *transspective* approach or *transspective* analysis, described by Klochko (2005), in which he discusses self-organisation in psychological systems. In this way meanings of discussion appeared on their own and not as a result of any meaning forming activity of a person (Klochko 2005, p 83). This informed view allowed a direction of   intra-systemic and inter-systemic analysis to become meaningful/reasonable, since it allowed organisation of an interpretative sphere surrounding the participants view of knowledge and knowledge transfer practices and processes.

For this study, this meant that a knowledge transfer practitioners perspective towards the world and himself could be related to either an intentional attitude towards an object or subjectively induced by a concept or ideology. This is because, the adoption of the *Transspective Analysis Technique,* allowed the recognition of both conscious and spiritual manifestations of complex human interaction to be interpreted as data. Understanding of this view was important for interpretation as this helped establish if the participants points of views were of singular or multi-dimensional importance. This was critical within the data collection phases, as these in turn will begin affecting formal and informal interactions of real world applications from the knowledge transfer

practitioners. This means interview questions were individualised in such a way as to be put to the interviewee in relation to their personal understanding of knowledge, knowledge value, knowledge transfer and business practices, this approach was supported by Vygotsky's (1986) discussion surrounding the psychology of an individual regarding personal interpretations.

In relation to the phase 2 research design structure, this meant that there was no need to control the number of questions and there was no need to set a length to any answer. Each question was derived from the previous answer but interlinked with the next interview questions and also allowed interpretation in relation to the dynamic experience of the interview process. The derived question could be more/less objective/subjective depending on the participants personal position in terms of cognitive understanding. In this way, the research question interpretation focused down to a position of mutual understanding to avoid any ambiguity and further interview probes were then determined by the interviewees answer. Interviewees were questioned using non-leading, neutral language, and avoiding jargon and double-barrelled questions.

When the interviewee made an interesting or ambiguous comment, "probe" questions were used to encourage the practitioner to expand on their answer. This allowed the questions to follow the direction of underlying participatory context of knowledge and the real life sectoral transfer mechanisms that they generate. Answers encompassed dynamic basic needs of social hierarchical regimes which allowed knowledge transfer scenarios to be realised and presented as real life experiential interpretations relating to knowledge transfer. This in turn highlighted any apparent diversifications as complementary perspectives of any knowledge transfer scenario. This combined approach allowed the gathering of deep and thick data for all questions and did not rely on

the interviewers personal experiences of the knowledge transfer practitioners for interview direction and probing.

5.6.3   Data analysis

The objective of the research direction in phase 2 was to develop an understanding of knowledge from the participants perspective and how this understanding related to knowledge transfer in a business context. The core of the analysis centred around thematisising of the interview transcripts. In a business environment this would allow alternative and innovative ways to understand topics discussed in the interview from a social and cognitive perspective such as memory, learning and personal attitude (Vygotsky 1997).

From Vygotsky's position, this thesis adopts Potters (2005) explanation, in that, when peoples views on a topic or issue are examined, full account should be taken of the context in which they express their views. In this respect, my qualitative methods of data collection enabled people to speak relatively freely and in unrestricted ways about their personal views. Potter (2005) asserts that people usually vary in their views rather than differentiation between attitude. Similarly this thesis is also informed by Vygotsky's work surrounding the *'Zone of proximal development'* and intersect with potters description in this respect. This is an important consideration, as this thesis is interested in several aspects of cognitive behaviour which are principal to knowledge transfer. Knowledge transfer practitioners will inevitably interact to discuss and interpret various aspects of the transfer experience.

For this thesis it was important to be able to establish the difference between knowledge transfer interactions informed by personal experience and those which are informed by symptoms of personal behaviour.

5.6.3.1 Transcription

Various conventions exist for transforming spoken texts into written texts (Edwards & Lampert 1993; Lapadat & Lindsay 1999). However, thematic analysis, even constructionist thematic analysis, does not require the same level of detail in the transcript as conversation, discourse or even narrative analysis, as there is no one single way to conduct thematic analysis and there is no one set of guidelines to follow when producing a transcript. Data, which consisted of over 1000 pages of transcripts, was analysed through three main stages. The first stage involved transcription from audio tape to a textual document.

As stated by Ochs (1979) *'transcription is theory',* this research transcribed interviews as they were carried out, creating data items as concepts and developed sub themes from this. From the first few interviews it was clear that the concept of knowledge and knowledge transfer is understood to have important meanings to this participant group. As the number of transcripts multiplied, some second-order concepts solidified and new themes led to the categorisation and clustering of additional themes. This process was consistent with Silvermans *'constant comparative method'* (Silverman 2000, p 179) in which a sample of responses is read, points of similarity and difference noted, categories generated against which to test new responses, and new categories generated.

5.6.3.2 Interpretation

Methods for analysing and interpreting qualitative interviews vary widely. Relevant to this research, Kvale (1996) describes analysis methods that include:-meaning condensation, meaning categorisation, narrative structuring and meaning interpretation. The use of semi structured questions in the interview protocol and the emphasis on interpretation with the interviewee helped this researcher identify two dimensions of

phenomenological interview: a confidence to engage and an object dimension to allow the interview to have some tangible and common sense construct. Within this framework, it is also useful for this researcher to use an underlining Kantian tradition, which is to 'bracket' preconceptions. For this research, the key to this enquiry process is an understanding of a cognitive interpretation problem. This problem was identified by building a complex holistic picture formed with observations and interviews.

5.6.3.3 *Thematic*

Themes or patterns within data can be identified in one of two primary ways in thematic analysis: in an inductive or 'bottom up' way (Frith & Gleeson 2004), or in a theoretical or deductive or *'top down'* way (Hayes 1997). Consideration for the inductive approach adopted by this thesis are discussed in detail next. The clustered categories in this thesis were aligned to an open/generalised coding in which all interviews were linked to the broad literature cognitive segmentation as noted in chapter 4. Importantly for this thesis, considering the aforementioned texts and discussions and adopting a dialectic methodological approach to data collection allowed an overall picture of both the knowledge transfer arena and the individuals philosophical interpretations of the transfer encompassed within a business context to be easily thematisised.

I found this stage useful as it presented this researcher with chunks of the same data in concentrated form and gave this researcher a greater sense of the 'bulk' and range of responses related to selected questions. This was in effect a re-ordering of data from being vertical (by respondents) into being horizontal (by question across all respondents). My second stage was to take dominant themes from the literature review and to analyse the data for language use and statements that this research considered a match for the themes. This stage in effect represented a third 'cut' of the data that was neither by respondent nor by question, but wholly by theme. In the third major stage of analysis this research looked

for patterns within themes that illustrated conflicting meaning and reflected difficulties amongst actors in establishing shared meanings. The inductive analysis was a process of coding the data without trying to fit it into a pre-existing coding frame, or the researchers analytic preconceptions. In this sense, this form of thematic analysis was data-driven but interpretive in nature.

5.6.3.4   Codes and themes

This coding phase then involved the production of initial codes from the data. These codes identify a feature of the data which will be latent in nature and refer to "the most basic segment, or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon" (Boyatzis 1998). In this research this was done by relating the themes to the cognitive segmentation of the literature discussed in chapter 3. This approach assisted in the process of bracketing preconceptions and helped this researcher focus on the world that is being described by the participant within the interviews.

- *Biographical Information*
- *Relationship to religion*
- *Awareness of knowledge value*
- *Job specifications*
- *Business understanding/success/competitive advantage*
- *Conscious decisions about knowledge*
- *Ontological position*
- *Epistemological position*
- *Intentions and conceptions regarding knowledge value and knowledge transfer*
- *Work in relation to ethics/religion*
- *Social interaction*
- *Family life*

Source: (Boyatzis, 1998, p63).

In this respect the study acknowledged work by Hsieh and Shannon (2005) who advised approaches to qualitative analysis, based on the degree of involvement of inductive

reasoning and was therefore particularly relevant to this study. The analysis considered 3 points in relation to this.

The first is conventional qualitative content analysis, in which coding categories were derived directly and inductively from the raw data. The second approach is directed analysis, in which initial coding starts with a theory or relevant research findings in which the researchers immerse themselves in the data and allow themes to emerge from the data. The purpose of this approach usually is to validate or extend a conceptual framework or theory. The third approach is summative analysis, which starts with the counting of words or manifest content, then extends the analysis to include latent meanings and themes.

Although informed by the previous two concepts, this third approach was used in this study and although it seems quantitative in the early stages, allowed the exploration of the usage of the words and indicators in an inductive manner. This allowed data to emerge and code tables to organise a thematic map were developed (See appendix 9.1 to 9.6).

For each individual theme, this research could identify the full information which each theme provided and ended up with a collection of main themes, and sub-themes, encompassing extracts of data which had been coded in relation to them. At this point it was also important to consider how this emergence of themes fitted with the broader research question and detailed questions and this ensured overlap between themes could be identified.

Sub-themes were also important to allow structure to be applied to a particularly large and complex theme and also for demonstrating the hierarchy of meaning between and within the data. Importantly for this research, the researcher was primarily looking for personal expressions of knowledge transfer perspectives.

5.6.3.5   Semantic or latent

A thematic analysis at a latent level transcended beyond any semantic content of the data, and started to identify the underlying ideas, assumptions, conceptualisations and ideologies which formed the content of the data. Analysis in this respect aligned with the constructionist paradigm prescribed by (Burr 1995) and discussed in the previous chapter. This constructivist alignment allowed phase 2 of this data collection process, to interpret the by searching across a data set which encompassed a number of different interviews, and this allowed repeated patterns of meaning to emerge. This study considered specific aspects and latent themes which were constructionist in nature, since the approach allowed the themes to cluster together. This approach made it easy to identify major themes by the degree to which they were closely associated in meaning and in relationship with other sub themes.

5.6.3.6   Data Clustering and Mapping

Cluster analysis (Macqueen et al. 2001) provided the ability to see the data in clearly defined clusters. This allowed for a quick and easy visual tool for interpretation. This analytical process was implemented by MacQueen et al. for a large, multisite qualitative study in which foci was applied using cluster analysis to determine thematic codes. Using an iterative process to determine domains of enquiry, data items were drawn into clusters and a structured codebook was developed (MacQueen et al. 1998).

This process allowed examination of final coded data using a construal code. Codes were then created for each domain of inquiry and provided a distinct context within which to analyse and interpret answers to interview questions. This structural coding identified key data items to be associated with participants' responses. A specific code was then

assigned to each data-driven item, individual text fragments were then coded for representative content.

This thesis was interested in determining the weight of each code for each respondent as an individual and also to be aware of the data item incidences and how they intertwined as a personal perspective across the full spectrum of interviews and locations.

The data item referred to here is a piece of text identified in the interview transcript, relative to each cluster underpinned by the literature from chapters 2 and 3 (appendix 9.10). Total items showed that this item was synthesised from the texts from all four sites and was relative to the total data collected by a percentage amount.

This was done to allow an amount of validation to be added to the themes which emerged and was used as an informative guide only.

The following table shows how the final data items were categorised into clusters following the incorporating relationships, relating back to the literature discussions in chapter 2 and 3. When the clusters emerged, main clusters were grouped into sub themes and given a suitable code.

The interpretation of clusters to sub-themes is shown in the next table 5.5.

Table: 5.5 Identification of data items into clusters of data items

Code (CODES)	Data Items	MOSQUE						MultiCulturalSociety						Large Retail Outlet					Small Retail Outlet		
1.10	24	7			4			2				5		4		1		1			
1.20	28		1		1		2				4	3	3		1	5		3		4	1
1.30	48	8		7		1	1		7	1		7			2		1	1	8		4
1.40	37	2	1	2		4	1	1	3		6	1		1		4	1	2	1	6	1
1.50	136	16	6	7	5	4	3	7	7	5	10	7	8	8	2	6	3	8	4	11	7
1.60	31	3	2		1	2		2	1		5			3	5	2		2		3	
1.70	78	5	5	7	8	2	3	6		4	3		2	7	6	4	3		2	6	5
1.80	24	3		1			1	3					4	3		4		5			
1.90	21			1							2		5	3		2		5		3	
	427	44	15	25	19	13	11	21	18	16	24	28	17	29	55	28	8	27	15	33	18
		39%	21%	35%	27%	17%	20%	27%	26%	20%	35%	41%	23%	40%	45%	44%	15%	36%	18%	45%	27%
2.10	41			6	1	1		4	1	2	1	6	1		4	1	2	6	2	1	2
2.20	24		1		1	2	1	2	3		4	1	2	1	1		1	1		3	
2.30	31	1		2	3		4	1	2	1	1		1	1	3		4		2		5
2.40	28	2	1	1		4	1	2	1	1	1		4	1	2		2	1	2	1	1
2.50	24		4	1	1	1	1		2		2	1	1		1		3		4		2
2.60	8	1		1										1	1		1		1	1	1
2.70	25		2							5		3	4	1	2	1	1	1		4	1
2.80	28		4		4	1	2	1	1	1		4	1	2		2	1	2	1	1	
2.90	161	12	9	8	9	9	8	9	4	12	4	3	12	8	21	3	3	6	11	5	5
	370	16	21	19	19	18	17	19	19	17	16	15	26	15	35	7	18	17	23	16	17
		14%	29%	27%	27%	24%	31%	25%	28%	21%	24%	22%	35%	21%	28%	11%	33%	23%	27%	22%	25%
3.10	6						1	1	2	1	1										
3.20	16		2	1								1	1	2			4	1	2	1	1
3.30	17	2			2	1	1	1		2		2	1	1				3			1
3.40	26			1		1	1	2	1	1			1	5		3	1	5		3	
3.50	146	22	16	6	5	11	4	3	7	12	9	4	6	4	2	5	5	3	5	6	11
3.60	29	1			2	2		5		3		1	1		4	3			4	3	
3.70	14	1				2	3		2		1			2	1	1	1				
3.80	19		2	3					1	3		2			1	1	2	1	1		2
3.90	20				1	5		3		4		4	3								
	293	26	20	11	10	22	10	15	13	26	13	14	12	14	8	13	13	13	12	13	15
		23%	27%	15%	14%	29%	18%	19%	19%	32%	19%	20%	16%	19%	7%	20%	24%	18%	14%	18%	22%
4.10	12		2										3	3	1				3		
4.20	52	6	2	3	5	4	1	2	7	1	5			2	2	4			8		
4.30	16		2		1	5		3			1	1				1		2			
4.40	30	2	1	1	2	1	1	1		2		2	1	1	5	2	1	1	5		1
4.50	32	2		3		4	1	2	1	1	1		4	1	2		4	1	1		4
4.60	29		2		5		3		4	1	2	1	1		1	1		3		4	1
4.70	27					2		5		3		4	1		1	2	1		5		3
4.80	170	18	8	9	10	6	11	9	7	12	5	3	8	11	9	5	7	9	12	8	3
4.90	16									2	1	1	1		2		2	1	1		5
	384	28	17	16	23	22	17	22	19	22	15	12	19	15	25	16	15	17	35	12	17
		25%	23%	23%	32%	29%	31%	29%	28%	27%	22%	17%	26%	21%	20%	25%	28%	23%	41%	16%	25%

The interpretation of the sub-themes from the data clustering allowed the emergence of constructed themes to become clear although was not an easy task (Appendix 9.11).

Table 5.6: Relationship of cluster to each sub theme.

Cluster Code	CLUSTERING OF DATA ITEMS	
Theme 1		
1.10	knowledge understanding	
1.20	knowledge transfer understanding	
1.30	knowledge Problems	
1.40	Knowledge Personal	
1.50	knowledge Religion	
1.60	Knowledge attitude	
1.70	knowledge awareness	
1.80	knowledge Business	
1.90	knowledge transfer	
Theme 2		
2.10	Business success understanding	
2.20	Business failure understanding	
2.30	Personal success understanding	
2.40	Personal Failure Understanding	
2.50	Business Success example	
2.60	Business Theory and Models	
2.70	Personal success example	
2.80	Personal failure example	
2.90	decision Based on Religion	
Theme 3		
3.1	Knowledge process/practice Understanding	
3.2	Knowledge process/practice Personal	
3.3	Knowledge process/practice Business	
3.4	Knowledge process/practice Social	
3.5	Knowledge process/practice Religion	
3.6	Knowledge process/practice Communication	
3.7	Knowledge process/practice Awareness	
3.8	Knowledge process/practice Acceptable	
3.9	Knowledge process/practice Not Acceptable	
Theme 4		
4.1	Business	
4.2	Personal	
4.3	Social	
4.4	Group	
4.5	Cultural	
4.6	work related	
4.7	non work related	
4.8	Religion	
4.9	Non Specific	

Detailed analysis of the cluster relationship from the interview transcript confirmed the significant sub-themes which make the biggest contribution to the main theme were personal perspectives of religion. This categorisation is informed by an interpretation of the data items which emerged related to the previous literature discussions and segmentation in chapter 3.

