A framework for critical evaluation of strategies for value creation within knowledge-driven organisations

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Award date:
2012

Awarding institution:
Coventry University
Institute of Accountancy Arusha

A Framework for Critical Evaluation of Strategies for Value Creation within Knowledge-Driven Organisations

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Submitted in partial fulfilment of the requirements for the award of the degree of Doctor of Philosophy in the Faculty of Engineering and Computing at Coventry University

January 2012

Coventry University

in collaboration with

Institute of Accountancy Arusha

Like a ship that cuts through heaving waves –
leaving no trace to show where it has passed,
no wake from its keel in the waves[1].

[1]Wisdom 5:10
The New Jerusalem Bible

Dedication

Zenais,

Jose, Steven, Mårtin, Devotha, Schola, David

Theresia

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Acknowledgement

May the endless thanksgivings, praises, honour, blessings and all glories be to my Lord Jesus Christ the King, Redeemer; son of God the Almighty Eternal Father; in His merciful love we live and survive. My homage goes to all who exerted relentless support; with a profound heartfelt gratitude to my Director of study, Professor Anne James; who took over the project, though half way, gave unwavering focused guidance to the end; equally to my former Director of study, Professor Brian Lehaney. I extend gratitude to my supervisory team Dr. Alison Todman, Dr. John Halloran and Dr. Donath Olomi. Their intellectual guidance nourished my doctoral journey. I owe debt of gratitude to my study participants both in Tanzania and in UK who gave their time for interviews that allowed the study to unfold. My esteemed study participants, the knowledge workers; this PhD thesis is a 'knowledge product' of their perceptions of the existing practices. I am so grateful to my employer and sponsor Institute of Accountancy Arusha, for earnestly supporting my study at Coventry University. I owe debt of thanks to Dr. Hodian Urio former Principal of IAA for encouragement and firm support; including my colleagues at IAA; also to Dr. James Eneje for his audacity. My sincere gratitude goes to all at Coventry University; especially Professor Ian Marshal, Pro–Vice Chancellor Research; the Dean and members of Faculty of Engineering & Computing; and for their great hospitality. Finally, I salute my family for enduring my long absence; relatives, friends in Tanzania and UK for prayers and moral support.

Abstract

Technological breakthroughs experienced globally have opened new avenues of opportunities; creating a virtual environment that transforms and changes businesses, organisations, social, economical and political landscapes. Such a wave of change affects all walks of life as internet connectivity gives the web a presence that engulfs workplaces and other organisational settings. In maintaining competitiveness, organisations strive to use knowledge to create value in the challenging new environment. The study aimed to develop a framework that will be used for the critical evaluation of strategies for value creation within knowledge-driven organisations using available resources.

The research used mixed methods in two case studies; the first for developing a conceptual framework and the second for critiquing it. Through a literature review and observation at AB institute main venue, case study 1 identified crucial intangibles for creating value. Knowledge workers (academics and non-academics) were the study participants in primary research that used in-depth interviews and questionnaires to collect data. Over four phases, the study unfolded to three neighbouring institutions for a wider representation. All the institutions covered in case study 1 were within the higher learning industry. The data were analysed and the findings revealed six features and six themes in two separate models, which formed the conceptual framework. The framework models were denoted as part A and B. Part A: the organisational

perspective shows the context within the features: 'knowledge flow, departments, new entrants, dynamic, recognition and the deliverables'. The individual global perspective forms part B with the themes: individual commitment, emotional capital, proactive environment, workplace interaction, value creation process and endless global connectivity. The four phases of the research process in case study 1 eased data collection, in triangulation for the convergance of evidence which produced the conceptual framework.

Case study 2 started in the UK and later in Tanzania was designed to critique the conceptual framework, the outcome of case study 1. Knowledge workers comprising 'academics and non-academics' from higher learning and other organisations formed the participantsin the 57 in-depth interviews of which had data collection under the instrument based on informed consent and confidentiality. Using mixed methods the data were analysed and findings presented as a condensed 'qualitative knowledge' of themes and features in 'focused codes' as a matrix to merge the models of the framework. The findings suggest that the framework will enhance understanding as a guide to unleash and create value; a lens for both decision makers and knowledge workers to use action research in endeavour to seize opportunities and initiatives for creating value through existing practices. It is a guide to harness ideas from interconectivity changing them into workable realities. The main contribution of the research is the developed framework and body of knowledge from the primary research findings of case studies 1 and 2.

Chapter 1

1 INTRODUCTION

1.1 Aim

This research aims to develop a framework for critical evaluation of strategies for value creation within knowledge-driven organisations, in order to help establish how they might become more competitive using the potential of existing resources; through practices that use knowledge for competitiveness.

1.2 Objectives

The objectives of this research project have been to:

(i) Map the proposed research to published literature, and establish its domain in terms of theory, methodology and practice.

(ii) Establish existing practices in regard to value creation and associated strategies.

(iii) Ascertain practitioners and academics views as to best practices and ideal practices.

(iv) Based on the foregoing, create a conceptual framework that captures the main drivers of creating value in line with the aim of this research.

(v) Expose the conceptual framework to critique and broaden; adjust appropriately according to the new findings.

(vi) Demonstrate that the new framework is usable and useful, and that its creation provides a contribution to knowledge.

(vii) Critically evaluate the completed research and suggest further research.

These research objectives have been pursued diligently to realise the aim.

1.3 Background

1.3.1 Problem context

Organisations use variety of strategies for value creation to attain performance that create profit, growth, competitive positioning and postures in the contemporary business environment (Gratton 2000; Pfeffer and Sutton 2000; Gamble and Blackwell 2001; Allee 2003; Birchall and Tovstiga 2005). Despite existing organisations having business strategies with the best organisational structures, they sometimes fail to unleash the full potentials of their workforce (Ehin 2000; Buckman 2004: 100–101; McGee, Thomas and Wilson 2005: 745). For an organisation to be successful, it needs to formulate strategic plans with workable strategies that allow the workforce achieve goals, such plans at times end unfullfilled due to uncontrollable factors.

The information deluge due to information and communication technologies, ICT, Internet technologies and e-commerce have greatly changed organisational paradigms (Afuah and Tucci 2003: 87–104; Gupta and Michailova 2004; Cavanagh 2007; Sandberg and Targama 2007). In resolving such challenges, practitioners and scholars have tried to deploy the use of

knowledge as a resource in knowledge management, KM, taxonomies, (Collison and Parcell 2004; Lehaney *et al*. 2004; Edvardsson 2006: 276; Alstete 2007). However, the importance of KM taxonomies lies in how plausibly they address aspects involved in value creation strategies, through use of intangible assets (Chattell 1998; Duggan 2003: 119–127; McGee, Thomas and Wilson 2005: 787). For instance, knowledge sharing, intellectual capital, business strategies and dynamic capabilities bring options for organisations to go through traps and at times in confusion, caused largely by fierce competition within the business environment (Birchall and Tovstiga 2005; Mintzberg, Ahlstrand and Lampel 2005; Helfat *et al.* 2007).

Nonetheless, organisational survival in isolation is daunting in the dynamic business environment of digital interconnectivity, intertwined with the web relationships. Although organisations use the internet and are partially virtual, future successes hinge on identification, creation and deployment of knowledge as a critical resource, especially intangibles (Warner and Witzel 2004; Roos, Pike and Fernström 2005; Ningyan and Liguo 2007: 230–231; Nonaka, Toyama and Hirata 2008: 104; Nowack *et al*. 2009: 108–110). Rapid change in business environment calls for managerial alertness to pressing needs, particularly where the knowledge base has to expand with the involvement and commitment of workers in the organisation for future success (Buckman 2004: 130; Rosete 2006; Boxall and Macky 2007: 262–268).

However, employee satisfaction is essential factor in the organisation and within knowledge clusters (Brough *et al.* 2008: 267; Huggins 2008: 285). The reliable knowledge base within an organisation is foremost the minds of the experienced and knowledgeable workforce. Continuous reliance on the use of tangible assets in formulating strategies for value creation makes organisations inflexible to change and slows the effective use of intangibles (Chattel 1998; Warner and Witzel 2004). This is a shortcoming, a gap that this study sought to address; whilst focusing on development of knowledge potentials within the existing workforce, mostly knowledge workers in the workplace settings.

Knowledge workers as study participants, gave their perceptions of lived work experiences viewed through existing practices; which can be linked to Meyer and Schroeder (2009: 222–225); also Kianto and Waajakoski (2010: 4–6). The study reveals insights into how to unleash knowledge potentials through existing practices of knowledge workers in their organisations. Previous study by Chen *et al.* (2006: 20–21), explored inter-organisational knowledge transfer to understand how to harness external knowledge. However, knowledge as an intangible resource has been explored to see how best to proactively uses intangibles (Robinson 2001: 162–164; Karier 2010: 50–51). Equally, Nissen, Orr and Levitt (2008: 124–125) explored shared knowledge to expand use of knowledge flow to improve organisational competitiveness. This study uses existing practices as a lens to identify the intangibles that underpin knowledge flow and develop a framework that enhances understanding of value creation.