5.7   PHASE 2 SUMMARY

Utilising the information from phase 1 allowed a different approach to phase 2 which included a deeper understanding of cogitate interactive socio-cultural contexts and understandings.   Adopting this new positioning allowed the development of an interview framework which then allowed this researcher to interpret the ways in which this phenomenology is co-constructed by both myself and members of the participant group. Using this philosophy, it was possible to examine the integrations which form the layers of culture, faith and belief systems within the participant group from their own perspective, not my own. This position helped this researcher recognise the associated social and organisational knowledge transfer practices which contribute to the fundamentals of knowledge interpretation in relation to transfer mechanisms within an overarching business context.

In phase 2, the interview streams were much more organised and participants engaged much more freely and readily with my questioning. This may have been because this research was much more confident in the manner in which the interviews were conducted and recorded. The interpretivist paradigm approach which supported this allowed the understanding of the experience of participants, through interpretation of how participants use communication, language and ideological symbols related to knowledge

transfer practices within a normal working day. This ensured that the emphasis on the data collection was on making sense of what is happening in a knowledge transfer arena and what things affected it from the participants perspective. This ultimately helped this researcher interpret meaningfully what was being expressed in a subjectivist manner, in that, people experience and interpret knowledge in different personal ways.

5.8   Chapter 5: CONCLUSION

On the basis of the research questions, the identification of a focused research paradigm and data collection methods were identified. This allowed a two phase data collection process to take place. Phase 1of the study was based on an ethnographic data collection method of participant observation, which did not succeed as planned. Phase 1 aimed to observe the experiences, perceptions and views of relevant individuals with regard to the interaction of knowledge transfer in a business environment.

This involved participant observation and note taking. Although none of the research actually turned out the way that this research thought it would. In following through the phase 1 stage this research did understand that when selecting a research strategy, the nature of the perceived connection between theory and research implied by the research question and along with epistemological and ontological considerations, is influential in deciding the defining research path.

Phase 1 informed the strategic direction of phase 2. Phase two of the study centred around an interpretivist approach and focused much more on qualitative in depth interviews. This yielded a significant amount of good quality, rich and thick data. The data sets were thematically analysed and the themes identified were strongly linked to the participants

themselves (Patton 1990) and related to the segmentation of the literature discussed in

chapter 3.

6 DISCUSSION of EMERGENT THEMES AND TRANSCRIPTS

6.1 INTRODUCTION

The purpose of this chapter is to discuss the significant findings from the data collected. The chapter will begin with a discussion of the emergent clusters and thematic categories from the data shown in section 5.8. Following on from this elucidation, the chapter will then look through iterative examples of direct representative quotes from the interview transcripts and relate these to the discussions which informed the thematic categories. This will show how the main themes became prominent and how the emergent themes supported the research findings. The chapter will conclude with an overall summary of the main findings of the research which allows the main objectives for the study to be met.

6.2 EMERGENT THEMES

Because of the amount of data involved and to allow a better understanding of the findings from the interview content and context, a discussion of the emergent data clusters identified in the previous chapter (Section 5.8) is provided in this section.

6.2.1 Thematic Data

This data weighting identified social relationships and interactions within the participant group and the significance of each of the participant areas. This indicated perspective importance attached to the interview answers by the participants. Each of the interview transcripts had a percentage recorded to allow better understanding of the data item sets in

relation to the literature previously discussed and also the overall data clustering. This became a useful tool when trying to understand the depth of personal feeling attached to some of the answers from the participants, which this research was unable to understand at first reading of the interview transcripts.

6.2.2   Data Items

The data items referred to in this section which support the findings are pieces of text identified in the interview transcripts as relative to each cluster, informed by literature from chapters 2 and 3 and identified in tables 5.4 and 5.5 in the previous chapter.

The weighting identified are supported by the findings by representing the total interview transcript content, in relation to the data items and clustering discussed in the previous chapter. The following table indicates the data set weighting for each interview and each participant which helped inform and support the main findings.

For example, participant A1 recorded nearly 40% of his interview transcript in relation to the clustered theme of knowledge awareness in relation to a (Psychological) context, whilst clustered theme 2 (Organisational) accounted for less than 15%. Themes 3 (Philosophical) and 4 (Cultural) accounted for approximately 45% of the overall interview content.

Main theme 1   = (39%) of the sub themes

Main theme 2   = (14%) of the sub themes

Main theme 3   = (22%) of the sub themes

Main theme 4   = (24%) of the sub themes

Table 6.1 weighting of the clustered themes in relation to data items.
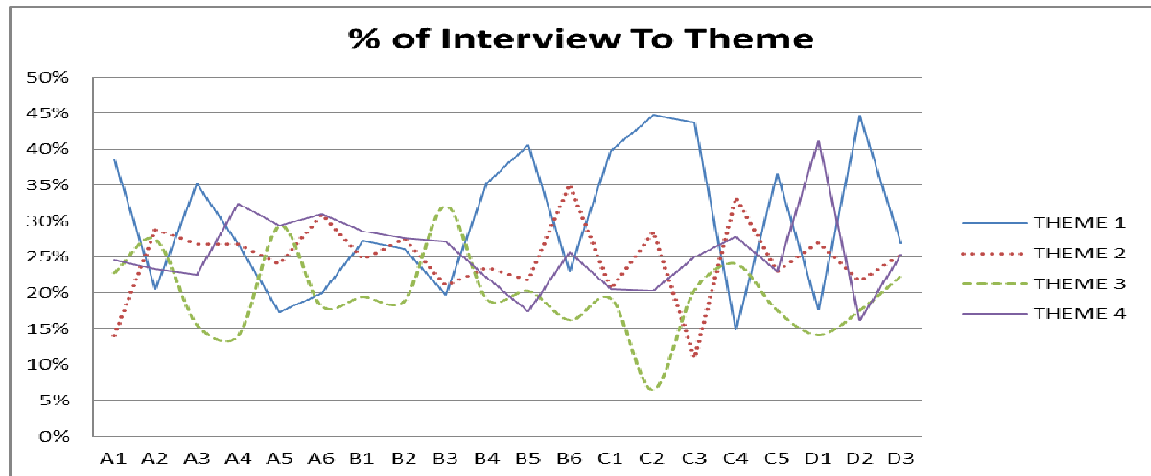
This position allowed for a better understanding of the significance participant demographics played in relation to main clustered themes. The contribution to each of the main clustered themes indicated for each participant a reflective perspective which contributed to the sub theme data set. This information was useful in interpreting some answers from the interview questions as this research could extract findings more accurately knowing that it was in the context of each theme and weighted appropriately.

6.2.3   Key Points.

This overall weighting indicated that a **P**sychological perspective attached to interpretive knowledge and knowledge transfer processes accounted for *(29%)* of the total recorded interview data and specified the highest percentage of all the main themes. **O**rganisational knowledge understanding also played an important role when it came to answering the interview questions and this is shown in the data which had *(25.1%)* of the total data related to it. The use of a Philosophical perspective attached to knowledge within daily business life was also important for the participants and this was shown as *(19.9%)* of the

total data. Data relating to knowledge transfer experiences interpreted through a **C**ultural lens recorded the second highest percentage *(26.1 %)* and showed that the relationship of knowledge and culture in a business context is important to this participant group .

6.2.4   Clusters

Clustered theme 1 indicated that sub code 1.5 related to *(9.2%)* of the total data items, against an average sub code position of *(3.2%)* giving it a percentage weight of *(6%).* This sub code supported the emergent findings in that, for this participant group, awareness of knowledge in relation to philosophical perspective, primarily came from a religious interpretation. This theme also indicated that to this group the awareness of any indifference to a personal position of knowledge became a matter of debate and that the debate centred around interpretation of knowledge not quality of its origin.

In clustered theme 2, sub theme 2.9 indicated *(10.9%)* of the total data recorded against a sub code average of *(2.8%)* giving it a percentage weight of *(8.1%).* This data weighting infers that the participant group understood the need for business development and the need to be successful from an organisational perspective. This also indicated that there was an awareness from a personal understanding that this kind of knowledge was necessary for participating in the Muslim business community effectively. Although the recognition of factors surrounding business development were known, weighting would suggest that it was reference to a religious position which became the main core of any business decision making process.

Clustered theme 3 highlighted the participant groups' daily interaction with knowledge transfer processes and practices from a personal philosophical perspective. Understandably perhaps, this was one of the most debated areas in terms of sub theme content and identification of clear codes was inherently difficult. The dissipation of sub

themes was more even in this cluster compared to the other cluster categories and could be explained by the acknowledgement of a philosophical alignment amongst the participants. As before the underlying sub theme was dominated by a religious reference and how the participants related their daily working practices from a religious reference in terms of governance and reflection from a philosophical stance. All of the participants noted a reference to their religious position when responding to their working practices and sub theme 3.5 accounted for *(9.9%)* of the total data recorded against a sub code average of *(2.2%)* giving a percentage weight of *(7.5%).*

Clustered theme 4 highlighted the understanding of knowledge from a cultural perspective. This clustered theme indicated that each of the participants had a general position in terms of their business experiences attributed to knowledge, and there was clear indication that it was influenced from a cultural perspective. The largest sub theme in this cluster was sub theme 4.8 and this indicated the largest weighting towards religion of *(11.5%)* in relation to a sub code average of *(2.9%)* with the highest percentage weight of *(8.6%).* In respect of decision making processes informed by cultural positions this clustered theme highlighted a similar importance.

6.2.5   *Relationship*

By looking at the clustered theme relationship to individual sub codes percentage weighting, the principle overarching weight to emerge was religion. In this respect, a total of 613 (*11.41 %)* of the 1474 data items identified this as a religious category from the total data, compared to a mean of *(2.8%)* for the other sub cluster categories. The emergence of this religious categorisation equated to *(32%)* of the total data for clustered theme 1 (*44 %)* of the total data for clustered theme 2 (*50%)* of the total data for clustered theme 3 and *(44 %)* of the total data for clustered theme 4.

This analysis allowed for a much deeper and informed view when interpreting symbolisms' and nuances from the transcripts which otherwise may have eluded this researcher.

6.3 TRANSCRIPT EXTRACTS

This section will discuss the interview transcripts in relation to the highlighted themes which emerged from the data. While the unstructured interview has much to commend it as a form of data gathering, the analysis of unstructured data caused some problems for this researcher. Although a number of methods of analysing unstructured textual were considered in the literature, ranging from the grounded theory approach advocated by Glaser and Strauss (1967) to the more impressionistic methods of presenting research findings (Jones 1985).

6.3.1 Approach

The thematic approach of analysing textual data adopted by this thesis was by breaking the text down into data units, developing a category system and grouping together individual perspectives into a similar sort of cluster. In these respects, this thesis aligned to a phenomenological analysis, described in the previous chapter (Kvale 1983). This was because each interview was different both in terms of structure and content, the resulting combining of ideas and perceptions needed to identify a theme was at times difficult. This chapter offers a reasoning of focusing on 'data units' described in the previous chapter as they were used as the basis of developing a category system which emerged from the analysis of interview transcripts. Data units of text were important

because this allowed the emergent clusters to become apparent from the interview transcripts.

The discussion surrounding the interview transcripts from the participant group in this chapter will highlight how the unstructured, qualitative data presented a challenge to the researcher and how emergent themes related to the literature examined in chapters 2 and 3 were identified from the transcripts.

6.3.2 Extracts

In this extract, participant A3 describes his interpretation of how useful the understanding of knowledge is to him and what it means from a personal experiential point of view.

> *I think that any business should be guided through your own ability. I don't think it is correct that you need to check up this or that book if you don't know how to do something. You need to use your own common sense sometimes or ask someone who knows better than you. Probably I would ask the Imam.*

(Participant: A3, Date: 22-04-11, duration 74 mins, Location: Mosque main area)

This view by participant A3 is an important indicator for personal interpretation of knowledge, as it highlighted a similarity to Thompson and Walsham (2004, p725–747) who state that knowledge is a subjective perspective of an individuals experience. The participant shows that in his opinion, validation of corrective practices to support business decisions may be needed but his view is preceded by a relationship to definitive doctrine (Quran) which is an objective position for him.

This position, held by this participant, negates the necessity of alternative sources of knowledge to fill any knowledge gaps or '*common sense' gaps* because, for this

participant, the interpretation of knowledge needed to fill any knowledge gaps is supported by the Imam, who for this participant gives justification to his sphere of knowledge understanding. This underpins a knowledge justification of both a source and a truth as the source and truth are interrelated between the Imam and the Quran.

This view is clear throughout the inter relationships between the knowledge transfer practitioners within the research and was highlighted by the emergence of a theme of personal knowledge awareness, specific to a business context overarched by the main category of religion. As a facilitator for knowledge transfer in a business context, the theme of knowledge awareness was similarly opined over the four areas of research and supported by sub themes from the emergent data clusters.

This participants view was relevant to current literature from several fundamental but not conclusive positions. In chapter 3 section 3.3.1, the *Personalisation* mechanism, described by Hansen et al. (1999) involves person-to-person interaction and this interaction happens in the form of personal knowledge. In respect of this participant it is easy to see why the main advantage of this personalisation mechanism developed in the discussion from Hansen et al. would be the ability to articulate non-codifiable knowledge and to enhance or learn knowledge understanding from it.

By stating that '*you need to use your own common sense*' indicated that this participant is fulfilling a role in deciding which knowledge content is appropriate for a specific problem and in this sense can be seen to have similarities to the discussion in chapters 2 & 3. Here knowledge that is highly tacit, is difficult for the sender to codify and communicate (Polanyi 1967; Nonaka and Tackeuchi 1995). Inkpen and Dinur (1998) suggests that people-to-people interaction can reduce communication problems and the substantive context of this extract is in line with this view from the literature in that respect.

However, in contrast to the literature, for this participant, explicit justification for a knowledge source did not depend on any empirical justification, it depended on the interpretation to a problem from the Imam with a solution of intent. In this regard, justification for the knowledge content is derived from and not implied by the teachings of Islam.

This relationship between religion and business awareness was similarly evident during the interview with participant C4 who expressed a very informed view of knowledge understanding in terms of his personal decision making processes. He expressed a view that his cognitive interpretations were uninformed by any theory or business model and required little in the way of justification thereof.

> *In terms of business, I mean that's going to be the same thing as my religion and basically I've certainly got an attitude to it…Its one of those, you know, you have to make the right decision for everyone involved and that included myself, it would be nothing to do with a view from some professor or a book about business. You can't learn how to do business from a book. If someone is a painter, they don't learn how to do it properly by reading about it, do they.*

> *….If you make a mistake in business one way or the other it can have very damaging consequences but I look at it that I can only do my best as I in the end I need only answer to Allah for my actions so I try to keep things right as best I can.*

(Participant: C4, Location: Large retail outlet)

For this participant, daily practices which could be identified in the Quran were the singular and most important point of his acknowledgement or justification of a linked between his personal understanding and his justifiable understanding of knowledge. This

awareness to personal knowledge expressed by this participant shares a similarity with Spinoza's view regarding personal awareness and relationships (See A Theological-Political Treatise 1670). From this view, discussed in chapter 2 section 2.2.2. Spinoza famously contended that "God" and "Nature" were the same reality, namely a singularity which underlies the universe and indicates a interpersonal relationship therein. This participants view could also align to both (Drucker 1993) and (Edvinsson 1997) who clarified the importance of knowledge interpretation and the significance of personal connections between logical determinates and logical connections of a self-world view and a real world view.

However, in a slight deviation, in the case of this participant the classification of truths of logic are expanded to include analytic truths ' *I need to answer to Allah for my actions'.* As justification for an action to replete a problem, this view is similar with Coakes and Sugden (2000) who describe knowledge as something which is known when information is placed in a particular context, in the case of this participant, this would be a business context and suggests that for him, his association to Allah for adjudication justifies any business actions. Coakes and Sugden (2000) argue that knowledge is often associated with a specific persons thoughts and actions and would also support this view.

A further example of personal understanding of daily practices related to personal perspective is explained from participant B5, who expressed an insight of knowledge understanding from a knowledge transfer practitioners perspective by stating that; *'a business can't run on its own'* and in this way is also related to a main thematic category of business understanding:

> **I don't think it's just a case of thinking how a business should be run. I don't think it is just be run to suit yourself its impossible. A business can't**

run on its own like that. You need all sorts of information to run it, but the way you run it depends on the people involved, not just one person to run everything, so there cannot be just someone's point of view on how a business runs. I don't think that would work, but running it right doesn't need to be complicated either.

(Participant: B5, Date:24-05-11, Duration:44mins, Location: Mosque main area)

This position of personal understanding indicated that the participant was aware of the fundamental requirement for some sort of structure and definition inside a business framework, but importantly needed to be justified by his own opinion, in that, his understanding of the situation would ensure the smooth running of the business ' *you need all sorts of information to run it'*. This participant therefore showed that from his personal interpretation of his real world situation, indicators of parameters and boundaries were an essential ingredient to support his daily business practices.

Boulding (1966) describes knowledge in this sense as personal interpretation related to cognitive content, which in many respects is very similar to Vygotsky's view surrounding the " *Zone of proximal development"* discussed in section 5.6 (Vygotsky 1997). From this view it is easy to establish the difference for this participant in terms of knowledge transfer interactions informed by personal experience ' *depends on the people involved'* and those which are informed by symptoms of personal behaviour *'I don't think...'*, *'don't think....'* which in this case is clearly used to inform his decisions about business practices and does not wholly support a knowledge position based on personal knowledge.

This participant also stated that *'it wouldn't be right'*, which of course indicates that he is aware of the right and wrong way to conduct business or a code of governance surrounding knowledge transfer practices. This introduces an alignment to a belief system which is responsible for implementation of corrective measures to ensure

parameters and guidelines are followed to justify this belief and shows similarities to self-development mechanisms of a person as an open self-organising system described by (Klochko 2008a) and discussed in chapter 3.

Participant D1 gave a slightly different view of his personal understanding of knowledge. He also included knowledge awareness in a business perspective and gave further insight as to the justification of his awareness:

> *I am feeling very well about it (His Business) for some time now and sometimes I'd wake up in the middle of the night thinking about what I had to do the next day. When you have a business you need to think about your plan day in and day out or nothing gets done . Sometimes when I go to the mosque I can clear my head and it helps me to plan my business better. You can work things out and learn things better there. Its much easier when there is someone to ask. Everyone wants to help and explain all the things from the Quran about business. It helps me think in a better way for my business. To do it correctly and properly. That's important.*

(Participant: D1, Date:20/06/11, Duration:59mins, Location: small retail outlet)

In this respect, the participant is enforcing Argotes' (1999) view that knowledge, and transfer, is the communication of known knowledge from a source to a recipient but is underpinned by justification. However, this participants view is not the same in respect of the justification of the knowledge source, which in this case seemed to be specific and importantly not affected by cognitive dissonance.

As with similar extracts, the difficulty surrounding his actions in terms of both learning and decision making, resulted in a trip to the source or knowledge repository, the mosque to '*clear my head*' and '*work things out*' . The identification of a structure to work within is enforced as a '*plan*' and is clearly at the core of his daily working practices supported

by an informed source of knowledge. Participant D1 was probed further to see if he thought there was a best practice approach structuring a business with knowledge transfer practices to see if this changed his view about the development of his own personal business knowledge.

This extract indicated that there was no opposition to the idea of using a business model to inform his related business practices, but that he did support the idea of an informed practice used to specifically support knowledge transfer *'things from the Quran about business'*, this also although supported some thought towards strategic planning *'thinking about what I had to do the next day'*. This position in itself is not unusual for knowledge transfer practitioners, as (Landau 1973) points out, in practice, decision making theories tend to be embedded in 'management practices'. For this participant it was however the Quran which gave justification to corrective practices *'To do it correctly and properly'* Therefore, association by this participant of the need for a specific framework to support his business practices on a daily basis could be related to management practices.

Adding depth to this theme of knowledge understanding from a personal perspective, and a framework as a pre requisite of a knowledge awareness and strategy, respondent B1 indicated that it is his interpretation of an ideology which is behind his understanding of knowledge:

> *It is quite difficult to put into simple words, example, but basically as a Muslim I know the best way for me as a person to do business.(Sic) Its not all about money all the time because of all the things you do are related to halal (Good, Godly, socially accepted) and haraam (Bad, devilish not socially acceptable).*

> *……listen, it is 'haraam' to trade alcohol but you might make money example But it 'halal' to do good honest trade and make a little money.*

…..for me it's about good and bad ways. If someone asks my advice about a business venture I would always consider these things first.

(Participant: B1, Date:04/05/11, Duration: 86 Mins, Location: Mosque Office)

This extract showed similarities to Gupta and Govindarajan (2000) who related a analogous view when discussing business models and theories which can add value to a business if properly managed, as the view from this participant is in the form of an ideological perspective which could be interpreted as a model for him to follow. This participant uses his interpretation of an ideology to decide how to participate in business practices in a perceived correct way justified by his knowledge of business based on his interpretation of Islamic business practices. Underpinning a reliance of morality to halal and haraam practices, indicates that it is a knowledge of religious ideology which business decisions are derived from.

This indicates that knowledge exists before any decision making processes are enacted. This view however contradicted Nonaka (1994) who argued that knowledge can be created and Nonaka and Takeuchi (1995) who hold that a conversion between tacit and explicit knowledge results in knowledge being created. The view from this participant, whilst similar to Gupta and Govindarajan's view of strategic necessity, is different, in that, for this participant, the principality of this decision making process is the capability to determine, or learn, which practice is the most valuable, not to the business, but to him as an individual via a relationship to Islam.

This theme of integrating self-awareness of knowledge and supporting correct business practices through association to the Quran, Imam or other religious icons became apparent at almost every interview (29 out of a total of the 37) contained some sort of personal statement in this regard. *" you can't expect Allah to do it for you" (D2), " you need to always do your best for Allah" (A4).*

Participant D3 worked as a checkout person at a small retail outlet. He did not own and has never ran a business, so is unfamiliar in respect to precise business or knowledge transfer experiences in relation to a business context. I asked him the question that if he were to start up business on his own would he be better off going to college for some sort of qualification first. He gives another view:

> *Michael, its very simple and I am not sure you are understanding. Its not that I disagree that sometimes you need things to help starting organising a business, of course I completely agree with that. I cannot agree with things that don't come from the Quran in the first place. How can I know if these things that you talk are even correct or proper for me I would never start a business because someone like you tells me this is the best way to do it.*

(Participant:D3, Date:14/06/11,Duration: 45mins,Location: Small retail outlet)

Although this view also contributed to the theme of personal business understanding, it contradicts the previous view of Gupta and Govindarajan (2000) in several ways. Firstly the participant makes a statement that knowledge about this business position is simple and that it is the interviewer who is having difficulty understanding the principle of knowledge in a business context. Secondly that there may be many sources of knowledge which can constitute a *'thing'* which is useful, or a model *'you need things to help starting organising a business'* to follow but importantly decided on the correct one without any reflection to evidence to support his statement from literature with empirical significance. Stating that *' I cannot agree with things that don't come from the Quran in the first place'* means that this participant is deliberately precluding himself to relevant sources of business knowledge and is making a judgement based on a subjective assumption of his

knowledge base. Not only is this view distinctly different from that within the literature, it is fundamentally different from a philosophical foundation discussed in chapter 2.

Kant (1787) and others, postulate that a proposition can be known from reason alone without the need for, or indeed independent from, experience. If this were true for this participant then his reason or logic would be to deduce his justification from his personal knowledge and would be false, as there is no explanation which defines knowledge as a definitive consequence of experience in current literature.

This would mean that this participant has an experience of knowledge out-with the norms of empirical research discussed within the literature previously. Participant D3 continued on this subject for some time and further explained that his understanding of knowledge in this respect is directly related to understanding of the Quran. This is a very important aspect to him and is directly relative to his knowledge understanding which supports his world view, encompassing knowledge about business practices and everything else.

Participant D3 added more depth to the previous text:

> *….I help with this business and I hope do a good job. I do what I'm told and am honest person(sic). I know about these business things because they are in the Quran and I understand them. The Imam tells me about them and my friends talk about them, they are real and happen every day.*

> *I am not sure I know much about running business but I know what's right and wrong so Allah will help me, I'm sure*

(Participant:D3, Date:23/07/11,Duration: 45mins,Location: Small retail outlet)

Although this participants personal knowledge was limited in terms of business and business practices as he did not own the business, his personalised world view of his own knowledge was definitive *'they (business practices) are real and happen every day'*.

This participant justifies his understanding of the practices, not as an amendment to existing business practices, nor as a cognitive development of his capability to understand business.

Participant C4 expressed a similar view which was equally straightforward:

> *You can't separate how you run a business from Allah, it doesn't make sense to me. I think you need to understand both, not just one or the other.*
>
> *You need to understand what God wants you to do not just do what you like.*

(Participant: C4, Date:15/06/11,Duration: 65mins, Location: Large retail outlet)

This participant understood that his knowledge was sufficient of the religion to which he subscribed and this gave justification in terms of knowledge capability which allowed him to fulfil his business obligations, and that was good enough for him.

The relationship between personal knowledge and knowledge understanding, which could enable him to better manage his business practices were not based on empirical justification of action. In this respect this extract entirely disagrees with (Blackburn 1987) who notes that within a concept of distinguishing between truth and falsity from a personal perspective, any experiential decision that lacks cognitive status, would be considered false. Therefore, for this participant justification for his knowledge understanding is derived from a position of a cognitive state, for which there is no empirical evidence to support it, thus false. This is exactly the same position as participant D1 had discussed earlier.

To examine this phenomena in more detail, participant B3 was asked to describe a business situation which had affected him personally and which required specialised knowledge to be transferred as a practical resolve. Participant B3 explained that he did this by asking his bank manager for help   In explaining what had happened in respect of financial situations and how he felt about the experience participant B3 talked about being given information from his bank manager, but not really bothering to read it properly.

Participant B3 said *" It was not that I didn't believe him, but at that time I needed money, not advice. Banks are pretty hopeless really" (B3).* This participant expressed a view which undervalued specialist knowledge, although in this respect could probably be said for most people. Participant B3 continued *"Business is not so good as it was. Maybe someone has a black eye on me , I don't know but something is happening. I am asking the Imam to do pray for me to help, I hope so."*

This participant showed that the use of encultured knowledge, as a guide or direction to follow, was not utilised as embrained knowledge supporting a position of significant importance or even desirable, even though this kind of cognitive process may have helped in a situation like this. Knowledge to resolve the problem was being transferred from the bank to him, however he chose to ignore it, believing this his personal actions had somehow instigated his person financial position *"Maybe someone has a black eye on me"*.

This is contrary to the view in the literature proposed by Blackler (1995) who explains the necessity of embrained and encultured knowledge interaction, which allows knowledge transfer practitioners to validate and satisfy epistemic interpretations to knowledge. Although the source of knowledge was a principal and pivotal necessity to a business

situation, this participant discounted useful knowledge by asserting his own experience of knowledge understanding to take precedence.

It was clear that the concept of requiring guidance in the form of knowledge was evident to this participant although his view expressed a concern as to the fulfilment of his actions in relation to his understanding of the seriousness of the situation. The interpretation, justification and proposition of personal knowledge in relation to an external source however was contrary to that proposed by (Winter 1987). Winter suggested that interaction of knowledge dimensions should enhance a practitioners capability to position knowledge in a useful way, not exacerbate the situation, as was the case here.

In terms of knowledge understanding in relation to business understanding, the response from participant A1 explained a different interpretation altogether:

> *I am not sure anything is worthwhile without correct guidance. I don't know of anything that just happens for no reason.*
>
> *….A businessman is only as good as his own mind and is only able to do what he knows. When Allah created man he didn't need to make him intelligent but he gave him the possibility to do good things. If a man follows the path of Allah then you can trust him*

(Participant:A1, Date:01/04/11,Duration: 70mins,Location: Mosque Office)

To this participant, and a definite emergent theme through the study, is the reliance to a belief system for unquestionable guidance of knowledge understanding. In the case of this participant and similarly with other participants, this reliance encompassed most things in life, not just business. Knowledge from a perceived outside source was viewed with indifference or at least treated with disdain as there was no ability to verify (justify) its capability in relation to an ideological source.

This view is similar to the view from McEvily et al. (2003) discussed in chapter 2, who reveals that trust can affect the degree of personal knowledge understanding . Trust for this participant however is subjugated from the same premise of Quranic guidance and underpinnings. Trust in relation to knowledge and knowledge understanding is seen to reduce the degree of concerns about knowledge appropriation and misuse. Moreover, proportioning a justification which increases the veracity of knowledge for this participant, thereby facilitating his acceptance of a single knowledge source. This view also supports personally imposed governance required by this participant to justify his position in terms of knowledge awareness.

Participant A1 was very open about requesting a knowledge source in this respect.

> *"The last thing I will do is force a person to help me fix problem, example, being myself, I always would ask someone for politeness". (A1)*

(Participant:A1, Date:01/04/11,Duration: 70mins,Location: Mosque Office)

Another example of this view came from participant C1, who, whilst admitting he had a problem discussing business related items with an important figure in the community, continued to do so rather than explore alternative or additional sources of knowledge:

> *I've always been under the impression with my Imam that hes got another person to see. You get this with the Imam sometimes if you do not got to the mosque regularly. I had this not last time but the time before with my Imam.*

> *I went to see him with my brother to tell him how I was feeling, and not sleeping because I was too worried about my money situation and we got the impression that he just wanted me out the door it didn't really help I felt he thought it was my faults somehow but who else can I ask really*

(Participant:C1, Date:07/06/11,Duration: 59mins,Location: Small retail outlet)

Religious alignment appears to be the single most important parameter or measurement from which all personal relationships to business boundaries and frameworks are determined by this participant. His knowledge understanding and his personal capability to interpret knowledge from an external source is based on this alignment being justified in some way. Szulanski (2000) states quite clearly that the *'absorptive capacity of the recipient'* is an important factor in barriers to knowledge and knowledge transfer success. Therefore, suggesting that it would be the participants cognitive capability to justify external knowledge sources based on alignment to his religious perspective which would be the determinate variable for knowledge justification not the knowledge itself.

This knowledge justification discussion is also seen from this extract from participant A6 who gave me advice on where to find definitive answers when I asked the best way to use knowledge to support a business. Participant A6 replied:

> *The ideal person should be your Imam. Someone you can trust and sit down and talk to. I'm not saying sit down and talk to him for twenty-four hours. just want to sit down and have enough time to have a decent conversation, to get everything out in the open, how you're feeling. He can tell you what's happened or what is going to happen in your business or anything because they've got more idea than I've got. He can show you the correct path and that's what's important*

(Participant:A6, Date:03/05/11,Duration: 70mins,Location: Mosque Hallway)

This spirit of co-operation and reciprocity can be seen to support a knowledge understanding context, but only as far as personal interpretation of a knowledge source which supports scrutiny. In this case interpretation from this participant is justified because it generates social

relationships which are able to influence individuals' ability and chances to learn, share and retain knowledge which is justifiable. Findings show that to this participant, knowledge understanding needs significant personal approaches to support both the ingress and regress of knowledge. This can be seen as a dyadic relation which is associated with understanding the proximity of relationships between the cognising knowledge transfer practitioners. In this sense they were shown to be crucial for the effectiveness of knowledge understanding and associated processes within this participant group

This is similar to the notion from (Uzzi 1997) who maintains that social awareness, and awareness of knowledge in a social arena, created relation-specific heuristics that facilitate the transfer of knowledge but from an external source. Although the central tenet of knowledge awareness for this and most of the participants revolves around a religious caveat, knowledge of this caveat is central to a cognitive stance and attributes a justified epistemology to the perspective of knowledge from this practitioners world view.

This justified perspective in terms of social identity related to knowledge understanding would support the view from Hansen (1999) in that strong social ties better enable the transfer of complex knowledge. Although this view is quite different from the reasoning for social interaction proposed by Nonaka and Takeuchi (1995). According to Nonaka and Takeuchi knowledge is first created by individuals and through a process of socialisation is converted to organisational knowledge.