1.3.2 Relevant concepts overview

This section gives an overview of relevant concepts used in the research project. In a research undertaking, concepts are the building blocks that construct the final thesis. In this research, various concepts have been used. They form a fabric of the entire study, because they carry meaning behind the ideas that have been captured and refined. As building blocks, concepts are simply parts of the whole that make the study unfold with a plausible meaning. Some of them might be common, but due to the high need for clarity and understanding of the research study and for the sake of being systematic they are used throughout the study from the title to the end.

Whilst the study aims to develop a framework for use in a knowledge-driven organisation, strands from social theories lead to further insights. In the topic formation, some words are found among the concepts while others are taken by implication. For instance, critical social theory (Leonardo 2004; North 2006; Apple 2010; Duncan 2011) helps to clarify the criticality of the research undertaking, whilst views of the strategy, value creation and the knowledge-driven organisations link together other concepts to the study.

For instance, Rowley (2000) looked at UK higher education readiness to embrace KM, with the conclusion that the sector is in the knowledge business. Similarly, Frølich and Stensaker (2010); Kagaari, Munene and Ntayi (2010) are related works. In the project the concepts helped to define and clarify the

research construct. The role of each concept in this research varies for plausibility and clarity in terms of practical approaches adopted in particular context in which data gathering process was undertaken. Such concepts led to insights which gave clear understanding that builds the study construct.

The concepts are *creativity, critical social theory, communities of practice, dynamic capabilities, innovation, intangibles, intellectual capital, knowledge, knowledge-driven organisations, knowledge management, organisational paradigms, strategy, the tangibles, value creation, and virtual organisations.*

The concepts named above are given with a brief explanation as follows:

Creativity. Among the concepts that have been written about, frequently, but remains elusive in implementation, is creativity. For example, the concept is depicted as being a way of connecting things anew, creativity is literally defined and summarised as the ability to produce work that is both novel and appropriate…original and unexpectedly useful (Duggan 2003: 29).

Critical social theory. In this research, critical social theory, gives more plausible explanation of various issues. Grounded in the philosophical underpinnings of works by outstanding scholars, critical social theory provides credible explanations of vital issues found in various social settings.

C**ommunities of practice** (CoPs*).* In this fast–paced business environment, unofficial communities are formed voluntarily in workplaces allowing workers to associate themselves more than ever in sharing experiences and knowledge. With such CoPs, KM can be explored more extensively to obtain further insights that allow the current study to be greatly enriched.

D**ynamic capabilities.** In order for organisations to survive in these turbulent times they need to possess dynamic capabilities. These dynamic capabilities do not appear out of nowhere, have to be cultivated, built up and nurtured with perseverance. But what are these dynamic capabilities? Such capabilities are evolving gradually, as explained further in chapter two.

I**nnovation.** In the Oxford Dictionary (2005: 523), the word innovation is defined as 'the action of introducing new methods, ideas, or products.' When organisations are struggling amid fierce competition, the word innovation was common to hierarchies of organisations. However, Christiansen (2000) outlines innovation as a process that is complex to achieve and has with it a lot of challenges when carried out. KM contains ways of making innovation work more effectively and efficiently than any other time before in allowing organisations to be more competitive.

Intangibles. Intangibles as a term usually refers to intangible resources. Much has been written about intangible resources, intangible assets, knowledge

assets, intellectual capital and intangible capital as though they are different but they all describe the same thing (Allee 2003). Also intellectual capital, IC, as a concept, is defined by Roos, Pike and Fernström (2005: 19) to involve nonmonetary and non–physical resources which are fully or partly being owned and controlled by the organisation as they contribute to the organisation's value creation; this may include organisational culture that embrace trust, confidence and collaboration in shared understanding.

Knowledge. Knowledge is a word long time in use but with the advent of ICT and increased networking, it portrays a new meaning as it is now termed as a resource. Yet knowledge is something so intangible, ephemeral so to speak, but vital in organisational settings. According to Allee (2003: 264), 'knowledge is a state of knowing'. This concept has been, 'defined in the KM field as the capacity to act whilst in the process of knowing.' In addition, 'familiarity, awareness, or understanding gained through experience or study.' In a simplest perspective, Gamble and Blackwell (2001: 43) depict knowledge to represent information that explains the connected relationships.

Knowledge-driven organisation. This can be viewed as a living system, 'a network of processes in which every process contributes to all other processes' (Wheatley 1999: 20). Wheatly reminds that, as water answers to gravity, moving downhill, through to the call of ocean. The forms change, but the mission remains clear. Structures emerge, but only as temporary solutions that

facilitate without interference (Wheatley 1999: 18). This can be a good example to link the issues of knowledge-driven organisations to the traditional organisations. In a knowledge-driven marketplace, knowledge sharing, the pooling of tacit knowledge and understanding from mind to mind across the organisation is what separates the leaders from others (Buckman 2004: 31).

Knowledge management. When one looks at the origin of KM, there are lots of differing views as to what is new. Some critics argue that knowledge started during the Viking era (Sveiby 2000), others attribute the origin and much debate about knowledge to the ancient Greek (Loermans and Fink 2005), claiming that, Sveiby tried to give the concept a new look, due to the prevailing business environment, its turbulence, networking and the ensuing information deluge.

Organisational paradigms. It is suggested that organisations are expected to be dynamic enough to allow flexibility to a certain extent to admit the people's uniqueness and idiosyncrasies, (Llewelyn 2006). As a notion, it is the expectation that policies and other managerial endeavours should enhance and enrich understanding to account for the prevailing competitive environment. In real practice managerial policies, strategies and plans are all formulated based on theories that reflect paradigms and underlying presumptions, (National 1996; Llewelyn 2006). Succinctly, a paradigm can be defined as a set of assumptions that underpin how workers operate in the organisation.

S**trategy.** According to Mintzberg, Ahlstrand and Lampel (1998: 17), the strategy defines organisation with advantages of understanding, distinguishing it from others, provides meaning, laying consistency, reduces ambiguity and thereby facilitates action. For instance, when defining strategy, Jarzabkowski (2005: 40) describes it, as a deliberate pattern that is being adopted in a stream of goal directed activities carried out over time; which are crucial in organisational actions.

Tangibles. In normal usage, tangibles can be described as that touchable thing. In this study the word is used to mean tangible assets. Allee (2003: 267) describes tangible assets as 'those assets that show up on financial balance sheets, such as cash reserves, physical property, machinery, and accounts receivable.' For instance, the hardware parts of the IT infrastructure constitute largely tangibles; these are those parts of tangible assets that even virtual organisations cannot afford to lose (Ward and Peppard 2002: 384).

Value creation. As a concept, value creation is a process that can either be enhanced or suppressed as far as an organisation's competences and capabilities are concerned (Welle–Strand and Tjeldvoll 2002; Lehaney *et al.* 2004; Choo 2006; Sense 2007). In contemporary organisational settings, the concept in this study describes how organisation can use intangible resources to enable knowledge workers to perform and accomplish tasks and activities that are core for value creation (Marr, Schiuma and Neely 2004).

Virtual organisations – in modern management, virtual organisation is taken as a strategic option when the needs of business and customers dictate (Buckman 2004: 191; Birchall and Tovstiga 2005: 277). However, this has prompted a fresh look at the prevailing changes that are being orchestrated more vividly by the technological updates that are surging around individual customers as well as organisations. Contemporary organisational paradigms, with the use of the concepts help to put together the tenets surrounding the study for a construct of the framework.

In addition to being useful these concepts bring to the fore the recent developments of important broader issues concerning the organisations that are crucial to this study. The use of concepts allows ideas to be harnessed, and linked together into practice. The concepts helped to form the construct of the study divulging the conceptual framework. Chapter two provides the detail.

1.4 Research design overview

In an overview, four important items are introduced. Whilst starting, the research design takes general approach, a significance of the study, scope and limitations, the units of inquiry and analysis are touched to set a direction.

1.4.1 General approach

This research uses mixed methods MM, which involves qualitative and quantitative based on action research. Two case studies are used, one for

development and the other for testing. The first was carried out at the Institute AB in Arusha, Tanzania, and the second at NT University, in Coventry, UK. In addition to these institutions, others have been used. First, in case study 1, few higher learning institutes in Tanzania were used; and in the case study 2, critiquing process widened representation to include those other types of knowledge-driven organisations, both in the UK and in Tanzania (by way of returning to the organisations that provided participants in Case study 1).