Participants B6 and B1 further developed the theme of knowledge interaction with simple yet informative explanations:

> *you must be polite when doing any business, there is no need to be rude, honesty is important too(B6). You need think about how you are acting to people. It's important" (B1). "That's how a real business works, example it starts with honesty, it's from Quran example (sic)*

The acknowledgement of standard business models which would underpin knowledge transfer practices (Weiss 1979) and theories (Grant 1996), within the core of the participants social knowledge transfer practices was not the underpinning methodology to begin with for these participants. The social content of honest business was at the core of the determining decision for good practice and guidance was from the Quran.

Three participants (B2, C1 and C2) talked about social interaction and knowledge transfer by discussing being scared of asking too much assistance from someone or doing anything that might cause others to have some sort of related business problem. B2 said, *"you worry don't you, quite a bit when you first come into a new business, can I do this, can I do that and you end up having to ask people at the Mosque all time for advice"(B2).* In this expression of knowledge understanding (the lack of it) these participants placed great emphasis on expert knowledge to assist their personal understanding of a specific problem, importantly however, motives underlying any requisite for knowledge do not seem to be   governed by the logic of instrumentality.

This identification of learning in a social context is somewhat different from Garvin (1993, p 80). According to Garvin *"A learning organisation is an organisation skilled at creating, acquiring and transferring knowledge and at modifying its behaviour to reflect new knowledge"*. For these participants, their requirements identify their capabilities or cognitive capacity and this relates to a central requirement of a knowledge source. For these participants, the identification of justified knowledge sources intercedes the logic of finality, rather than instrumentality and it is this search for finality which precedes judgement of a knowledge source and not as a prerequisite for behavioural change on their part. That is, these knowledge transfer practitioners do not modify their behaviour to suit different sources of knowledge.

Participant C1 maintained this same kind of personal reflective expression.

> *I was anxious to know how far you could actually push yourself without help from friends at the Mosque, but at the same time was scared of failure and what they might say. I didn't want them to think I don't know the Quran properly.*

(Participant: C1, Date07/06/11,Duration: 59mins,Location: Small retail outlet)

Participant B4, sums up the feeling of this group very succinctly in this respect:

> *I don't want anyone to ever say that I don't know what I am doing when it comes to business. That is why I will ask someone when I am at the mosque. ….I am not afraid to ask if I don't know, but there ways to ask and if someone helps you it's the right thing to do when they ask you for help   That way your conscience is clear*

(Participant:B4, Date:18/05/11,Duration: 76mins,Location: Mosque Hallway)

In terms of scientific psychology, business or organisational awareness to knowledge transfer practices are immediately comprehensible. Not as a theoretical enigma, but in relation to immediate justification for knowledge and a knowledge repository or source, 'the mosque'. For these knowledge transfer practitioners, to be able to identify which kind of instruction is optimal for a particular transfer scenario is enacted within this group at the same cognitive level of understanding regarding and awareness to a single knowledge source.

I asked participant A1, a very senior member of the mosque, if knowledge of business practices would be valuable to him. I asked this question because many of the participants mentioned about asking this person for critical business advice.

In terms of my own knowledge about business, it is not really for me to say if it is a right or wrong example. I think of only that what I know what I believe in and what I believe in is that my knowledge can come from Allah.

I call God, Allah, do you know what that means. It's the same thing. This kind of knowledge from Allah is clean and you know, is valuable to me. Nothing else is as valuable

(Participant:A1, Date:01/04/11,Duration: 70mins,Location: Mosque Office)

From an organisational perspective it is easy to see an association within the literature to this view. Current literature (Grant 1996; Zander and Kogut 1995) argues that knowledge clearly influences and is influenced by other knowledge and its transfer, this will in turn substantially influence business strategy formulation and implementation. For this participant however, the basis for the transfer process is not based on indicators which perpetuate from the evolution of management practices. Interpretation of an empirical source has no relation to the capacity to understand what knowledge transfer consists of or how it is determined, since the former view (Grant 1996; Zander and Kogut 1995) is based on formative competitive advantage and an economic caveat.

Participant B2 gave a similar indicator in this respect.

…..I am not going talk about every page in the Quran but if there is something that I need to know I certainly look for guidance there. I am not sure I believe business is about making money as fast as you can

(Participant:B2, Date:11/05/11,Duration: 67mins,Location: Mosque Office)

When asked about knowledge, both of these participants immediately related my question to elements of the Quran. This of course supports the consistency within the

theme of religion and would explain why the directness of some of the answers was unswerving in respect of theism. This theme of personal interpretation of knowledge related directly to the cognitive experiences and interpretations of the Quran from the knowledge transfer practitioners perspective.

Participant C4 was equally vocal *" knowledge and business are the same thing to me. Its all the same thing. God. Allah its all the same "(C4).* Participant B6 also made an additional comment *"If you know something is important then you will try and understand it. That is what business knowledge is, if you put it like that" (B6).* Although I was not asking about business knowledge as such, findings make it clear that in this respect, it is very similar to the view discussed within the literature by (Blumentitt and Johnston 1999) who focus on the information status given to knowledge. Blumentitt and Johnston highlighted that information gains value when it is used in new contexts and is transformed into value specific knowledge in the process.

Although not exactly the same, I could still see a similarity to the literature discussed in chapter 3 by (Wallerstien 1977), in that, businesses depend on the relationships *"its all the same thing" (B6),* which encompass the nature of knowledge value within the association of business practices.

> ***To act in a way that is good for a business, if that is what you are asking, might not be same thing to everybody but it is important to me as a Muslim to know this. Knowing about a business for me is trying to make the best of what I know and what I have and I have Allah to thank for it.***

(Participant:B6, Date:26/05/11,Duration: 53mins,Location: Mosque main area)

From an organisational perspective, deciding what is good for business, this view would not align with current authors who argue that businesses can accumulate knowledge and stockpile it un-problematically, at the same time acknowledging its stickiness and that it first needs to be created to be of value (Wallerstein 1998; Amin 1977; Wallerstein 1979).

This view of organisation intent was also portrayed as important from the view of participant A6, who at the same time interjects the relationship to personal success and a perspective of personal capability relating to knowledge transfer.

> *It is important to me to do any part of my work to the best of my ability. I would never do anything dishonest or anything like that. If I can learn how to do something good enough, maybe I can teach it to others. What you learn is not always from books and stuff. You need to learn though, its important. If I can feed my family and give something to the path of Allah then I feel I am doing well.*

(Participant:A6, Date:03/05/11,Duration: 70mins,Location: Mosque Hallway)

Although not specific to success in an economic context, the importance attached to success here is seen in the participants view as a personal attainment of knowledge which can be passed onto others. Importantly, at the same time there is an acceptance that his knowledge is related more to the Quran than business management. The relationship between knowledge transfer and success does not come across as being significant in any other way except as to underpin his personal integrity and claims more of an importance than knowledge of commercially measurable resources.   In this sense, the focus of the participant was never in the position of attributing an answer to a specific sequence of problems related to a knowledge question and this is similarly explained by participant A5:

For me I would need to use any knowledge in a useful way or it is wasted. It would make no sense to me to do it any other way.

To put it simply if someone is clever it doesn't mean he knows more than me it just means that he can understand some things better, it's not a problem. This goes for business or anything really.

Only the Quran has the correct knowledge about something. At least that's what I think

(Participant:A5, Date:29/04/11,Duration: 53mins,Location: Mosque main area)

This view from this participant is important because the problematic nature of knowledge is debated at length within the literature (Szulanski 1996, 2003) who concluded that knowledge has an inherent problematic sticky' nature from the point of creation. Therefore, it was important to understand the situation from the perspective of this participant group Knowledge stickiness is a well-documented phenomena (Szulanski 1996, 2003). In this sense, problems or barriers related to business were not defined in a sticky' way, although in this respect there is a view form this text which could be aligned to (Szulanski 1996). In that, transfer may fail for reasons that range from the quality of the relationship between donor and recipient groups to the characteristics of the knowledge to be transferred.

The idea of knowledge being a problem was not in the minds of the participants at all. B3 continued in a similar fashion in relation to sticky knowledge. I then tried to give an example of stickiness, without actually saying the word sticky, to see if that would give a different type of response. My example was ' if you were starting a new business and you were unsure of the correct course of action where would you go to find out what to do' I

hoped this question would lead to a discussion(s) relating to social interaction and perhaps identify an example of stickiness in relation to a clear business project.

> *If you are in business you are in business for a reason. Sometimes you get problems you have to deal with but the main thing to remember is that you are in business to feed your family and pay your bills. Not to deal with problems. My van broke down the other day but it wasn't a problem for me because my friend has a garage so he helped me out. Problem is what you make of it and it can always be fixed. If I am confused with some information I just ask some else to look at it. I always find an answer in the Quran.*

(Participant:B3, Date:17/05/11,Duration: 71mins,Location: Mosque main area)

The theme is clear from the extract from participant B4 when asked about defining knowledge from his personal perspective .

> *I can't see the point in all your books, it's not that complicated. Ask the imam he can explain it better than me. But I know about business and it works for me. I didn't know there was different kinds of knowledge so I am not sure I can answer that really.*

> *…..You should talk to the Imam he will know better than me but that's my opinion*

(Participant:B4, Date:18/05/11,Duration: 53mins, Location: Mosque main area)

This was re-iterated by most of the participants in some form. For example participant B3 went on to say;

> *The knowledge I use to run my business is the same as I use to wash my car or dry my clothes. There is nothing complicated about it. I am not sure what you mean by definition but my understanding of the things I do in*

> *terms of my business and life are in the teachings of Islam they are not mine.*

(Participant:B3 , Date:17/05/11,Duration: 53mins, Location: Mosque main area)

Although this response indicated the concept of a problem, it did not fit with the standard idea of a sticky problem in relation to knowledge transfer. The participants relate any barrier or problem to a personal interpretive perspective or at least a different perspective to Szulanski's broadly accepted view.

This contrasting view to Szulanski (2003) is also clear from the response from participant C4.

> *Oh I think I know what you are getting at. You think a problem about knowledge is my ability to help someone fix something in their business. That's not a problem for me as I am always happy to help someone if I can. I help out around the Mosque as well during Ramadan as there is a problem with the cleaning at times. I enjoy that work but it's not a problem for me I am happy to do it.*

(Participant: C4, Date:15/06/11,Duration: 65mins, Location: Large retail outlet)

For this participant, the underlying relationship to religion gives a perspective of a relationship to a specific business problem. In this way, it does not align with (Reagens and McEvily 2003) view of stickiness, which is specifically attributed to a problematic barrier. From this view, stickiness exists within any knowledge to be transferred in addition to a problem with the transfer mechanism.

Participant D3 continued on a similar theme;

You know, I work very hard and I am grateful to Allah for giving me my job. But you know, he would take it away from me if I did not at least try to support my family and fix my problems myself.

You must make sure you feed yourself or else you cannot be strong to work at what you do. But it would be Haraam to keep all the money I make for myself and spend it on things to show how successful I am like a big car.

To me that is not right in any way, too much money can lead to problems. maybe you think that's successful but I do not. That's the sort of thing you need to teach your family and your friends. No need to be greedy

(Participant:D3, Date:14/06/11,Duration: 45mins,Location: Small retail outlet)

The view from this participant can be linked to, or at least related to, knowledge transfer practices critical to successful knowledge transfer in relation to personal understanding of problems and definitions. Specifically, the strength of interpersonal connection between the source and recipient will positively affect the ease of knowledge transfer and in this respect supports (Reagens and McEvily 2003) view of pragmatism.

A very succinct answer in relation to problems came from one of the senior members of the mosque A2.

Allah, doesn't make problems…people do

(Participant:A2, Date:12/04/11,Duration: 66mins,Location: Mosque Hallway)

Additionally contributing to this theme, six knowledge transfer practitioners (A3, B1, B2, B4, C2 and C3) did not express any disquiet about taking their business problems directly to the Imam for consultation in the first instance and underpinned the acceptance of

problems existing directly to them. Although B1 and B2 raised concerns about the clarity of his advice. *" sometimes I just try hard to understand where I went wrong but I do get confused at some of the answers to my questions" (B1).* When talking about specific advice to support a remedy to a business problem B2 said *"I don't think he understood what I was asking at that point because he said it is Haraam to make a lie about my business. But I didn't really mean that in my question" (B2).* Findings in relation to the nature and definition of knowledge were made very clear from a single extract from one of the more vocal participants.

Participant C3 stated ;

> **I didn't really know what to say when I am told I am wrong about something, but it's nothing to do with my knowledge about business. I try to reflect on what I have learned before and if I can answer a question I will do so. You can't say knowledge from the Quran is wrong ,how can it be wrong (Laughs), it comes from Allah. Did you know that. If you read the Quran then it can explain everything if you understand it. I can't read Arabic very good so I am not an expert. If you ask the Imam he will help you understand it.**

(Participant:C3, Date:14/06/11,Duration: 47mins,Location: Mosque main area)

This view and a view from many of the participants contradicts the overarching view from the literature which summarises that knowledge is embedded in, and determined by, disembodied structures which influence decision making, implying that knowledge comes with its own descriptive communication ciphers, which would enable the receiver to interpret it un-problematically. For this participant group, knowledge of true belief is not an issue subset of its parts, it is a personal interpretation of the value attributed to the source which gives the knowledge justification, not the knowledge itself. That is, knowledge transfer practitioners desire knowledge from their own

interpretation rather than from epistemic standing and that in many respects, the source of the knowledge is of primary value.

Aligned to this view, participant C1 had a similar perspective;

> *I've read some business books of course I've read the book and tried to find the answer to a question about my situation" but added "I would be interested to know how I could use this information in a practical way as it was not as easy to understand as I would have thought , it's not like the Quran*

(Participant: C1, Date07/06/11,Duration: 59mins,Location: Small retail outlet)

The importance of his distinction between the knowledge and its source is easy to accept, for this participant, justification adds value to a mere true belief not to the actual knowledge. From this position, it is clear for this participant, that knowledge entails justification, since there would now be a property of knowledge which mere true belief supports and which affords greater value to true belief than the actual content of the knowledge. In this respect, Szulanski (1996) defines knowledge as a 'causally ambiguous set of routines'. This argument from Szulanski juxtaposes the view from this participant, since this participant did not significantly attach any justification to causal beliefs or indicators of causal relationships, such as mechanisms, probable dependencies or independencies.

For this participant and indeed all of the participants, there are not different kinds of cause for knowledge justification, justification is entrenched within one notion. This view is in complete contrast to Szulanski's (1996) definition of knowledge, since, Szulanski proposes that causal beliefs are generated by a wide variety of indicators. To this

participant this is untrue as this variety of indicators does not yield a variety of concepts of cause.

In the following extract, participant B2 focuses on the relation between evidence and causal beliefs which leads to an epistemic causality in terms of economical perspective. In this view, causal beliefs are appropriate but only on the basis of observed evidence of material objects. This view contradicts Szulanski and others as the notion of cause for this participant is understood only in terms of rational beliefs. Causality, for this participant, and also the previous participant (C1), is clearly a feature of epistemic representation of a personal real world view rather than of the world itself, for these participants real world interpretation does not yield multifaceted ambiguous notions of cause, quite the opposite. In this respect, participant B2 explains his point of view by stating by;

> *.......think of someone who sells alcohol. It's not right but you can make money if that's all that is important to you. You know it's wrong but you still do it to make money. That is not correct for Islam*

> *...........it is good to work to the best of my abilities, selling Haraam products is wrong, it is not my way to personal success*

(Participant:B2, Date:11/05/11,Duration: 67mins, Location: Mosque office)

For this participant, the central tenet regarding Islamic understanding of knowledge is clear, encompassed by a unity of knowledge which for this participant is not a causal effect.

Participant C1 had a similar view to this position, but added an extra facet to the general discussion by explaining his view on knowledge understanding as a relationship problem related to knowledge definition.

> *…..In my view there is only one way to do business and only one way to decide if you are going to be successful or not. You just need to follow the rules. Don't do anything dishonest and make sure you thank Allah for what he has given you.*

(Participant: C1, Date07/06/11,Duration: 59mins,Location: Small retail outlet)

One could argue however, if a knowledge transfer practitioner in this position would have an understanding of justified true belief, then the value of knowledge ended at this point. In relation to this participant view, the literature purports one fundamental assumption regarding the philosophical position of knowledge, that, if given the correct circumstances and understanding, knowledge and its value can be created and universally transferred, un-problematically (Blackler,1995; Winter 1987). Thus, the epistemic value here is of a justified true belief and not of the knowledge nor the sum of its parts. C1 continued;

> *It seems to me that I know what I am talking about when it comes to knowledge and business. I have been in business for 10 years and always made a good living. This is not because I am a genius or anything, it's just that I follow what the Prophet tells me in terms of business and how to do it.*

(Participant: C1, Date07/06/11,Duration: 59mins,Location: Small retail outlet)

Undoubtedly, this adds to the misunderstanding regarding any knowledge definition and any subsequent analysis or research therein. From this frame of reference, many theorists focus their attention on this line of reasoning, and position understanding of knowledge

concepts as an all incumbent sub set of functions to guarantee knowledge transfer success (Kogut and Zander 1996).