Self-administered questionnaires, interviews and focus groups have been used in conjunction with document reviews and observation. The approach allowed data collection in convergence of information as evidence in a triangulation. For this study, it is a starting position, expectation of future studies. However, the lack of serious studies that address knowledge-driven organisations, specifically a dynamic framework that can critically evaluate strategies deployed for value creation, prompted this research. The research project used mixed methods approach due to the dynamics involved. The MM study with the action research approach envisioned that within its lifespan, study might experience changes. Through action research with its techniques of capturing unfolding events, useful insights could be gained (Rego 2003; Herr and Anderson 2005: 26–28). Moreover, through critical reflection and collaborative inquiry, the use of MM approach gave good results (Chiu 2006; Peidong and Laidlaw 2006; Trochim and Donnelly 2007:182–184; Denscombe 2008: 275; Tashakkori and Creswell 2008). The study therefore

uses such approaches to ease the process of harnessing facts and data. The inclusive premise is that, as a presumption, knowledge workers in these organisations lack thorough knowledge of their strategic plans sometimes even the necessary details, for boosting morale and cohesiveness.

The notion is vital in the implementation phases to evoke knowledge workers' commitment, dedication and trust. This is what prompted the qualitative part of the research. It entails the use of qualitative research techniques and tactics that helped to draw out perceptions and insights that are not well captured when relying only on questionnaires. Such perceptions from participants (in face-to-face) were taken through semi–unstructured interviews. Ethical issues were adhered throughout data collection and in the entire research process.

Generic issues such as whether organisational goals are known to ease implementation have been captured using unstructured interviews and observation as the qualitative part. The distributed questionnaires and documents analysis formed the quantitative part of the research that underlines the link between information from both internal and external activities. With regard to information on organisation culture, the study participants shared their experiences as they practise in workplaces; this can be linked to works of Brown, Massey and Boling (2005); Oates (2006) and Sapsford (2007).

The action research aspects of the project meant to enhance the chances of capturing and evaluating incremental changes that might occur within this specific period of the project, (Blaxter, Hughes and Tight 2001: 64–87; Robson 2002: 201–221; Fisher *et al.* 2004: 48–54; Lam 2005: 207–208).

The unit of inquiry for data collection included top and middle level executives of the organisations. Triangulation has been deployed to bring in the required reliability and validity. The crucial reasons for using MM approaches in this study include the practicalities involved in obtaining ideas and the need to observe incremental changes. MM research has better tools that bring the real picture and offer better options for gathering evidence to meet aim and objectives of the study (Creswell 2007: 73; Staller, Block and Horner 2008: 28–29; Jang *et al.* 2008: 221–224; Woolley 2009:7–8).

Briefly, data collection was conducted following proposed pattern: Case study 1, started at Institute AB in Arusha, Tanzania, where the focused groups for this project were based. Other surveyed data for the boundary issues were taken from VS University Dar, Institute CM, and the UE University (city campus). All institutions are members of higher learning industry in Tanzania. Targeted respondents in addition to knowledge workers were students of higher learning (as future knowledge workers). AB students were the only respondents that gave data in search for insights from student bodies.

Case study 2 which was used to critique conceptual framework, a product of Case study 1, purposely excluded students. The reason lies in the intention taken to establish existing practices in the workplaces of knowledge-driven organisations; with a due regard to value creation as practised in knowledge-driven organisations. Moreover, in order to realise the aim of the study, efforts were exerted to obtain insights, as much as planned through ascertaining practitioners and academic views. Such efforts were undertaken through observation, in-depth interviews and a mini-survey for data. The research looked for the best and ideal practices that prevail in workplaces. Practically, however, data collection dwelt on the existing practices.

1.4.2 Significance of the study

The study has been a quest for information to fill gaps; as creativity and innovation are crucial to the success of the knowledge-driven organisations that require continuous growth of dynamic capabilities (Pfeffer and Sutton 2000; Allee 2003; Lehaney *et al.* 2004: 13–18; Birchall and Tovstiga 2005; Helfat *et al.* 2007). The study attempted to explore the insights that might reveal the hidden interlinks of the intangibles, as a way to unleash creative potentials during the process of value creation. Kaplan and Norton (2006) argue that it is through the value creation process undertaken within the business strategy that the firm can serve stakeholders satisfactorily. A way of addressing such gaps cannot easily be seen without conducting research. The insights from this study will add to the knowledge domain for academicians,

researchers and practitioners and enhance the role of KM strategy in organisations. In addition, in exploring the insights of people's willingness and organisational capabilities to use knowledge to create value, it is hoped that the framework developed in this research will act as a spring-board from which ideas can be continuously generated.

These will highlight new methods that are vigorous as well as practicable in the deployment of intellectual bandwidth that make organisation draw potentials for intellectual capital IC, and enhance future value creation. From an individual level by questioning how to best unleash ones' maximum potentials from hidden brain power, it is possible for organisations to realize a vast, untapped wealth of knowledge potentials. The value of the IC usage can be realized from evolving systems. It can be captured through continuous and relentless search for factors that underpin realities of the existing sociological and organisational paradigms. The research project has been undertaken to develop dynamic framework, that is deemed useful and works.

1.4.3 Scope and limitations

The study is meant to enable organisations to start KM and learn the importance of IC strategies and their effectiveness and role in workplace settings. Using case studies, the project looks for clarity in critical highlights and insights into central issues of the value creation process. It provides an analysis of the factors affecting value creation with hindsight of IC viewpoint.

The emerging conceptual framework can be used to inform and contribute to the development of value creation strategies. The study is an attempt to reduce the degree of uncertainty, and increase clarity and understanding of knowledge potentials of the existing workforce in workplaces, using KM and IC, as linked to Nonaka (2004: 170); Pfeffer and Sutton (2006: 94) and Taxén (2008: 258). However, there is still scope for further study in view of the changing environment in the higher education with link to the global economic climate. Though, future specialisation in sectors of the framework components may provide more insights into possible innovative and creative options. The conceptual framework in Case study 1, gives views of IC that underpins the value creation within the higher education in Tanzania, whereas Case study 2 shows signs of it being applicable to UK, as sectors in the developed world.

1.4.4 Units of inquiry and analysis

The study used as units of inquiry to gather information as follows:

(i) strategic and operational managers (executives, directors, heads of departments)

(ii) human resources managers (human capital strategy)

(iii) external / internal consultants

(iv) other workers (source of more ideas)

(v) databases of organisations, (whenever there is enough accessibility)

(vi) internal documents and reviews (e.g. strategic plans)

(vii) other external sources according to opportunities available.

According to Robson (2002: 361), the existing data of a study if thoroughly explored, may suggest questions and be a starting point for unforeseen lines of enquiry. Therefore, efforts were made to explore available data from the study venues and other sources for evidence. In order to gather rigorous but in-depth insights from these organisations, observations of a non-probability sampling methods approach, such as snowballing sampling were used to help expand the sample size as the study evolved. Snowball sampling helps to build and expand a sample through informants (Blaxter, Hughes and Tight 2001: 163). Snowballing has the effect of achieving responses from the right respondents because they might possess information that may give a breakthrough to puzzling challenges in the project. Practically, snowballing, allows direct access to key persons, to be study participants, who may otherwise be inaccessible (Robson 2002: 265; Fisher *et al.* 2004: 142; Oates 2006: 98; Walliman 2006: 214; Hair *et al.* 2007: 182; Lee and Lings 2008: 215–217).

Case study 2, essentially, was used to expose the conceptual framework to rigorous critique and adjustment to create appropriate generalised framework. The recommendations and study implications that were drawn demonstrate that the developed framework is suitable and useful, and its creation enriches the contribution of existing knowledge. Finally, a critical evaluation of the completed research, ex post, has been undertaken with suggestions of possible areas for future research. This step was vital to ensure that a dynamic vision is maintained as an end to one project should be a start of another undertaking.

1.5 Outline of the chapters

The research report contains nine chapters. Chapter 1 gives introduction, stating the aim and objectives of the study whilst introducing the major issues for the research project. Chapter 2 unravels the problem context for clarity of the contextual issues and the relevant concepts. It explores aspects within the organisation and its boundaries that enhance knowledge workers' abilities to create value. Chapter 3 describes research methodology. It uses MM research design that underpins methodological attributes that guides empirical part of developing the framework. It gives practical approaches the study was required to undertake, the data collection I and II, data analysis, critiquing process and the entire research process, including study validity and reliability.

Chapter 4 allows case study 1 to unfold describing data collection, the empirical work with its data analysis divulging the conceptual framework. Chapter 5 as case study 2 critiques and adjusts the conceptual framework. Chapter 6 gives the qualitative data analysis, whilst Chapter 7 describes the quantitative data analysis; complementing each other in the MM analysis. Chapter 8 provides critical reflection on the framework, whilst forming theoretically informed critique. Chapter 9 describes the framework use, the implications of the study, and tracks how study's aim and objectives were addressed which leads towards contribution to knowledge. This last chapter suggests future research works using framework and concludes the study.