Contrary to current literature, from the philosophical position for this participant (C1) it is easy to understand why knowledge would be deemed a useful resource to a business or firm even without proper conceptual understanding of its nature and perhaps content or proper justification.

Participant B3 had a similar interpretation of this but added a perceptual perspective to the answer;

> *I can probably understand why people get confused if you put it like that. A book for this problem and another book for another problem.*
>
> *No wonder you read so many books. It doesn't make sense to me. Michael, success is a matter for your soul it's a matter for you and it's a matter for Allah (God).*
>
> *If you cannot convince either one of these things then you yourself cannot be most successful.*
>
> *…These are not my words they are words from the Quran. If you follow the words from the Quran under guidance from the prophet, {Peace Be Upon Him} then success will come to you.*

(Participant:B3.Date:17/05/11,Duration: 47mins,Location: Mosque Main Area)

This very affirmative view would contradict an argument from Blumentitt and Johnston (1999) in which it is argued that the recipient of knowledge needs to have a necessary level of cognitive understanding of knowledge for knowledge to become useful. Blumentitt and Johnston's view determines that within the extended route of knowledge in a transfer scenario, knowledge is not regarded as an invariable or singular concept.

This view permeates throughout the philosophical positioning within the literature, in which it is the transfer parameters which adopt the focus and not the definition of knowledge being transferred.

This view from participant B3 would contradict the majority of literature in this respect as the view from current literature dictates theoretical ingredients or constituent parts of knowledge are primarily from an occidental philosophical perspective.(Leibniz 1673 , Kant 1787).

In relation to the previous text, the next section is reported verbatim from participant A1.

It is not a problem in terms of interpretation.

It's simple. If I encounter a problem and I seek a solution of course my first instinct is to look to the Quran for guidance. It is a natural thing for me to do. But If I am still unclear as the meanings I read the I would consult the Hadith[1].

This will tell me if the actions I intend to use are correct and in accordance with my beliefs as a Muslim and these are the books I would seek advice from in matters of Islamic law"

(Participant:A1, Date:01/04//11,Duration: 70mins,Location: Mosque Office)

In this retort, participant A1 encompasses a view which recognises economic necessity and personal knowledge. If this philosophical perspective reflects the locus of knowledge understanding, then one can conclude that the philosophical perspective of the knowledge to be transferred will also be derived from his real world view. This position of

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[1] Hadith are regarded by traditional Islamic schools of jurisprudence as important tools for understanding the Quran and in matters of jurisprudence. Hadith were evaluated and gathered into large collections during the 8th and 9th centuries. These works are referred to in matters of Islamic law and history to this day.

knowledge understanding and communication is in itself derived from a sequence of parameters which are classified from a philosophical position of justifiable truth and belief. Although Sayer (1984) argues that knowledge of the real world is both fallible and theory laden.

This importance of philosophical positioning is deliberated by participant C5 which underpins the relationship with money is perhaps the easiest thing to understand from this response.

> *I think everybody likes money. Else what is the point of business. It is not just for fun or to amuse yourself. But for me that is not the complete story. You can't have money from something without asking where the money comes from.*

> *….. if you do your business properly and honestly then any money you make may be halal. This is the only money I can use. You can't be successful with Haraam money.*

(Participant:C5, Date:16/06/11,Duration: 40mins,Location: Large retail outlet)

The focus for this participant is the relationship to personal knowledge of where economic stability comes from and the attributed governance of avoiding Haraam. This suggested that the relationship between knowledge and business success would require the relationship to be bound by effectual constraints{Sharia laws}.

C2 also gave an informed view of this position;*" ….well if you are talking about a business decision that was successful that's a different thing to asking me if I am successful, because I know about business well I don't know that much really"(C2).* This suggested two things. First, the understanding of success comes from peer critique, in that, one cannot define

ones' own success but that it is okay for others to do so. Secondly, the instalment of a label of success can only be granted as a result of compliance to Sharia law or Quranic knowledge being attributed to the person as a form of collective agreement.

Participant B3 adds to the debate by stating;

> *you cannot hide Haraam from Allah. You cannot give money to the path of Allah if it is Haraam.*

> *If you can't do that than for me money is of no use. It needs to mean something or else it gets lost somewhere and means nothing.*

> *…..as I see it , it is not too difficult because if you are confused as to what is right and what is wrong then you only need to ask.*

> *There are plenty people at the Mosque to help you with your questions. There is no excuse for getting it wrong.*

(Participant:B3, Date:17/05/11,Duration: 95mins,Location: Mosque main area)

This view supports the view from (Kogut and Zander 1996) in that, firms may exist because people prefer the shared identities and moral communities, which they supply. This view from this participant is a recognition of knowledge, surrounding shared moral values, which would allow members of the community, to which the business or organisation belonged, to attribute success. This would mean knowledge from a business context would need to conform to a recognised position of governance first before there could be a determination of how it would support business success.

Participant B1 was also very clear in this respect and expanded on previous comments.

> *you need to know about your business items and the way you treat people I think that is the knowledge you mean but that's not what I think, example. You need to understand that there is only one knowledge and you need to understand how to use it in your business. Knowing about the things in your business and how you use them are two different things to think about but you use the same knowledge from the Quran to figure it all out.*

(Participant:B1, Date:04/05/11,Duration: 76mins,Location: Mosque office)

This view also indicates an understanding of the necessity for knowledge management of sorts to underpin a success. 'knowledge is critical for organisational performance' and effectiveness and is 'vital for competitive advantage' (Argote and Ingram 2000; Kogut and Zander 1996; Nonaka and Takeuchi 1995).

Two participants (C3, and C2) indicated hesitancy of talking about their own personal success in case it would offend others in their direct community. Both indicated that they had worked hard and learned a lot throughout their business experiences so they were comfortable to dissipate this working business knowledge to anyone who asked for advice. C3 said *" I don't know if I would feel comfortable saying to you I was successful, it doesn't feel right and I certainly wouldn't say it to any of my friends but if they asked for my advice on a business matter, I would be happy to help "* (C3).

This view, although a little complex, defines success in relation to a religious ideology and this is juxtaposed to the concept of business success as a purely commercial concept.

The idea of two definitions of success, commercial and moral, were exemplified to me in a very firm way by a senior member of the Mosque,

> *Everybody thinks about success in some way. You know it doesn't always need to be about business or money for that matter. Material things are not*

always of primary importance if you cannot redeem yourself with your success.

….let me say that how you measure this success is determined by your ability to understand it. You cannot measure it with wealth and you shouldn't try to.

(Participant: A1, Date:01-04-11, Duration:70mins, Location: Mosque office)

In the following extract the researcher explained to the participant that he was trying to determine what the relationship between personal knowledge and personal success meant to him as a knowledge transfer practitioner. This researcher feels it is very important for this thesis to record his reply as it transcends interpretation with fact from the participants point of view.

To have done what Allah wanted me to do

During the holy month it is correct to give food to the poor and during Ramadan it is correct to pay for the meal to break the fast here at the mosque. You should think about that.

There are a lot of real and worthwhile things that can be done to ensure you are the best person which Allah intends you to be and the Quran gives us the knowledge to do this. So this is success i think. Not your bank balance

(Participant: A1, Date:01-04-11, Duration:70mins, Location: Mosque office)

For this participant, knowledge of the Quran would be justified to support this philanthropic direction and knowledge of Islam was considered as being a pre-requisite for success and, more importantly, that success was not being inferred as economic or

material success. Success involved a view from the community as a moral and ethical judgement.

Participant C5 offered a view which in many respects, supports this.

> *In terms of problems with my job, It's just one of those things. If my boss tries to explain something to me and I don't understand then it is up to me to try my best to understand. If his knowledge of the problem is greater than my own I will expect him to know the answer. It makes sense. If he (Boss) was not a Muslim, I don't know if he would properly understand me though so there may be a mix up somewhere along the line.*

(Participant:C5, Date:16/06/11,Duration: 40mins,Location: Large retail outlet)

In this sense this view is similar to Goh (2002) who considers that culture may contribute to the knowledge transfer process, but culture must have a strong set of core values and norms. In the case of this participant, he assumes that his superior would have difficulty in understanding him on a professional level if there was an inconsistency with cultural understanding.

The view from this participant supported findings which indicated, for this participant group, culture, consisted of a set of values and beliefs that are embedded tacit preferences about what the group understand as the experience of their interaction and that this will encourage the active participation of any group member and thus reciprocate knowledge transfer within the group.

Supported by an argument from Winter (1987) who points out that the more culturally and socially complex the knowledge, the more difficult it is for competitors to imitate. This view supports the notion of group-culture interaction as being beneficial to a business wishing to assert competitive advantage, thus, would agree with (Zander and

Kogut 1995; Grant 1996; Szulanski 1996), in that, that social interaction constitutes a solid base for competitive advantage.

This extract from participant (B6) is an example related to the previous discussion.

> *It's not really up to me, for anything I need to understand, I will, and anything I don't need to understand I won't need to bother with. It's not up to me really there's no need. You can't say this or that knowledge as there is only one kind so you either use it for your business or you don't. I choose to use it my way and it works for me.*

(Participant:B6 , Date:26/05/11,Duration: 53mins, Location: Mosque main area)

The view from this participant was that knowledge was significant as a factor for interaction, advice and decision making regarding business and could underpin a cultural perspective. However, knowledge was not used primarily as a vehicle to underpin economic significance.

Knowledge of personal actions which align the business and the participant to the Quran is viewed as the single most important facet to being successful. In this respect, the participants use the Quran as a moral compass to direct their whole lives, the idea of using the knowledge solely for the purpose of business success is considered offensive. For this participant and for this group, cultural interactions are substantial and are important considerations.

The following participant, B1 gave an insightful answer in relation to knowledge, culture and business success.

> *You see, what you are asking is not fully understandable to me. I have my own business but I don't go around shouting to people that I am*

successful. I know what I am doing and I can train my staff and fill out forms if I need to.

I can teach them how to do business the way I want it to run. That's not success.   But I will only know if I am successful when my friends tell me that I am. If they come to me and ask me for advice.

…. It's not that you are offending anybody, it's just that it's not really polite to go on about how successful you are or how successful you think you are. We use the Quran to guide us, not to make us rich.

(Participant:B1, Date:04/05/11,Duration: 86mins,Location: Mosque Office)

Participant B1 continued to inform this researcher that one of his most dearest friends had just died. He said *"he was one of the most successful men I have ever met" (B1).* He continued, *" he helped with charity he helped with the poor , he ran a food kitchen both here and in Pakistan he was a great man, very clever and read the Quran every day" (B1).* Asked what business this person did that would allow such a high degree of respect, B1 responded.

Oh he didn't have a business….He didn't have a job as you might think of it, although I think he was an accountant at one point. Anyway, his job was to help people, his business, if that's what you want to call it , was organising food for people who didn't have any, he was very successful right up until he died. I hope I become that successful it would be a great thing to achieve. I don't think I am up to the same job as Mr. X but I will certainly hope so.

(Participant:B1, Date:04/05/11,Duration: 86mins,Location: Mosque Office)

This view is perhaps not surprising in a business context as Szulanski (1996) states that close relationships and good reputations increase the potential for successful knowledge transfer. Bhagat et al (2002) agree that in the context of transfers of knowledge, cultural

variations and interactive hierarchical group considerations play a role in influencing knowledge interpretation and that the cultures are inevitably going to affect the transfers. But, typically, with this participant group, values attributed to the cultural dimension differed greatly from current occidental views described by (Brown and Duguid 1991; 1996; Grant 1996; Spender 1996) who indicate that it is management of the resource of knowledge which will underpin commercial success and competitive advantage for a business. Current literature fails to recognise these resultant intransient social interactions at all hierarchical levels which significantly influence knowledge transfer.

Participant B4 gives an indication of understanding which is very descriptive and encompasses the view from the participant group;

> *I think what you meant is that I can't understand something or someone doesn't understand me or there's a problem……..if I don't understand I will just ask someone, probably the Imam, but if that person doesn't understand he might know someone who does. I don't think that makes things difficult as you say, just difficult to fix sometimes*

(Participant:B4, Date:18/05/11,Duration: 71mins,Location: Mosque Hallway)

For this participant group, success of the transfer, supporting business success, is judged by how success is achieved using ones knowledge of business protocols related to the culture of Islam and not by the accumulation of resources to dispel problems or barriers. Moore and Habel (1982) agree in this respect that social interaction has an effect on transfer. However, importantly at the same time also recognise that different kinds of experiences and practices are generally accepted as though they are universal and applicable to all societies and cultures.

From the perspective of participant C3, it was clear that the culture in this group was always derived from a primary source;

> *No wonder you can't understand things.*

> *Maybe you read too many books. How could you walk around with all that in your head every day and try to do your business successfully. It would be impossible.*

> *I think you should slow down and think about it a bit more. It's much simpler to get your answers from one place. It's easy. If you are wrong it's easy to see the right path.*

(Participant:C3, Date:14/06/11,Duration: 47mins,Location: Mosque Main Area)

Participant C4 was similarly vocal in this respect and made the main theme of religious underpinning to directional precedence very, clear.

> *Think of it another way Michael, some people sell drugs and make money. Some people rob banks. It is no different for me.*

> *I would not be successful buying food for my family if I was using money that I had made from dishonest business.*

> *There is nothing successful about that. You don't need to be a Muslim to work that out.*

> *You are the one at University , you should be saying that to me Michael. (laughs)*

(Participant:C4, Date:15/06/11,Duration: 65mins,Location: Large retail outlet)

Although there was over 1000 pages of transcript text, the previous accounts were synonymous with the emergent themes. The participants reiterated much of the texts throughout the data collection and the slightly short discussion in this section reflects this.

6.4   Chapter 6: CONCLUSION

This chapter focused on discussing and summarising the findings from the data collection in relation to the research questions. The findings aligned to four distinct areas of knowledge transfer literature and this was indicated by textual excerpts from interviews with the participant group.

The discussion emphasised differing views on knowledge transfer practices by delineating between a coexistence of empirical understanding and personal interpretation. The debate expressed how this participant group utilised business models, defined knowledge, understood stickiness and perceived business success in relation to knowledge transfer. In contrast to current literature, participants' real world views are governed by an ideological perspective supported by a single knowledge source, the Quran. Knowledge transfer advocacies use this single source of knowledge to fill collective knowledge gaps in relation to knowledge transfer in a business context. According to the findings in this study, knowledge transfer practices were derived by continuous identification and satisfying knowledge gaps from participants' real world perspectives. In this respect, definitions of knowledge and barriers relative to transfer had little justification for existence within this sphere of perspective throughout the overarching theme of religion which encompasses the rhetoric of the findings.

Findings from the study provide an understanding of knowledge transfer practices in the Muslim business community in Edinburgh related to personal perspectives, but submerged within a business context. Through the systematic and dialectic analysis of knowledge transfer participants' daily practices, the details and dynamisms underpinning knowledge transfer processes are revealed through findings from this research.

7 THESIS CONCLUSION

7.1 RECAP

To cope with the challenges of today's business environment this thesis has provided insight to show that there is a need to understand in more detail, internal skills, capabilities and perspectives of all knowledge transfer practitioners in a business or organisational context. This is because it is clear that both practitioners and knowledge are key and very strategic assets (Kogut & Zander 1992; Grant 1996; Spender 1996). The successful and efficient sharing of knowledge has been shown to be critical if a business or organisation wishes to achieve its ambitions or goals (von Krogh 1998; Argote et al., 2000), and are subsequently interested in allocating resources to reduce problems associated with the sharing of it (King 2006).

As there was little in the way of specific study, surrounding knowledge transfer practitioners in the Muslim business community. this research has been full of insights into knowledge transfer in a business context. A starting point for this research was an identification of knowledge gaps in the literature surrounding knowledge and knowledge transfer from the perspective of practitioners from the Muslim business community. The identification of these knowledge gaps led to broad questions concerning the significance of personal perspectives of knowledge.