1.6 Summary

Chapter 1 introduced the study, stating aim, objectives, problem context and the research process, giving a hint of the research design of MM approach, its significance, scope and limitations and the units of inquiry. The literature review given in the overview undepins contextual issues. Short synopses of the (15) fifteen relevant concepts used in the study have been highlighted and are further expanded in Chapter 2. The outline of the research report given in nine chapters allows the research project to be in the right course.

The problem context and relevant concepts are elaborated in Chapter 2 for the clarity required to achieve the aim and objectives of the study. Whilst trying to accomplish in stages, the study's aim and objectives are tracked throughout each chapter to show their appropriate fulfilment. For example, part of objective (i) to map theories has been introduced in Chapter 1, addressed in Chapter 2 and fulfilled in Chapter 8 in a theoretically informed critique for the framework. Such implications drawn from a focused view of theories that underlie the study; enhance the ability of the framework to be a critical evaluation tool for the value creation strategies in the knowledge-driven organisations. Chapter 1, so far, concludes with a thesis structure that diagrammatically shows links of Chapters from 1 to 4, then 5 to 7; Chapter 8 and Chapter 9. The links form the inside and outside structure of thesis construct (Figure 1.1) which provides an overview of the research project. Chapter 2 will give in detail the problem context and relevant concepts.

The Thesis Structure

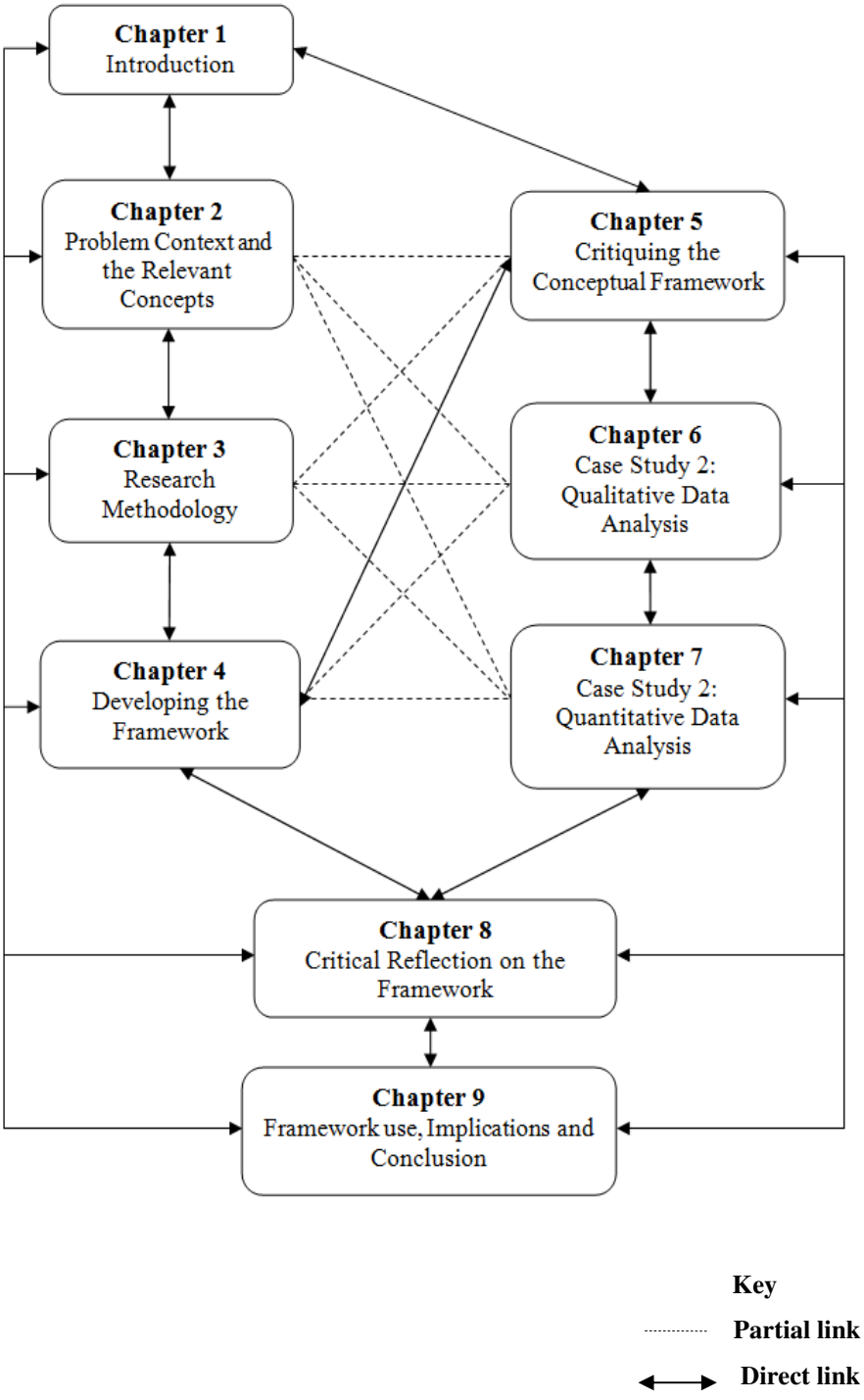


Figure 1.1 Thesis Construct

Chapter 2

2 PROBLEM CONTEXT AND THE RELEVANT CONCEPTS

2.1 Introduction

Chapter 2 describes the problem context and the relevant concepts to the study. It expands subsections 1.3.1 and 1.3.2, whilst partly fulfiling objectives (i) and (ii) of the study. It covers the organisation's adaptation to changing environment of increasing availability of information, the consequent rise of intellectual capital and measuring of intangibles in the value creation process. The chapter describes various relevant concepts like creativity, dynamic capabilities, knowledge management and intellectual capital to enhance clarity of the aspects of developing the framework. It sets the tone for the study.

2.2 Background to the problem context

Whilst organisation embarks on strategy implementation, the environment of web connectivity require strategic options to activate actions that turn the vision of the organisation into a workable reality (Kim and Mauborgne 2005: 161–165; Harman and Harman 2008: 119–120; Puukka and Marmolejo 2008). The use of intangible assets needs the organisation to possess appropriate technologies and knowledge which form the core capabilities that incorporate evolutionary fitness as a cycle of goodness for value creation (Choo 2006: 150; Helfat *et al.* 2007: 15; Nonaka, Toyama and Hirata 2008: 201–203).

However, a dynamic business environment give signs of readiness to change, revealing scenarios that require bold actions with calculated considerations, despite o uncertainties and other tradeoffs (Mintzberg, Ahlstrand and Lampel 2005: 69; Palmer and Hartley 2006: 29). Common signs include increasing Internet use urging new business models that embrace considerations of global interconnectivity. Nonetheless, some organisations have adapted quickly by continuously renewing capabilities to accommodate new platforms for creating value (Möller and Rajala 2007: 901; Huggins 2008: 285–286). It entails that individuals when enabled to unleash individual potentials with commitment, can skilfully offer exceptional contributions to organisations, despite prevalent locus of control (Hodgkinson and Sparrow 2002: 198). For example, policy and trust are issues that require individual autonomy to create research deliverables (Ehin 2008: 345–346; Lehaney and Clarke 2008: 12–14). Nonetheless, possessing emotional ability enhances the evolving interactions required to create value (Decker, Landaeta and Kotnour 2009: 30).

2.3 Adapting to changing environment

In describing the changing environment, Lehaney *et al.* (2004), relate the rise in KM to the rise of services in western economies. The increased adaptation of information and communication technology (ICT) and the proliferation of e–commerce caused an interest in intellectual capital to rise. It became apparent that organisations possessing superior knowledge and better ways of managing are capable of winning market power, position and gaining high

levels of organisations growth, (Korot and Tovstiga 2001; Allee 2003: 105; Bouwman *et al.* 2005). Smart use of knowledge and technologies, provides organisations winning bids in various economic ventures.

Nonetheless, organisations need to identify their core capabilities, develop and manage business models that enable their requisite knowledge to be created and utilised. This is a realisation of visions and missions using core capabilities deployed in business practices (Bouwman *et al.* 2005: 145; Sparrow 2005: 136). Within a given context, it presupposes a need for knowledge-driven organisations to unleash potentials of their workforce for meaningful organisational competitiveness. The organisational resources of these organisations are in a dynamic environment, which is constantly being developed and managed for competitive positioning. The core competencies, practices and ICs of these firms are kept continuously fit, sustainably, in synergy to the fast changing business environment (Birchall and Tovstiga 2005: 22–23; Kaplan and Norton 2006: 39). Complexities arise due to networking and the web interaction.