The nature of the research questions broadened the scope of the research from an expansion of current literature to a line of enquiry which included the understanding of philosophical dynamics and which encompassed ideological perspectives in a business

context. Tentative answers to the questions were sought through two data collection phases and rich and thick data was collected.

In an effort to fully understand knowledge transfer from data gathered from this participant group, it was discovered that current research and literature rarely acknowledge a personal perspective and has not focused on the personal beliefs nor juxtaposed or asymmetric ideologies. This research has shown that personal beliefs or ideologies can affect both knowledge transfer practices and business practices simultaneously

7.1.1 *Aim and Objectives Review*

The aim of this research was to provide a deeper theoretical understanding of knowledge transfer practices within the Muslim business community in Edinburgh. This research fulfilled this aim by addressing the following objectives.

7.1.1.1 *Objective 1*

The first objective is to establish a practical, working definition for knowledge transfer in a business context underpinned by a philosophical episteme of knowledge.

This objective is crucial to allow interpretation of symmetry over current knowledge transfer practices from the knowledge transfer practitioners perspective, since to fully understand knowledge transfer, a definition of knowledge must be understood.

This objective was not fully met by the research as there was no clear definition for knowledge which emerged from the findings. However, it was discovered that to this group of knowledge transfer practitioners, what exists is a single source of

knowledge, defined within a set of metaphysical boundaries, rather than multiple streams of ambiguous definitions, which exist in current literature.

7.1.1.2   Objective 2

The second objective is to critique and explore business management models and theories which can be utilised by knowledge transfer practitioners in this Muslim business community to support knowledge transfer practices.

This objective is necessary to ascertain factors which contribute and impede the adoption of knowledge transfer business practices which align strategic management frameworks necessary for the business or organisational environment. For this objective to be met, the research will need to establish which standard business models are utilised within the businesses and organisations under study and which of these facilitate meaningful knowledge transfer in a business context.

This objective was met by the research as it was shown in the findings that this participant group did not align their knowledge transfer practices with current theories and models described in the literature, were not bounded by historical occidental precincts of cause and effect but rather, establishment of factorial parameters, from which no dichotomy of governance existed.

7.1.1.3   Objective 3

The third objective is to establish if a methodology investigating contiguous knowledge transfer practice overarched by a phenomenological lens, will allow the data collected to become meaningful in a business context.

This an important objective since no empirical study to date has established if a person centred approach involving interpretation and significance to forms of knowledge which support knowledge transfer has any significant impact on the data collection method.

This objective was met as it was clear from the research methodology that a person centred approach to data collection proved to be interesting, informative and resulted in deep and thick data. This particular research methodology however found the practicalities of data collection are complicated from an ethnographic point of view. What was also apparent form this style of data collection is that participant observation was an ineffectual way to collect data in a pressured organisational or business environment. Using a phenomenological lens from which to engage interviewees allowed an in-depth and personal form of research which ultimately discovered the significance of a religious ideology which would have escaped a more traditional method of enquiry.

7.1.1.4   Objective 4

The fourth objective is to identify personal perspectives within this Muslim business community which relate to current business practices associated with knowledge transfer.

This objective is necessary to understand any personal perspectives which support the existence of knowledge transfer practices in this Muslim business community, such as economic, cultural and personal drivers as this will have an impact in forming personal objectives within any knowledge transfer practices and will underpin associated decision making processes.

This objective was met by the research since it was discovered in the findings that the drivers for knowledge transfer practices in the Muslim business community were social acceptance of knowledge transfer practices that need to be enacted under a strict rule of governance and moral value founded on guidance from the Quran and underpinned by their religion. It was important for this participant group to transfer knowledge under this premise and not as a precursor to economic gain as discussed within multiple existing research streams.

7.2   SUMMARY OF THE MAIN FINDINGS

The findings in this section support the objectives set out at the beginning of the thesis. In this respect the findings here are able to show answers to the principal aim of the thesis.

7.2.1   Finding 1:

Findings reveal that the association of knowledge from this participant group is derived not from a relationship to standard empirical data and models but from the conjoint levels of relational causality surrounding the unity of knowledge, to conclude a unification of perspective. This finding was identified in several ways from the participant group

First, the principle ontology of the participant group, is based on the completeness surrounding the source and quality of knowledge. It is this reality which forms the fundamental premise of knowledge transfer practices according to a vehicle of unity, which in the case of this group of knowledge transfer practitioners is knowledge from the Quran. Second, the parameters and boundaries derived from the functional ontology of discourse and analytical forms apply to diverse interpretations of the knowledge transfer, they are not derived from it. Third, the unified relationship that is formalised between the participant group is supported by both a fundamental ontology and a functional ontology. This commonality constructs a unified worldview accorded to knowledge through the episteme of unity of knowledge.

For this participant group, the analytical method of deriving functional ontology from real world knowledge transfer practices, are reformed and reconstructed by levels of unity of knowledge-induced schema, supported by common entities and relations underpinned by an alignment to a codified belief. In this participant group, social psychological processes

mediate the effect of knowledge on knowledge transfer and the attention to behavioural attitudes to knowledge, supported by a cognitive capability, is due to empirical restriction of the participant rather than logical reasoning associated with empirical models and theories. In that, the a priori position of the practitioners in relation to knowledge introspection supporting knowledge transfer practices, can only be fulfilled as a personal interpretation of religion, and nothing else. The following diagram (7.1), summarises this view from the participants and abridges the view of a unity of knowledge to encompass a framework for personal knowledge, knowledge transfer, business philosophy and everything else from a personal perspective.

Figure 7.1: identification of a single source of knowledge.

Omnidirectional Knowledge Flow
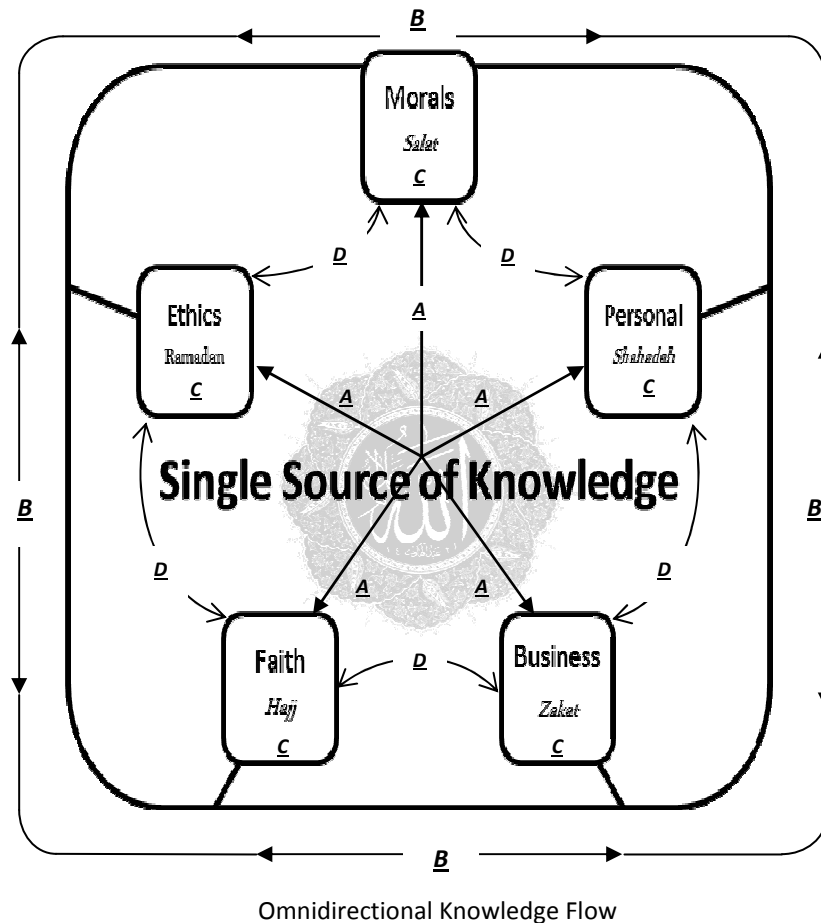
Findings showed that knowledge transfer practitioners in this group are not bound by personal cognitive or absorptive capacities to interpret multi streams of shared knowledge content and context. It is the knowledge perspective of the transfer practitioner which is the crucial factor in knowledge transferred practices and not the barriers to transfer expounded upon in current literature. Figure (7.1) illustrated that there is only a single source for all knowledge *(A)* and importantly, that it flows in only one direction, outwards. Participants viewed this source of knowledge as singular definitive entity and findings showed that this was not in the form of philosophical discussion nor a hypothetical proposition. Understanding the utilisation of knowledge from position *(D)* may still be as a personal experience but importantly, this knowledge is already assumed to guide all things in life un-problematically, encompassing both business and personal decision making *(C)* and does not distinguish a precedence of creation or definition from an experiential concept.

Knowledge transfer utilisation from this perspective eliminates the causal effect of resistance by knowledge interpretation as there are no barriers to this knowledge. As a consequence, utilisation of knowledge from this single source, can be used to develop an understanding of the personal experience which one is part of, either in a business context in the case of knowledge transfer, or for any other personal experience. In relation to knowledge transfer in a business context, knowledge from this single source is ubiquitous *(B)* but can be utilised through proper guidance *(D)* by scholars (Imams) which would be the case if clarity and understanding by the knowledge transfer practitioner is needed.

This clear symmetry in the relationship of individuals cognitive attributes, affecting the knowledge transfer mechanism contradicts current literature, as for this participant group the underlying experiential attribute to the Quran would consciously and subconsciously affect a knowledge transfer practitioners decision making process. Whereas current

literature underpins the need for measurement of a static process which starts, stops and is measured from a procedural interpretation in relation to specific knowledge management practices.

7.2.2 Finding 2:

Findings show that the balancing of extrinsic and intrinsic motives is very clear and is contradictive of current literature streams. Knowledge transfer practitioners encourage intrinsic motives, especially in connection with social connection and personal knowledge and there is a constant purpose to translate and justify intrinsic motives into extrinsic motives in order to make them acquiescent to an underpinning ideology which supports all knowledge.

The conduit towards such a reformation and construction of knowledge definition from the participants, is realised through social differentiations as they form distortions of knowledge which require interpretation not justification and definition. This finding is contrary to the philosophical debate in current literature which has a core focus surrounding interpretative phenomena mainly to justify knowledge from a position which supports occidental laws and policies.

This is a position which fractures business and knowledge transfer communicative parameters to multiple viewpoints. For this participant group, it is the process of learning the laws of unity of knowledge by cognitive intent which gives the justification to knowledge, its meaning and also sustainability of this meaning in the transfer scenario. This cognitive capability however is in the phenomenological model of unity of knowledge which manifests the normative application of knowledge to the world-system of the knowledge transfer participants.

7.2.3 Finding 3:

Findings show that in relation these sought drivers, specific and pragmatic answers are situated within the realms of liberal rationalistic paradigms and cannot be wholly relevant for this participant group

Findings reveal this is because the epistemological premise which grounds knowledge transfer actions as a commercial entity does not depend on alignment to moral judgement to facilitate it. In this respect findings show that for these knowledge transfer practitioners, it is the holistic nature of daily knowledge transfer practices, encompassed within an ideological knowledge framework which support and justify knowledge transfer practices, not an empirical model driven by economic pressures. This contradicts current literature which maintains that knowledge is interpreted from many philosophical and theoretical positions, is multi-faceted, multi-sourced, without origin and in need of creation.

Findings revealed that the universality of knowledge is unconditionally accepted by this participant group as an a priori. Such is the case for this participant group that knowledge has its ontological formalism of unifying ontology within the domain of discourse, reasoning and functional ontology. Findings show that it is the political, economic and social structure established around a self-imposed world view which the knowledge transfer practitioner sustains cognitively which has the potential to overcome knowledge related problems. Problems are not sticky' and do not contain meaning in the same context described in current literature such as barriers and interference, findings for this group show that the concept of a 'problem' with any of the unified knowledge is out-with

critical examination or discourse for this participant group, there is no need to position management resources to counteract this phenomena.

This finding is in contrast to current literature which adopts individualist constraints of empiricism by assuming an adaptive hierarchical position is always necessary because this receives relevance in most knowledge transfer business scenarios from an economic pressure to succeed. Findings indicate that contrary to current literature, dysfunctions within the knowledge transfer scenario are seen to be the result of individual interpretation and are not attributed to the nature, quality or source of knowledge. This stance from the practitioner adopts a position of empowerment not a barrier or pressure for conclusion.

For this group, this position becomes the knowledge-based premise of a communitarian structure and ultimately provides a driver to interact within the knowledge transfer scenario to make contributory inputs not prescriptive adjustments to management directives. To show ones comprehension of any dysfunction in a knowledge transfer scenario can be seen as a relationship to knowledge of the Quran and this produces iterative solutions of interpretation. Findings make clear that this phenomenology is intricate and complex and cannot be acted upon easily for theoretical interpretation, which is why it may have been under researched in previous studies.

7.2.4   Finding 4:

Findings show that it is the ethical and moral framework, not a commercial variant, which encompasses a common relationship or consciousness between knowledge and the knowledge transfer participants. Findings show that the knowledge transfer act has to become socially accepted by this common ethically induced premise and is of a unique and intrinsic type not previously discussed in any literature or researched in any previous

study. It is from this epistemic foundation alone that successful knowledge transfer may exist from a personal experience or constructivist view .

To justify knowledge transfer practices which underpin success, in a business context or otherwise, alignment to Islamic jurisprudence is necessary, and additionally for this participant group, business success from a community perspective is irrespective of economic status. As such, constructive and discursive processes allows a unique and distinct knowledge transfer methodology to unfold. Social knowledge transfer groups are also bound together within these imposed standards, wherein, moral rules and parameters are governed by religious ideology, for which there is no dichotomy of governance. Findings are clear that economic success, although important to this participant group, is no substitute for moral and ethical success.

7.3 CONTRIBUTIONS

The findings from this research make a significant contribution to business management theory development and literature by contributing to the current knowledge gap concerning knowledge transfer practices. This from the perspective of a knowledge transfer practitioners perspective, specifically, this personal perspective of knowledge is not discussed as an adaptive epistemology within the current literature as a contingent for knowledge transfer.

7.3.1 Theoretical Contribution Overview

From a theoretical position, this research highlighted a weakness in some previous studies in which the proposition to deal with problematic knowledge transfer tended to treat knowledge as an independent entity. This opinion suggested that knowledge is viewed as totally separate from its embeddedness within a typical transfer scenario and that the complete understanding of knowledge was unclear and required further study. The research findings on knowledge transfer processes, mechanisms and problems shows that understanding of knowledge transfer is perhaps more demanding than might be advocated from current literature. This study can now contribute significantly to current literature by emphasising the inadequateness of some studies which restate that knowledge must have a logical route to travel along, suggesting movement which is pre-defined and easy to understand, and thus allowing it to be interceded at any stage. An additional contribution of this study is to show that to this participant group, knowledge does not come from many sources, will not always be complex in nature and does not

need to be constructed into something meaningful for the actors involved to allow it to be regarded as useful.

The definitions and explanations discussed in this thesis reduce the difficulty required in defining understanding of knowledge from a practitioner/organisational and group context and enforces what is substantial from the perspective of the individual and underlying phenomenal concepts inherent within the knowledge transfer scenarios. In addition to this, the study identifies a perspective position of the definition and role these concepts play in human cognitive understanding and the relationship to participant characteristics surrounding knowledge transfer. These conceptual points are now better understood by using the psychology of faith and religion or the philosophy of knowledge as a starting point or baseline for future study.

7.3.2   *Practical Contribution Overview*

From a practical position, this thesis has shown that the person centred approach adopted for this study led to a deeper understanding of a knowledge transfer scenario, the environment in which transfer occurs and how this position is significant for the practitioner. This was supported by shifting the main focus of knowledge transfer efficiency measurement away from economic assessment to personal situation assessment. Explaining that matching knowledge transfer mechanisms which are continuously evolving and maturing, directly interact with the practitioners perspective and has implications for business practices to support business development. Significantly, for this group of knowledge transfer practitioners, business practices, cognitive capabilities and degree of social interaction were aligned with a single source of knowledge (from the Quran) and, for them, this position of knowledge, derived from a position of perfection (God) would be unable to recognise stickiness as being associated

with this knowledge. This is a major contribution of this research as it informs current literature of a definite perspective out-with the sphere of 'knowledge stickiness' in a business context by examining a personal interpretation of knowledge transfer which as yet had been undocumented.