As new organisational paradigms emerge, information and knowledge are raw materials for activities in the workplaces (Malhotra 2003: 35), causing organisational cultures to keep on changing. These changes hinge on communication, collaboration and coordination with ICT investments that represent stores of knowledge. Value mapping helps to harness knowledgeable

insights that inform and report evolving value creation in the organisation (Jack 2001; DTI 2005; Kuisma, Laukkanen and Hiltunen 2007). In addition, Qureshi, Briggs and Hlupic (2006) provide evidence showing efforts towards value creation strategies in organisations that fit a dynamic environment. Similarly, Möller and Rajala (2007: 898) provide further evidence of the use business nets as part of pervasive networking.

The notion of value creation is not new; but due to contemporary changes in organisational paradigms, it is an emerging thought, (Pór 2000; Allee 2003; Dayasindhu and Narayanan 2004; Roos, Pike and Fernström 2005). In strategic perspectives, there is an emphasis on KM though researchers, academicians, practitioners and business executives view KM as embracing value creation process in organisations (Seddon *et al.* 2004: 11–34; Berghman, Matthyssens and Vandenbempt 2006: 961–973; Chang and Holden 2007: 108). In these organisations, IC acts as a linchpin between KM and the firm's strategy. With a dynamic business environment in global interconnectivity, knowledge flow proliferates. This challenges organisations and intellectuals to rethink initiatives and ways of enhancing knowledgeable tasks for knowledge workers to deploy intangibles as vital resources to raise competitiveness, (Sandberg and Targama 2007: 149); largely through workplace interaction, Internet and networking (Cavanagh 2007: 48–51; Jones 2008: 139–142).

Researchers, practitioners and writers like Twomey and Harris (2000), Skyrme (2001), Sveiby, Linard and Dvorsky (2002), and Ferreira and Neto (2005) have worked on entrepreneurship, KM and IC, contend that the use of intangibles is vital for competitiveness. As firms become knowledge-driven, the importance of intangible assets increases, with profound effects; compelling them to develop competitive and dynamic capabilities by investing more in intangible assets (Allee 2003; Lehaney *et al.* 2004; Birchall and Tovstiga 2005; Helfat *et al.* 2007). Though, in explaining intangible assets, Allee (2003: 155) relates that, accountants use the term intangibles, whereas economists typically prefer knowledge assets. However, business people generally speak of intellectual capital, IC, although the simpler term 'intangibles' has recently gained ground. From an economic point of view, intangibles have high powers of divulging appreciating returns, compared to the tangibles which develop diminishing returns. However, intangibles have shown difficultes of being measured with a degree of certainty compared with tangibles (Gamble and Blackwell 2001: 91–92; Lehaney *et al.* 2004: 28; Warner and Witzel 2004: 84; Birchall and Tovstiga 2005: 27; Augier and Teece 2005: 24; Marr 2006; Allee 2008).

In business firms, value creation occurs "when goods or services produced are worth more than the cost of necessary inputs", (Sull and Escobari 2004). They bring to the fore the changing perspectives of the brainpower assets of organisations, to include intellectual capital as approach for managing

knowledge (Stewart 1999; Little, Quintas and Ray 2002). These firms possess, intellectual assets, tacit and codified knowledge with technologies, causing global strategy to use KM systems (Rhem 2006; Inkpen and Ramaswamy 2006). Innovatively, firms maintain cash flows that nurture survival and growth as workforce uses knowledge in tasks that integrate intangibles to divulge value, (Bouwman *et al.* 2005: 152; Choo 2006: 71–75). Studies on IC reveal that, practices of workers sharing knowledge are crucial for the success of these organisations (Alle 2008: 88–89; Zhu 2008: 115; Marr 2009: 221).

2.4 Overview of the KM and IC strategies

Whilst changes are prevalent with business environment continously affecting organisations, knowledge is recognised as the intangible resource for use. Knowledge management, KM, and intellectual capital, IC, seem to possess strategic strands vital to underpin the dynamics involved in the organisations.

2.4.1 Emerging KM and IC value creation practices

The KM and IC practices have the case of Finland, which in the early 1990s experienced a financial crisis that rocked the national economy. An organisation, Nokia, through pooling together knowledge using Information Communication Technology, ICT, managed to create and sell mobile phone handsets and the country's economy was revitalized. The experience of Finland is a good knowledge use as a resource in economic transformation for growth and competitiveness, (Dahlman, Routti and Ylä–Anttila 2005).

Factors in Finland's success include, strong ICT capabilities, availability of high-level manpower, strong university and research infrastructure, a quickly responsive educational system, availability of foreign and venture capital; with a boost of government seed fund (Dahlman, Routti and Ylä–Anttila 2005: 19). Finland used knowledge strategies in a systemic approach to manage, innovate and bridge the entrepreneurship and financing; changing the invention into commercial reality (Dahlman, Routti and Ylä–Anttila 2005: 20). The Finnish case gives KM and IC strategies extra successful application.

Equally, there is the case of Australia, a study undertaken on alignment of KM and IC with a major focus on how the organisational culture and structure can be explored using knowledge to foster growth (Zhou and Fink 2003). In practice, the concept of dynamic capabilities seems to be at the heart of KM.

For the effective and efficient deployment of IC in the organisations, a concept of intellectual bandwidth (IB) was developed and deployed. An organisation's IB is its ability to use IC to support the tasks at hand. The higher is an organisation's IB, the higher would be its potential to create value, (Qureshi and Briggs 2003: 1). Such perspectives of dynamic development in an organisation's core capabilities, makes them strategically sensitive in seizing opportunities. Although, being aware of the value creation strategies and competitive advantage can leverage the best exploitation of corporate strength

(Andrikopoulos 2005: 167). Yet priority lies on IC development, deployment and measurement that can help increase its critical viability for higher value creation strategies**.** This is evidenced in the way networking has managed to grow and increase the opportunities for value creation in these organisations (Möller and Rajala 2007: 901; Boxall and Macky 2007; Allee 2008: 7).

Furthermore, a case study from the USA shows a different perspective of KM activities. Within it are major highlights on knowledge sharing, to find ways of 'developing KM strategy and linking with the organisation's mission and vision. Once the KM strategy is formulated, KM implementations plans need to be developed' (Liebowitz 2003: 75). The study was about ageing members of civil service cadres, where KM strategies alleviated the effects of knowledge gaps occurring after retirement. This called for government organisations to show preparedness for the future and foundations that use KM offerings as vital keys of human capital strategy which can can fully be involved (Liebowitz 2003: 71–75).

In Japan, a case of KM practices is the merging and integrating various technologies in strategic communities (SC), that foster inter–organisational collaboration for the purpose of developing strategic enterprises. Despite formation of 'Leadership Strategic Community' (LCS) to merge and integrate knowledge from SC, such efforts were curtailed since struggles and conflicts seem to be common occurrences in networked SCs (Kodama 2003: 83).

Key issues for organisations in the 21st century to achieve innovation, hinge on nurturing creative leaders. It requires a nurture of strategic capabilities that foster leadership abilities to steer and lead the workforce in collaborative networks (Allee 2003: 138–139; Kodama 2003: 84; Petitta 2007: 382–383).

The instances of efforts made by various global frontiers show the use of knowledge as a prime resource in value creation. Individually, people are vulnerable to being beaten. As a group, they can win in any situation if they work together smoothly and effectively amid opposition (Buckman 2004: 19).

Efforts are made by researchers and practitioners to catalyse initiatives that act as platforms for organisations to accommodate change. Recent initiatives include three stages in 'KM readiness tool' for organisational members: *readiness,* receptive and forthcoming, *adoption,* attitude and behaviour conform to expectations; and *institutionalisation* the changed mindset is part of the behaviour and fabric of the organisation and continuously able to foster learning, (Holt *et al.* 2007: 86; Jyrämä and Äyväri 2007: 124).

Whenever, a KM strategy, is appropriately adopted and institutionalised, organisations are likely to maximize the harnessing of individual potential experiences. This can leads towards to gain resilience, build and achieve sustainable dynamic growth through coordinated activities that create value; as experienced in Toyota corporation (Ichijo and Kohlbacher 2008: 180).

2.4.2 Measuring intangibles for value creation

Traditional thinking holds the view that 'intangibles are not measurable.' This is challenged as 'intangible assets are measurable using existing knowledge management metrics' (Tahvanainen and Hermans 2005: 73). With such a perspective, few reported cases can assist in explaining the issues of measuring intangibles. Among KM strategy projects, the MERITUM Project (2002), funded by the European Union prepared a guideline for measuring intangible assets. The MERITUM project revealed the extent firms can opt for intangible valuation in practice. It takes the *vision of the firm*, *identification of intangibles* with related activities and *indicators* as criteria for any company to report (MERITUM Project 2002). With such criteria, management organises both critical and non–critical intangibles through knowledgeable activities to meet organisational objectives. Undertaking of the value creation process, as envisaged in the KM strategy, guide the organisation's future scan of the requirements and knowledge gaps underpinned by plausible options of knowledge potentials. From a taxonomic perspective, the three knowledge types are: *core knowledge* minimum for the firm to be in the business, *advanced knowledge* for competitive viability; and *innovative knowledge* to enable competitive advantage (Mehta 2007: 128).

The framework by Mehta (2007: 126–135) highlight the importance of deploying four organisational capabilities to make a KM strategy effective in the value creation process. These capabilities are: *articulating the KM Strategy*

to help the firm define KM strategy in the light of corporate strategy, *facilitating knowledge flows,* helps to improve knowledge flow and build appropriate human and technical infrastructures. The other capabilities are: *enabling innovation;* realigns the firm's institutional structures to address strategic knowledge gaps, and *assessing value,* develops direct as well as indirect measures of value assessment. The study by Mehta (2007: 130), reveals that firms with developed '*assessing capability*' exhibit expertise in using direct and indirect measures to assess economic, social, intellectual, and cultural value created within and outside; making them dynamic capabilities.

Similarly, in market value link, Lehaney *et al.* (2004: 27) argue that the ability to manage the intellect of human resources, including creativity and sharing of knowledge, has a direct impact on the maximising the organisation's overall value. This is realised less in the use of tangible assets for the profit margins, but the overall market value of the organisation using intangible assets, boosts the value creation process (Nonaka and Teece 2008); whilst Ricceri (2008: 111) propounds that the value creation process in an organisation has to rely on the stakeholders perspectives on comprehensive approach, in understanding the business activities that might allow intangible assets to be deployed as fundamental attributes to bring competitive success.

An *enterprise market value* has three detailed 'Intellectual Capital' related parts: While, the 'Intellectual Capital' takes the biggest portion of the parts

constituting enterprise market value 'It is undisputed that the intellectual capital represents the most important asset of a knowledge based organisation. This value is usually not declared in annual reports and does not appear in conventional analysis models. Intellectual Capital may be converted into knowledge resources to formulate an intellectual capital statement' (Auer 2004). As enterprise market value is divulged to stakeholders without the IC components, it goes on with high deficiency or appears weak strategically and structurally for a competitive positioning of the firm in a particular industry.

This is the major concern for stakeholders, a query for more information in organisational reporting. However, the works from other areas specifically for Intellectual Capital include the Danish Guideline that shows systematically how to go in IC valuation from strategy to specific actions. This guideline shows how organisational knowledge is used, affects, challenges and the results from various parts of the organisation. In a more elaborative form, the guideline shows how to plan in 21st century: how to identify, use and measure intangibles. The guideline, as argued in Danish Ministry of Science, Technology and Innovation (2002: 4) shows the importance of knowledge management, KM. The following is an excerpt:

> *Knowledge management is about how a company works with its knowledge resources…its employees, customers, processes and technologies…*it is *not just a matter of acquiring the right*

> *knowledge, but ... developing, sharing and anchoring this knowledge ... The Intellectual Capital statement makes it possible to work strategically ... goal–oriented with challenges…*facing grimly ... *organisations;* day in, day out.

The Danish Government nurtured KM practices, as signified further by the guideline format that leads to the intellectual capital statement reports. It comprises of four essential elements arranged in two phases; firstly, to formulate the knowledge management strategy and secondly, to communicate the strategy attributes in an intellectual capital statement, (Danish 2002: 4).
The essential ellements are shown in summary as follows:

(i) **Knowledge Narrative** – how the products or services create value.

(ii) **Management Challenges** – set to realize knowledge narratives.

(iii) **Actions** – management challenges broken into specific actions

(iv) **Indicators** – recording actions; narrative to specific measurable factors.

This guideline with their four major elements shows how to go on valuing and preparing intellectual capital statements. A natural way of valuing knowledge is to look at its fragments, the breaking down into its constituent parts, (Gamble and Blackwell 2001: 194). However, as business activities of knowledge workers escalate both at local and global level due to web

interconnectivity with customers and investors, intellectual capital statements reporting is crucial. For it gives transparency and foster confidence and hope to parties in their efforts of improving value creation processes, (Andriessen 2004: 330–35; Mourtisen, Bukh and Marr 2005: 69–72; Bornemann and Alwert 2007: 563; Nielsen, Roslender and Bukh 2008: 21; Marr 2009: 155).

2.5 Unified guidance to measure IC for value creation

In other countries, there are developments but without comprehensive guidance from the state authorities that has been in wide use as the Danish one. In Japan, "a corporate story on value creation differs from company to company," (Sumita 2005: 10). It is also worth to note that, IC guideline proposals have been adopted on a larger scale. In comparison to other guidelines, 'the Danish guideline does not contain elements specific to Danish corporations, these guidelines could be easily adopted by corporations from other countries' (Rimmel *et al.* 2005: 18). This can assist the quest for insights into intangibles. Similarly, Malhotra (2003: 3) addresses the 'complexity of measuring the intangibles' providing a definition of intellectual capital (IC) as 'the intellectual material – knowledge, information, intellectual property, experience - that can be put to use to create wealth'.

Occasionally, researchers have defined IC to include, all nonmonetary and nonphysical resources that are fully or partly controlled by the organisation and that contribute to the organisation's value creation (Roos, Pike and

Fernström 2005: 19). Alternatively, IC is seen as the difference between the firm's market value and the cost of replacing its assets. Besides, 'a more dynamic view of IC, together with its strategic focus and a set of organisational and technological attributes, are all essential to the development of dynamic capabilities' (Zhou and Fink 2003: 92). Whilst competitiveness is of prime importance to the organisations, continuous learning is a necessity for adaptation and acquisition of vital capabilities. Both formal and informal knowledge flow in the organisation are seen as to help to adapt, develop competencies and abilities for knowledge creation, divulging a high value creation process, (Furlong and Johnson 2003: 102–103; Nonaka and Toyama 2003: 4; Ford and Chan 2003: 24; Coakes, Bradburn and Sugden 2004: 118).

A deeper understanding of critical roles for KM leadership, in multicultural settings can help knowledge as a resource to be well utilized, as vital with such a high significance to the firm's competitiveness, (Ribière and Sitar 2003: 42–46; Cecez–Kecmanovic 2004: 166). These efforts are geared towards meaningful process that create and sustain the business value market. Basically, what is most important is the management of organisational knowledge for creating business value and generating a competitive advantage, (Gamble and Blackwell 2001: 3). One might link this to definition of Intellectual Capital which explains 'intangible assets' as to include knowledge or qualities of value that support competencies in the whole organisation (Allee 2003: 63; Marr 2006: 42; Kianto and Hong 2009: 263).

With more researches on KM and IC, that have value creation underpinnings, it is possible to look at knowledge creation either externally through linkages (networking) or from within the organisations to get options that are better for growth and survival (Bouwman *et al*. 2005). The Korean case is an instance that shows a country experiencing severe setbacks due to a financial crisis which managed to make a remarkable turnaround using KM strategy. It is after the financial crisis, that the knowledge revolution triggered a move towards more modern knowledge-driven economy. The ensuing synergetic, interplay of the private and public initiatives greatly helped to unleash the hidden energies and knowledge potentials of the Korean people towards a high growth, through business activities in Asia (Malhotra 2003; Cheonsik, 2006).

However, harnessing together valuable ideas through various methods, such as knowledge sharing and knowledge mapping it has been possible to raise to the forefront major moves, (Lehaney *et al*. 2004: 194; Von Krogh 2005: 379; Cheonsik 2006). The cases of Korea and Finland are examples of successful application of KM and IC strategies. Similarly, the case of Australia which explains the study on alignment of KM and IC, gave findings that show strong relations to organisational culture rather than structure, (Zhou and Fink 2003).
A difficult but yet an obvious fact is the act of knowing in an organisation; that 'amounts to understanding the subtle interaction between background and foreground, absence and presence, order and disorder within an organised

settings.' It is also to say, 'Like silence, knowledge is seductive and elusive at the same time' (Patriotta 2004: 5). Whereas, time (change and innovation), breakdowns (discontinuities) and narratives (cognitive devices to guide action), are attributes in a three lenses framework, an empirical tool to study organisational practices, where tacit knowledge on a day to day basis is seen but difficult to codify. Within them, their 'meaning, ..., intuition and hunches qualities deeply rooted in each person, indispensable ..., yet requiring various learning abilities with somehow hidden relationships in making the entire body of knowledge, from organisational members to form strategic capabilities' (Patriotta 2004: 10–11; Arnaert and Delesie 2005: 4; Rosendaal 2006: 261; Cox 2007). The culmination and consideration are that the dynamic capabilities with mechanisms of interconnectivity ease knowledge flow. Such are the centre of the KM applications; where knowledge workers are in collaborative interactive environment (Mitchell and Nicholas 2006: 311–314; Sense 2007: 16; Gooderham 2007; Allee 2008: 10; Salisbury 2008: 219–221).