7.3.3 *Methodological Contribution Overview*

From a methodological point of view, the innovative method adopted by this study shows that indicative methodologies need not be constrained to information based sub systems. On the contrary, this thesis shows that a use of sociological underpinning within a methodological design may be employed in a beneficial manner without compromising the researchers intent. This means that the significance, usefulness, and adequacy of the research is much more relative to current and potential concerns of knowledge transfer process and practices. This position can now be informed by the perspective of the knowledge transfer practitioner and from the organisational or management view as a single research entity. This then redirects analysis towards the relationally constructed nature of Knowledge, through the lens of phenomenological interpretation. This represents a shift away from event, or sequenced accounts of transfer, and goes beyond simple, process accounts of interpretation of the transfer mechanism.

7.4   LIMITATIONS

This section will briefly review the limitations of the study and will note the key points for future discussion. Principally, it is important to note that the participant group was quite small and related to only a proportion of the general Muslim business community. This is perhaps the most significant limitation of this research.

Chapter 3 highlighted the limitations involved with using observations as a tool for data collection by noting, unless ethnographers use other data collection methods as well as participant observation, there is likelihood that they will fail to report all aspects of the cultural members. This proved to be true during the conducting of phase 1 data collection, where this researcher continually failed to extract meaningful data. This was because this researcher tried to understand each observation from my own position of knowledge understanding and is a clear case of research bias in this respect. It was evident that this researcher failed as a researcher to acknowledge or reflect on my personal biases properly. Had this researcher done this, this researcher could have been more efficient by doing only one set of data collection.

Because of this position, initial phase 1 observations were often incomplete and selective, in that, only certain aspects of the participant group were documented and only allowed for a generic indicator of knowledge transfer practices as this researcher interpreted them from my own personal frame of reference. Nevertheless, observations were useful in providing a backdrop of informed sensitive considerations when it came to interview question selection in phase 2 and did serve a useful purpose.

Chapter 4 explained why it was important to adopt a second order perspective throughout the data collection and was an essential element as to why interpretivism was selected in this respect. The emphasis was on trying to see the phenomenon through the participants eyes not my own and construct a real world view from the interpreted data. This was not at all straightforward and perhaps supports criticism by those who claim it to be impossible to set aside ones own preconceptions in order to remain open and unbiased to participants descriptions and reach an understanding of what they say. Although a strength of method used in this study was the use of interviews which gave the richest means by which participants perceptions could be explored via their accounts of experience. The second order nature of this data collection was sometimes flawed because of the difference between actual and described experience and the limitations of discourse between the participant and this researcher.

The research was definitely limited in this respect because a large proportion of language and context interpretation complicated the examination of the data, as opposed to interpretation of direct knowledge transfer experience. However, this researcher would add that even if direct experience were to be the data source, it would still be dependent on some sort of subjective observation by the researcher.

The categories of experience were thematically constructed from the pool of data, and as such it may be inevitable that this process was open to researcher bias in some way. To defend the validity of this study, this researcher remained as objective as possible, making a conscious effort to do so throughout the process of all the analysis. Although this researcher made every attempt to use the evidence from the data to form the categories of description not my own interpretations, this researcher was unable to

conclude that researcher bias was not involved in some form and that some validity limitations were inevitable.

7.5   RECOMMENDATIONS FOR FURTHER RESEARCH

This study has answered several questions about knowledge transfer in a business context. It demonstrated the usefulness of identifying and discussing underlying processes of knowledge interpretation. Building on the findings of this study there are several areas which may benefit from additional exploration. There is certainly scope here to examine both the Muslim business community in more depth to underpin these findings and also to encourage further research into whether other religious beliefs or ideologies can affect business practices in the same way as they have been shown to do in this Muslim community.

Although compelling theoretical expectations exist, current research is not very optimistic about knowledge transfer performance. Various studies draw ambivalent conclusions on the effects of knowledge interpretation regarding various performance indicators. In this respect there may be an argument suggesting the negative impact of personal perspective on knowledge transfer performance and that cognitive capability may contribute to dysfunctional knowledge transfer conflicts. The majority of current research surrounding knowledge transfer is derived from as occidental context of knowledge, the results found in this study emphasise more intercultural research on personal perspective related to knowledge transfer may be beneficial to management literature.

In particular, further research on religious differences, that is, religious perspective and knowledge perspective associations in other Business Communities, for the purpose of

comparison would also be a serious research direction to consider. Further research will have to discover if this result can be generalised and related to other codified belief systems rather than just Islam. The systematic analysis of conditions under which other religious or ideological perspectives influence knowledge transfer in a business context is a major question for future research.

If this direction of research were followed, management of personal perspective differences would not be limited to a strategy of temporal or spatial knowledge segregation. Similarly, analogous tendencies toward knowledge segregation from this position could equally be reduced at the organisational level. From this business perspective, future research may identify significantly improved business practices by implementing remedial changes to knowledge transfer practices which would then become more attuned to, and identify better with, employees interpretive knowledge frameworks and match these with the desired knowledge transfer scenario outcome.

Current knowledge transfer research is focused on different forms of surface-level perspective, for example deep-level perspective such as economic and process development, the rigidity with which knowledge transfer practitioners insist on their respective values or beliefs has never been properly analysed. so far, only related constructs such as commercial or management competences have been included, albeit as moderators of the relationship between perspective and performance.

Pointing to the different effects of religious and occidental alignments in management practices, future study could also stimulate the differentiation of the knowledge transfer practitioners perspective and capture the outcome through an economic lens. This means

knowledge transfer inventiveness linked to business strategy, leading to effective knowledge transfer processes known to be relevant to the broader business strategy.

Putting this knowledge in the context of personal perspective may be useful for establishing goals and performance expectations of a business as it may define how knowledge will drive the business. In this respect, future research in this direction would help identify the efficiency by comparison of other 'in house' knowledge transfer processes and practices. These could be, but not limited to, knowledge mapping and knowledge profiling, which would be used in establishing knowledge required for business competencies and networking tacit knowledge. This in turn would allow developing communities of interest to be established which would allow the link between strategy to knowledge in a combination which could drive business performance.

Recommendations for future research can be summarised, as in the following table 7.2

Table 7.2: summary of future research directions

Common Problem	Future Research Direction
Low awareness of knowledge understanding	Determine beneficial pedagogy which would benefit knowledge transfer practitioners in respect of the usefulness of knowledge understanding in a business context.
Poor knowledge cartography	Mapping of knowledge transfer practitioners perspectives to known critical processes within the business.
Low Incentive	Examination of incentives to match the knowledge transfer practitioners personal frame of reference.
Low knowledge absorption	Better understanding of knowledge transfer practitioners absorptive methods, by interpreting absorptive conclusions to frameworks rather than commercial metrics.
Poor knowledge management	Provide a common group goal by developing networking based preferences surrounding a businesses or organisations common goals which should not be limited to commercial success.

An increase of the credibility and to support and confirm the results of this study, would be possible if a larger participant group were involved in subsequent studies. Perhaps

even with the use of statistics, as there might be correlations and links discovered in the findings which were not identified and considered by the researcher of this study.

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9 APPENDIX

9.1 Interaction of the four participating sites
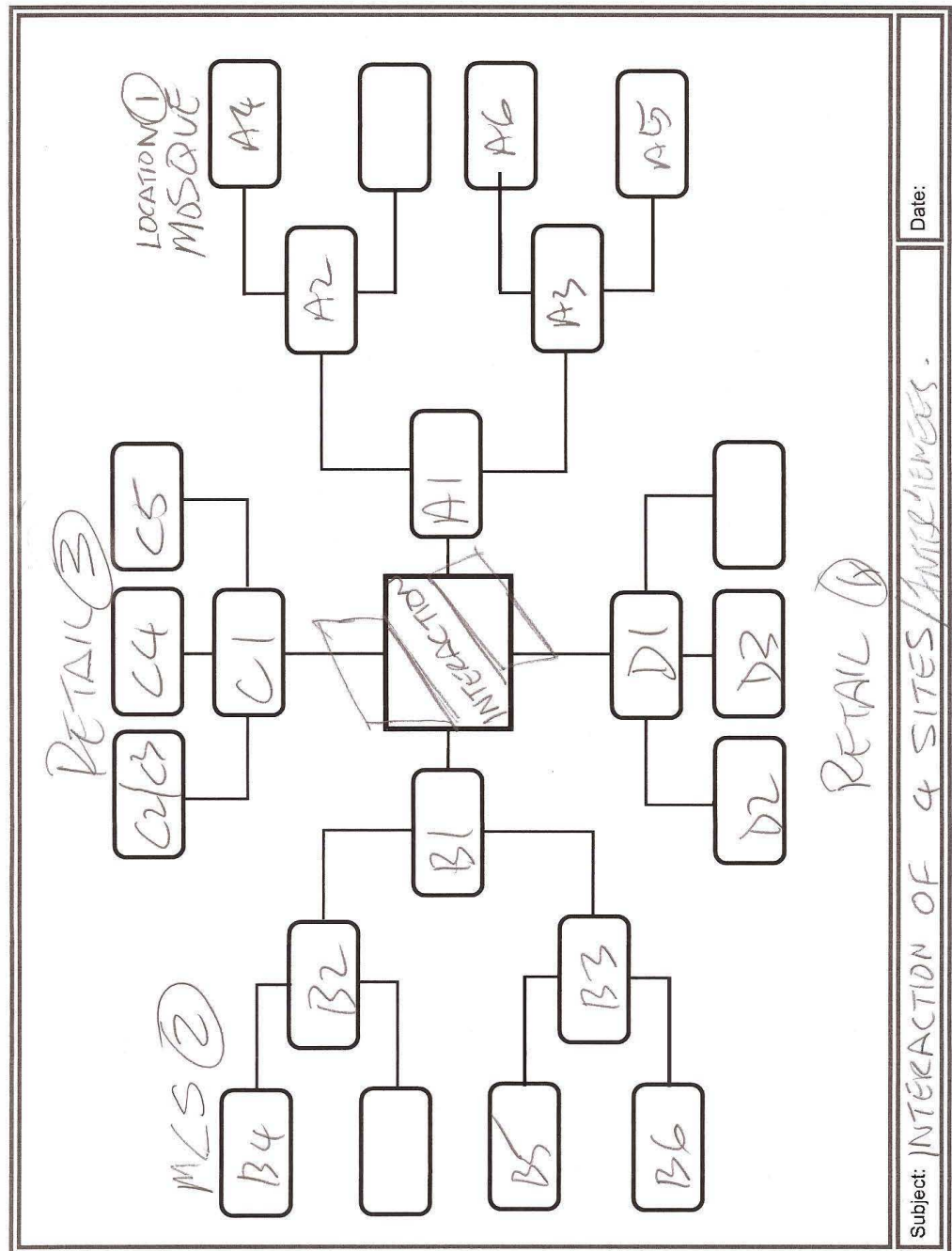
9.2 Observation Example 1 (Hand written)

DATE 23 Dec   LOCATION MCO

Item	Notes
10.20	Arrive late to the office — I have been given a set of keys to 'open up' — No one here. — I look at the pictures on the wall again — The Mecca is written MAKKAH. and is the holyest place on earth for a Muslim —
10.40	Teslene arrives and is surprised to see me. —
11.15	Pervis arrives and shakes my hand — Salam al lekp — — He asks if ☑ I am fine & if I need anything — He asks me to phone the council regarding a housing problem — Its better if I do it because I am Scottish — He says the council do not trust PAKIS
12.00	Ring Council regarding problem — No water in a flat at tollcross — It takes half an hour to find the correct person.
12.30	I explain to pervis that it is resolved and I ask him if he wants me to explain what I did — he says No — speak to Hamid — We stop for tea (again)
1.00	finish —

COMMENTS

Interview + Observation + Notes

9.3 Observation Example 2

Tuesday, December 23

Observation @ Edinburgh Multi Cultural Society (EMCS)

There are   8 people in the room.

(1)

The office is a brick building approximately 150 to 200 years old in the centre of Edinburgh and is a converted tenement block basement. The room is about 40 feet by 30 feet. The room is carpeted and is sectioned off by various bits of normal office furniture.

(2)

There is a PC on every desk, a fax machine, piles of paper and boxes of colourful leaflets .There is an area to the side which has a large map of Edinburgh outlined with markers and red dots marking each of the businesses which the EMCS deals with. Next to that is a shelf with a mixture of small books, tapes, and big books in baskets.

(3)

There is a sectioned off area in front of a kitchen area and there are office chairs pulled up round the wall in a sort of structured seating area.

(4)

B1s desk at the rear of the office, Its bright and lively colourful posters on the other walls. A giant poster in a frame is of Mecca. Books and papers are everywhere. On the corner of his desk are some Islamic books and pictures.

9.4 Interview Participation over the four sites

The following figure shows how participation related to one another in terms of themes across   the 4 sites
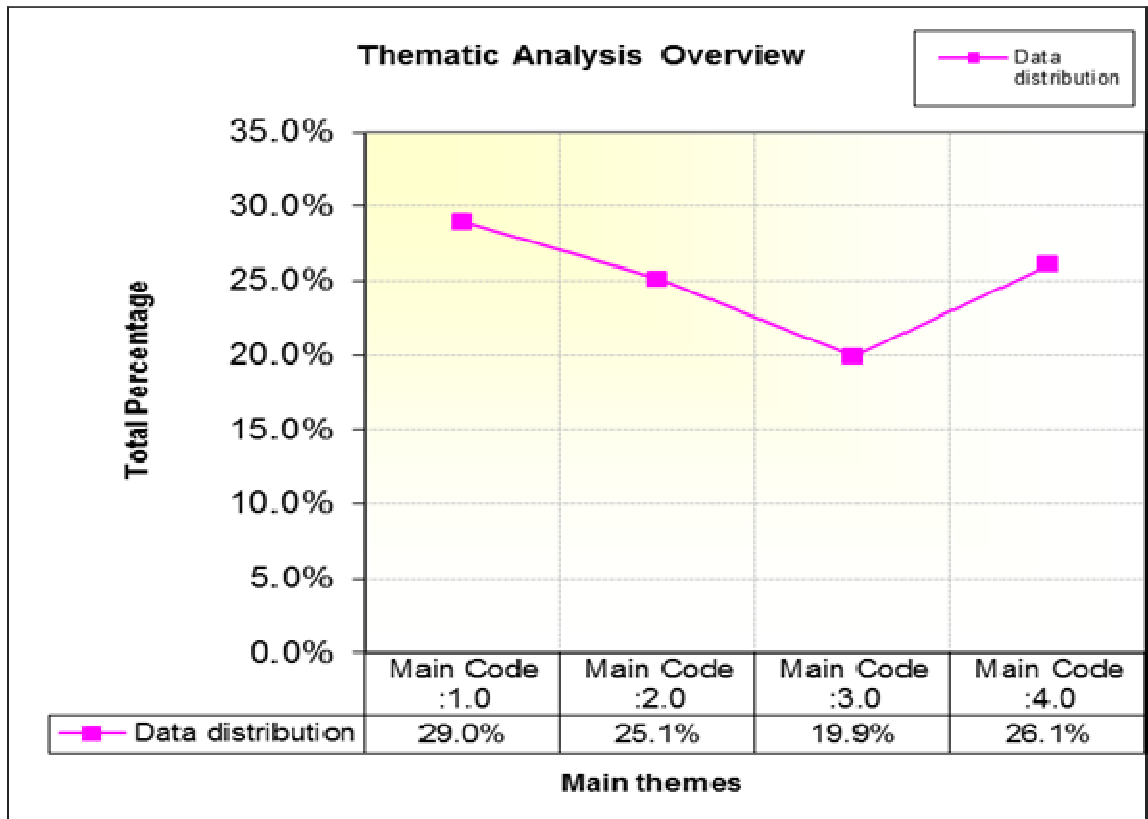
9.5 Example of observation/ Ad Hoch interview notes

DATE _Dec 11_   LOCATION _Mosque._

Item	Notes
3.02	Still no arrival of other members so MR M asked me if I wanted to look around the mosque building.
	I said I would be very interested and asked if he would be happy to be interviewed as we walked and talked.
	He said Yes.
3.50	Started interview with MR M.

11-DEC-LI-MEH MR M is approx 60
He was born in Pakistan & raised in Lahore.
He has no formal qualifications
His full time job is to look after the mosque.
UK passport.
Muslim

① I am proud to be a muslim

② I serve god on a daily basis, I enjoy it, it is my job.