2.6 Strategy and value creation

In running smoothly towards success, many business organisations deploy the use of strategy. As Normann and Ramirez (1993: 65) explain, strategy is the art of creating value, since it provides the intellectual frameworks, conceptual models and governing ideas that allow company's managers to identify opportunities for bringing value to customers and delivering that value at a profit. Strategy helps a company to define its business and link together the

vital resources of the organisation. The vital resources are the organisation's competencies, customers, organisational knowledge and good relationships.

The fast changing business environment; with globalisation effects catalysing competition, changing markets and new technologies augmented with KM strategy can triggers new ways of formulating effective strategies for value creation (Nissen and Levitt 2004; Smith, McKeen and Singh 2006; Chua, Chaudhry and Fen 2007). It is crucial to build a knowledge base (Ruffa 2008: 185; Huggins 2008: 281–287). For instance, by using a KM strategy, IC gives linkages that allow the deployment of essential aspects for effective use of intangibles, (Teece 2008: 24–25; Nonaka, Toyama and Hirata 2008: 220), for organisations exist in an unprecedented complex environment that changes continuously. Palmer and Hartley (2006: 33) acknowledge that the business environment comprises of three levels: the microenvironment, encompassing organisations and individuals that interact directly affecting its activities; the macro–environment, involving the general forces that may eventually impact on the microenvironment and the internal environment, comprises other functions within the organisation. An analysis of each level reveals a continuous shift due to interactive forces that cause reactions of processes in the levels; learning that affect the dynamic business environment.

Changing economic, political, sociological and technological aspects directly affect the business environment and need a dynamic business strategy that has capability, stability, alertness and competitiveness, (Palmer and Hartley,

2006). KM in practice has these attributes. For the past two decades the Internet turned mainstream business upside down; in the way companies operate especially in terms of high–tech and other costs, with trade–offs underpinnings to links vital operations (Ward and Peppard 2004). Moreover, researchers, practitioners with focus on organisational settings learn the evolving systems' dynamics (Stacey 2010: 38). The communities of practice (CoPs) organised to create mutual aid are due to this (Senge *et al.* 1999: 157). Such concepts based on tangibles have lost their supremacy compared with those on intangibles in terms of the nature of the value creation process; due to long–term sustainability of which, value can be generated by intangibles that are not well reflected in financial statements (Starovic and Marr 2005: 4).

Based on the Meritum Project, Starovic and Marr (2005) split the concept of intellectual capital, into three different categories: human, relational and structural capital and a value creation index. This value creation index measures the difference of non-financial metrics and explains the market value of companies. Such attributes, like the 'key drivers of corporate value are customer satisfaction, ability to attract talented employees, innovation, brand investment, technology, alliances, quality of major processes, products or services and environment performance' (Starovic and Marr, 2005:15). Still they can assist in the quests for insights on KM and IC for the value creation. The MERITUM Project aimed at giving out guidelines. Its insistence hinges on the identification of intangibles, measurement and action. Categorised as,

'a set of critical intangibles that might help maintain or enhance a firm's competitive advantage or attain its strategic objectives.' These critical intangibles are abilities the organisation has or needs to develop; including: '*adaptiveness to market changes*, *human resource commitment*, *innovative capacity*, and *customer approach*' (MERITUM 2002). The guide meant for organisations to prepare intellectual capital reports in a format that has: *vision of the firm*, the *summary of the intangible resources,* with related activities the *system of indicators*. When completed, these reports form Intellectual capital statements as guides for the organisations (MERITUM 2002: 22).

The knowledge governance, a proposed mechanism to facilitate contribution of organisational members in relation to fits and success, are vital in acknowledging the contextual and cultural issues. Otherwise, internal competition may impede learning and practices in turning knowledge into action (Pfeffer and Sutton: 2000); Peltokorpi and Tsuyuki 2006: 37; Hutzschenreuter and Listner 2007: 137). Such contention is supported, for example by work of Larreche (2008: 215) which explains the importance of organisation's ability as a flexibility to react in crisis as sudden crises act as an acid test for organisation's reflexes to its real culture.

2.7 Changing value creation strategies

The study explores insights into strategies of value creation from the strategic level of the organisation. Through revisiting business strategy from the stages

of formulating strategic plans, the practice is based mainly on tangible resources. The premise is that, even the implementation of a best company strategic plan could be in jeopardy due to low considerations of the critical roles the intangibles play in the overall value creation process.

Traditionally, organisations had business strategy formulation and implementation using the systems based on tangible assets. But information technology, the streaming and live networking using the internet and other related ICT technologies have profoundly changed the workplace behaviour and attitude in the way people process and run activities (Bosua and Scheepers 2007: 106; Klein, Connell and Jasimuddin 2007: 115). These entail a greater increase in the intangible assets usage. However, Afuah and Tucci (2003) explain that information–intensive business, being advanced in computer technology, combined with the larger customer base provided through the internet, have boosted scale of operations than was possible in past years.

However, designing of websites as shown by (Buckman 2004: 150; Rogers, Sharp and Preece 2007; Benyon 2010: 385); with intranets and extranets enhance capabilities to create, acquire and synthesize information. Such practices gave rise to online transaction of knowledge products, like software, journals, banking services done globally. Globally, KM strategies allow fair competitiveness and sustainability due to the shift from manufacturing to services. It is crucial that organisations need to adopt KM to help in exploring

and use appropriately knowledge options from their workforce; for it has important aspects of business strategy, and it may continue to be viewed as part of the organisational culture in the workplace (Lehaney *et al.* 2004: 245; Collison and Parcell 2004). Organisations that have their business strategy, based on tangible resources, would usually face the economic principle of diminishing returns. It is vice versa for intangibles as they enhance value creation process. For, through knowledge flow, integrating explicit and tacit elements of knowledge, learning and identification of intangibles is facilitated, whilst deploying intangibles for best practices in organisations (Serrano–Cinca, MarMoliero and Chaparro 2004: 115–116). The use of KM strategy that deploys intangibles in knowledge flow seems to trigger momentum for value origination (Sense 2007:15; Larreche 2008: 234).

2.8 The relevant concepts

The concepts that are discussed in this section have been lightly touched in Chapter one, are elaborated to form contextual narrative for the study. In discussing the concepts, clarity of the methodology and theoretical strands that underpin the themes and features of the framework is vital. Whilst developing the framework, clarity enhances understanding of the emerging framework models. It offers plausible meaning for evidence that evokes and stimulates a change of mindset to decision–makers, an essence of the evolving changes.

2.8.1 Creativity

Normally, much of creativity goes out with innovation, and all these arise with intuition, (Duggan 2007: 153). While information is in abundance, the act of connecting issues, the knack for the incisive ways in which certain pattern of issues can be put together and bring out a completely new thing, be it tangible or intangible is somewhat novel issue. This is the creativity that is much needed. A deep knowledge of various techniques and being versed in the latest technological skills, if this combination is used appropriately, are likely to act as a springboard (Kim and Mauborgne 2005: 187). Through observations, reflections, intuitions and thereafter the right combination of good skills, together with amicable source of ideas one can possibly bring to the fore new knowledge. Such a process is being carried out in various CoPs. That is the reason why CoPs are being assisted and nurtured by their organisations.

There are ranges of different methods of creativity. In the act of solving problem, for instance, 'different creativity methods include: brainstorming ... and permutations of elements' (Klein 1998: 143). It leads into different logic of explaining creativity as 'a mystery' whereas the 'logic of creativity is the logic of patterning systems,' (De Bono 1996: 4). De Bono (1996: 278) says that, creativity needed to help analyse information. Corporate strategy level is crucial as a 'heavy user of creativity' to cater for various needs, such as ways to form new designs, concepts and strategic options much necessary at workplace to increase competitiveness in the knowledge-driven organisations.

Senge *et al.* (1999: 153) assert that, 'creativity is mostly understood as a problem-solving ability, in the realm of thought.' But in reality creativity do not work that way. As argued again by Senge *et al.* (1999: 153), 'this mysterious creativity is something that everyone already possesses – the ability to approach the world with interest and curiosity.' For instance, keen senses underlie creativity... just consider a fine – tuned piece of music provides an awareness of pure experience. Intrinsically, beautiful experience gives people an inner ground for being more creative ... a glimpse of the threshold between perception and thinking, which help to create new ideas.

It is with the concept of creativity that action research projects bring meaning. The idea is to see that, there is a move forward, a move towards positive change. What is most important in organisations is to build an environment that facilitates and sparks creativity; and with it a sense of belonging. In the business environment that is ever changing, with networked organisations, 'we need to learn how we can better self-organize to live on ... the creative edge of chaos' (Allee 2003: 233), and create new ideas that help to solve problems.