③ My religion and my job are the same thing, that is, I do both for god and to help people.

④ I have always been a muslim & I was born Muslim. I use that belief to help me run the mosque properly.

⑤ Too many to mention, but I remember my father dying & he was so happy – I didn't really understand it at the time but it meant I had to take over the family shop.

⑥ I think letting people know that God can take you whenever he wants & you should always be prepared for the event as he would not want to disrupt your business – It is up to you to make this provision – Its what you are taught in the Quran.

⑦ Very active, I always try to help people and show them the way of islam – Its the correct thing to do if you are a muslim.

⑧ None, I always have to consider Gods will on teachings of the Prophet Mohammed (PBAH)

COMMENTS Peace be upon him

①

9.6 Code Assignment

DATE Dec 11   LOCATION Mosque.

Item	Notes
~~3.00~~	Still no arrival of other members so MR H asked me if I wanted to look around the mosque building.
	I said I would be very interested and asked if he would be happy to be interviewed as we walked and talked.
	He said Yes.
3.30	Started interview with MR M.

11-DEC-LI-MRH MR M is approx 60
He was born in Pakistan & raised in Lahore.
He has no formal qualifications.
His full time job is to look after the mosque.
UK passport.
Muslim

① I am proud to be a muslim.

② I serve god on a daily basis, I enjoy it, it is my job.

③ My religion and my job are the same thing, that is, I do both for god and to help people.

④ I have always been a muslim, I was born Muslim. I use that belief to help me run the Mosque properly.

⑤ Too many to mention, but I remember my father dying & he seemed happy – I didn't really understand it at the time but it meant I had to take over the family shop.

⑥ I think letting people know that God can take you whenever he wants & you should always be prepared for the event as he would not want to disrupt your business – It is up to you to make this provision – Its what you are taught in the Quran.

⑦ Very active, I always try to help people and show them the way of islam – It's the correct thing to do if you are a muslim.

⑧ None, I always have to consider Gods will in teachings of the Prophet Mohammad (PBAH) peace be upon him

COMMENTS

①

9.7 Phase 2 interview probes

Ontological/Epistemological probes

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Probing for conscious decisions about personal interaction
with knowledge

Why do you turn to your Imam or the Quran for advice and
information in both your personal and work relationships when
there are plenty of other sources of information relating to
business.
Do you ask specific questions or just for general guidance?
Do you always get the answers you are looking for?
How do you receive the information?
Does this information help you?
What significance do you attach to this interaction?
What significance do you attach to this knowledge you receive?
Would you say that your personal/business relationships
benefit from knowledge passed on in this way?
In what way does it affect your personal relationships?
In what way does it affect your business relationships?
Do you think there are different kinds of knowledge?
If yes, what are they. If no , why not
Do you think it makes any difference to you ?
Do you think it matters where the knowledge comes from?
Why do you think this?
Do you think it makes any difference to you?
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Business/Social/Family Interaction probes

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Probing for personal intentions and origins regarding
knowledge and knowledge transfer
Do you always transfer new knowledge or information/guidance
you receive on to other family members/colleagues/employees?
How do you do this within your family/personal relationships?
How do you do this with work colleagues/employees?
If not : why not
Do you always transfer knowledge (pass on information) in the
same way for other areas of your life? For example at
university or if you have worked in a different business?
Did you feel your normal or subconscious methods worked in the
same way?
What was the reaction to this
Have you found it easy/difficult in other areas of your life
to receive or convey knowledge/information to other people?
Do you think any part of your education/job or business
relationships would have been easier if the people involved
had adopted the knowledge transfer practices you are familiar
with?
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9.8 Interview Probes Continued

Example of probes

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Can you talk about how you feel your business/job
interacts with your community?
When resolving a specific business/job related problem,
what kinds of personal rules do you have regarding new
business practices to resolve the problem and how do you
; communicate / transfer this knowledge  to other
members of your group .
When developing a new business practice to overcome a
specific problem, how do you receive the knowledge
regarding the new practice or workable solution
If you ever had a problem with business/job decisions,
who would you approach to talk about it to find a
solution? Can you explain your thoughts about your
choice of this individual? And how/where would they
convey this knowledge to you
Would you communicate this knowledge to other relevant
people, if so , how would you do this
Do you have some thoughts on how your business/job or
is affected by the current business and financial
problems. Can you describe for me what you know about
this and how did you find out about these new practices,
if any exist.
What does your business or local community do to educate
you about finding possible workable solutions, to
problems regarding your business or job in respect of
these problems.
Do you think this knowledge is something other people
would find useful, if so , what would you do about it
Can you talk about your thoughts on how you are given
knowledge about business/job decisions that directly
affect you and  may directly  affect another person,
family,  social group, or  of the community?
Do you think this kind of information is easily available
to everyone and will everybody understand the answers
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9.9 Interview Example

SUB Code:		TEXT	Code 1.0	Code 2.0	Code 3.0	Code 4.0

Legend / header block:

Main Code := 1.0						9%
Main Code := 2.0	Location	1				17%
Main Code:= 3.0	Interview	2				19%
Main Code := 4.0	Date	12/04/2011				55%
	P =	Participant 2_2A2_m				100%
	M =	Me				95

Example of how each interview is coded and sub coded

SUB Code:	P/M	TEXT	Code 1.0	Code 2.0	Code 3.0	Code 4.0
	m	hi , im Michael, are you happy to do this interview regarding knowledge transfer				
Objective/Subjective influences Non Specific 4.90	p	Yes I am very happy to do for you Mr Michael				
	m	I am going to ask questions about your job, your role in the business and what this affect your daily workload. Do you understand what i mean				
knowledge understanding 1.10	p	Yes I do , I remember the last interview so I guess it will be sort of the same as that	1			
	m	Can you tell me the sort of things you do in your job				
Objective/Subjective influences Social 4.30	p	I start every morning at 9.00 pm, I always try to be 10 mins early so I can get a cup of tea and chat to everyone before I start.				4
	m	Do you enjoy that part of your day				
Objective/Subjective influences Group 4.40	p	Its very pleasing to come in and see everyone and find out if they are all ok and also if there are any problems that I can help with.				4
	m	Problems to do with work				
Objective/Subjective influences Cultural 4.50	p	Problems can be anything not just to do with work. They can be about family or friends or anything. Its my duty to ask as both a friend and workmate.				4
	m	Can you elaborate on a specific area				
Knowledge process/practice Social 3.40	p	At work there is always something going on with someone. Every day there are stories about some sort of problem. Mostly family			3	
	m	what do you mean its your duty				
Knowledge process/practice Social 3.40	p	Often I hear about people who are living in this country and have a problem. They go to the council or the bank or something like that and get nowhere. All they get is a bunch of leaflets and an 0800 number for guidance. In the quoran it tells me that I have to help people less fortunate than myself, whatever their circumstance. So a persons problem can be about anything but if I am able to help I must do so.			3	
	m	what makes you think you can help				
knowledge understanding 1.10	p	At themosque there are many discussions regarding personal and family problems. Some business things too. You can learn a lot just by listening and being thoughtful	1			
	m	That's very interesting, so what sort of things do you do in your job.				
knowledge understanding 1.10	p	I start every day with organising the mail and see what letters need to go to the specific people	1			
	m	Does that take long				
knowledge value 1.60	p	Getting the mail doesn't take very long but getting it to the right people sometimes takes a while because often the names are spelt wrongly and it very confusing for me as english is not my first language.	1			
	m	So do you open the mail first.				
Knowledge process/practice Business 3.30	p	yes, that's part of my job.			3	
	m	could you explain a bit more about it				
knowledge use 1.30	p	I always open all the mail first before I sort it out, that way I can see if there is any rubbish things like people selling stuff. Then I sort it into peoples names. Thyats where it gets confusing because , as I said sometimes names are spelt wrong.	1			
	m	How do you know what kinfd of thigs are rubbish				
Learning 1.50	p	I can tell which sort of products are useful to us and which are not because part of my job is to organise the purchase orders , so I have a lot of experience in orgainsing the buying of things, I have seen it many times. Aslo I know that if things are too expensive there is no point in showing it to anybody.	1			
	m	That sounds kind of important, have you worked here long				

9.10 Identification of Data Clusters

DATE: 04/05/11 LOCATION: MCSO Participant (B1)

8) What business decisions can you make or knowledge can you transfer, without thinking or relating the outcome to religion or religious beliefs *decide what is right or wrong* —

None — I cant see how you can make any descison in life without first considering if it is correct as god wanted. How can you decide what is right or wrong — *only god can decide.*

Important * *Link*

9) Is it easy to communicate new knowledge to other members of your business/job/social group

Yes, for me anyway. I am an honest man and most people know that *I am a good Muslim* — I would never give anybody bad advice or tell a lie in relation to any business decision *Explaining new things to people is like teaching them new things.* I ensos that

10) What, if anything, would you change about your job/business to make it more efficient if you could?

Better understanding of English — Even tho I have been in the UK since the 1970's I still feel that my English could be better. I still have trouble filling in forms e stuff.

LINK

11) Think back to your first major business experience how did you exchange that experience/transfer the knowledge of that experience with the people it directly *always Give my experience in business to people if they ask me.* Its part of my Job, to help new Businesses —

When I bought my first Stor I got the local Imam to come e bless the Shop for me — I celebrated the opening with a meal in the Shop after closing time. I

LINK

12) How do you expect to hear about new information or decisions regarding different ways of working with the day to day running of the business/place of work /job/social group

I look on the internet for new ideas all the time. Most of my business conversations happen at the mosque, so if there is any urgent developments that will effect me I would expect to hear it from someoneelse —

LINK

13) How easy is it to find out new information/knowledge regarding a recent business/job decision

Very Easy for me — all I need to do is pick up the telephone and call any one of my friends — If they dont know the answer — they will certainly know someone who does. Being a Muslim means you have many friends/Brothers to help you when you need it Most

14) How do you communicate information/knowledge regarding your business/job to your:
o Family
o Friends
o Work colleagues

Usually over a meal or a cup of tea — I hate formal business meetings I prefer to meet at the mosque if it is a serious bit of information as I feel safe to discuss there.

Interviewer. overview notes

P27(2)

9.11 Linking of the emergent themes:

LINK TO 4 LIT.

Transfer
Personal

link

(PSYCHOLOGICAL)
SUB THEMES

1.10	understanding
1.20	transfer process
1.30	Problems
1.40	Personal
1.50	Religion
1.60	attitude
1.70	awareness
1.80	Business
1.90	transfer practice

(ORGANISATIONAL)
SUB THEMES

2.10	Business success
2.20	Business failure
2.30	Personal success
2.40	Personal Failure
2.50	Business Success example
2.60	Business Theory and Models
2.70	Business Decision Based on Personal success
2.80	Business Decision Based on Personal failure
2.90	Business Decision Based on Religion

(PHILOSOPHICAL)
SUB THEMES

3.10	Knowledge Understanding
3.20	Knowledge Personal
3.30	Knowledge Business
3.40	Knowledge Social
3.50	Knowledge Religion
3.60	Knowledge Communication
3.70	Knowledge
3.80	Knowledge
3.90	Knowledge Not Acceptable

(CULTURAL)
SUB THEMES

4.10	Business
4.20	Personal
4.30	
4.40	
4.50	Cultural
4.60	Work related
4.70	non work related
4.80	Religion
4.90	Not Specific

LINK

HELP!!!

9.12 Thematic linking finished

(PSYCHOLOGICAL)				
SUB THEMES				
1.10	understanding			
1.20	transfer process			
1.30	Problems			
1.40	Personal			
1.50	Religion			
1.60	attitude			
1.70	awareness			
1.80	Business			
1.90	transfer practice			
(ORGANISATIONAL)				
SUB THEMES				
2.10	Business success			
2.20	Business failure			
2.30	Personal success			
2.40	Personal Failure			
2.50	Business Success example			
2.60	Business Theory and Models			
2.70	Business Decision Based on Personal success			
2.80	Business Decision Based on Personal failure			
2.90	Business Decision Based on Religion			
(PHILOSOPHICAL)				
SUB THEMES				
3.10	Knowledge Understanding			
3.20	Knowledge Personal			
3.30	Knowledge Business			
3.40	Knowledge Social			
3.50	Knowledge Religion			
3.60	Knowledge Communication			
3.70	Knowledge Awareness			
3.80	Knowledge Acceptable			
3.90	Knowledge Not Acceptable			
(CULTURAL)				
SUB THEMES				
4.10	Business			
4.20	Personal			
4.30	Social			
4.40	Group			
4.50	Cultural			
4.60	work related			
4.70	non work related			
4.80	Religion			
4.90	Non Specific			

9.13 Literature related to themes
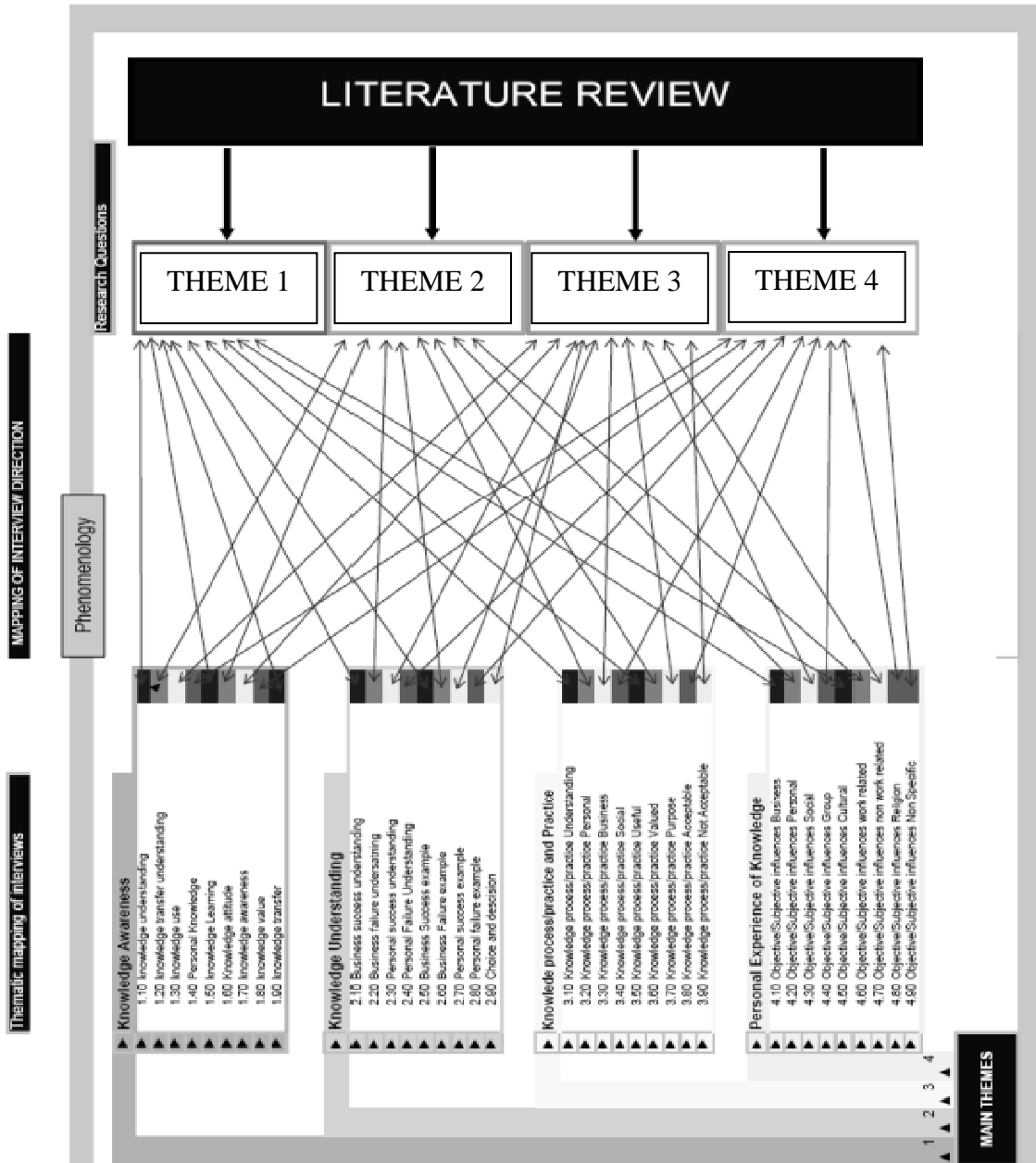
9.14 Geographical location of the participant sites in central Edinburgh