The concept of creativity is hoped to spark ideas and initiatives that can steer an organisation through unexpected grim situations of downturns to high success. The irony with creativity is the uncanny feeling that goes all along with some kind of independence, in distancing oneself from the rigidity of

organisational structures, policies and rules that bind and sap creativity potentials and blur the richness of the intellectualism. Furedi (2005: 33) says;

> *'The aspiration of autonomy is driven by understanding that ideas cannot be developed in accordance with schedule or dictates of a particular institution. It is generally recognised that a degree of detachment is essential for the gaining of perspective and of creativity...* to *preserve critical intelligence'*

In using KM strategy, there are possibilities of putting creativity to the fore; a valuable concept for the focus groups in the study; hopefully it is real useful.

2.8.2 Critical social theory

Owing to rapid technological changes, many organisations are caught in the race towards competitive positioning. In so doing, it might be so easy to ignore crucial aspects in the livelihood of the organisation. Let us take an instance of the simple art of questioning which is so common in the whole system of education and training (DeBourgh 2008). Is this art being practised by many people in the organisation at a personal level? Even if practised silently, what are the resulting effects? Are we always ready to share with others in the dialogue as to what real is going on within oneself? What causes the blockages of the valuable ensuing insights? Let us again examine what others are saying on such issues. For "opinions being newly aroused have a

dream like quality. But if the same questions are put" to someone, 'on many occasions and in different ways, you can see that in the end' one will have 'knowledge of the subject as accurate as anybody's ... this knowledge will not come from teaching but from questioning' (Gottlieb 2001: 26). When such attitudes are amiss; such an organisation is not healthy for it is losing its critical ability.

Nevertheless, the art of questioning, coach people to reason and arrive at acceptable conclusive statements; as precipitates of the thinking process. Such practices lead to critical thinking. As we search for truth, Fuller (2005: 65) reminds us that '... the only reliable means to the truth is criticism;' through criticism it is possible to get reasoned facts. With reasoned facts, we can organise various ideas into knowledge. In this research, therefore, the idea is to unlock the hidden potentials in people. Knowledge workers in organisations with differerent backgrounds and culture; are sources of ideas that need a refining process. However, constructive criticisms are crucial for desirable changes as 'ultimate expression of individuality' (Greenfield 2008: 255) and as 'stimulating creative strategies' (Kaplan and Norton 2008: 53) that work; to underpin critical thoughts at workplace (Fook and Askeland 2007: 5–6).

In such a process, critical social theory is seen to be a product of intellectual work, a combination of works of critical theory and social theory. Leonardo (2004: 11) argues that 'critical social theory is a multidisciplinary framework

with the implicit goal of advancing the emancipatory function of knowledge in a society.' The critical theory when related to social theory allows the art of questioning critically issues in search for truth. It aids, cultivates thoughts and arouses finer abilities whilst questioning, deconstructing whatever knowledge one has and then reconstructing it and emerging with a new knowledge, (Leonardo 2004). Nevertheless, in exercising the process of critical thinking; the best potentials from one's deepest thoughts with the aid of the immediate environment sensitisation can emerge. At this level, the use of knowledge and technology is clear, with caution, that they are used with wisdom and candour.

The prime target in all such undertakings is the attempts to make people unleash their potentials in abundance. With the help of the organisation to them, put them into practice so long all of these ideas are in line with organisational mission, values and goals. One may consider these to be reasons for communities of practice, CoPs, and networks of practice, (NoPs).

These have sprung into life, are being cherished by people and organisations worldwide. In this research, the concept of critical social theory has been used as a better refinement process. If such an experience is well fostered in a firm, it is quite possible to create the flair of high fliers of knowledge creation; real important knowledge management taxonomies. The challenges in this type of study were manageable due to, perseverance, supportive organisational culture and positive leadership. These maintain the sense of dynamism in scanning the

environment to avoid reinventing the wheel. Nonetheless, this concept has brought inspiration and quality to the entire fabric of the project, ensuring that the logical flow of the whole research is perceived as a constructive study.

2.8.3 Communities of practice (CoPs)

Normally, CoPs, 'tend to be bands of individuals who come together for some reason and stay together because of the value added that the members obtain by associating with one another and sharing common experiences and knowledge together' (Buckman 2004: 163). These CoPs are new autonomous groups that have sprung up for managing new types of knowledge (Lehaney *et al.* 2004: 33). Also CoPs are seen as a group or network of individuals who share their common concern, a set of problems, a passion about a topic or methodology to deepen their knowledge and expertise when they interact with each other on an ongoing basis, and even build global organisations (Allee 2003: 116; Buckman 2004: 164; Choo 2006: 165–167; Sandberg and Targama 2007: 145; Denscombe 2008: 275–279). Being cross–functional and multi–skilled, CoPs align themselves with socio-technical ideals of inclusivity and fluid boundaries. Members of CoPs share a sense of joint enterprise and activities in mutual engagement and so each learn an individual capability through participation (Allee 2003; Lehaney *et al.* 2004; Buckman 2004). This study was designed to learn from individuals and the groups focused, their insights on the ongoing technological innovation, organisational change and

knowledge flow capitalising their presence as future dynamic CoPs. Evident also is the need for organisation to give more support to CoPs for they are the other sources of insights for nurturing and enhancing a dynamic KM strategy.

CoPs are described as 'relatively tight-knit groups of people who know each other and work together directly' (Andriani *et al.* 2004: 21). Whilst CoPs have a face-to-face basis, there are Networks of Practice, NoPs, which are undertaken virtually, based on networking. Both CoPs and NoPs are in the realm of KM but with differences in focus. NoPs are virtual networks that require projects with modular architecture and are well suited to integrated centres as opposed to CoPs that have location and collocated groups (Adriani *et al.* 2004: 30). Pavlin (2004: 98) argues that informal learning from others at work and after work hold greater importance compared to formal learning. CoPs concept popular in KM initiatives; for developing and disseminating best practices, guidelines and procedures for members to engage in practices that foster the spirit and art of what works (Gratton 2000: 67; Duggan 2003: 101).

2.8.4 Dynamic capabilities

In describing dynamic capabilities, Birchall and Tovstiga (2005: 39) argue that; dynamic capabilities are the subset of the organisation's core or distinctive competencies that enable it to build its competitive position in the changing market circumstances. They allow the firm to create new products and processes in response. Similarly, Helfat *et al.* (2007: 121) state that,

dynamic capability in an organisation is the capacity with a purpose of creating, extending, or modifying resource base. It consists of patterned and somewhat practised activity. This concept of dynamic capabilities is associated with the process of resource management. Top leadership and the management team with zeal can continuously, effectively and efficiently upgrade and conceivable right skills. Organisation can then realize competitive advantage and bring change (Allee 2003: 232–233); with such a momentum of leadership that fosters actions for value creation (Larreche 2008: 222).

However, there are variety of advantages for an organisation to keep on mentoring their dynamic capabilities for positioning and growth. A good specific instance is where entrepreneurial venturing uses the dynamic capabilities available to allow careful management of the new business development process. Managers and decision-makers apply the concept to plan and organize their processes to obtain optimal benefit from new innovations (Katzy, Dissel and Blindow 2001). If an organisation is knowledge-driven, it requires dynamic capabilities to cruise safely in the contemporary turbulent business environment. It is because of the changing nature of the prevailing environment that these capabilities are able to change responsively. This concept has been of great help in clarifying many issues that surfaced in this research project. This gives opportunity for members who might be curious to see strengths, weaknesses, opportunities, and threats to the entire organisation's ability to create value. Thus, clear links between dynamic

capabilities in the areas of research provide many opportunities for additional conceptual and empirical research (Helfat *et al.* 2007: 120). This concept has given further insight as an advantage that fosters the organisation's intrinsic characteristics in the use of its ability to change, which is so vital in this era.

2.8.5 Innovation

Knowledge management is supportive to innovation with its 'mix of business awareness, creative attitudes and practices, systems, tools, policies, and procedures, designed to release the power of information and ideas' (Lehaney *et al.* 2004: 13). The idea of using action research is mainly to let innovation be practised and from it allow be fruitful. Innovation may be termed as an awakening since it does involve vision. It has to start with an idea and when one decides to become servant of the whole, then action arises. Though the awakening is not in the event itself; it is in our–selves. Being servant of the larger whole ultimately involves a shift in will, accessible to all who come to understand and choose it (Senge *et al.* 2005: 143). Similarly, De Bono (1996: 15), Robinson (2001: 105) and Barker (2002: 7) argue that, human beings can always learn, think, be creative and more collaborative, for the capacity of the human mind is very great, making it restless, inquiring, and so desperate to acquire knowledge that never stops; usually, a source of active creativity. Such tendencies, if given the right opportunities, have the possibilities of breakthrough innovation, with positive changes in relation to the business environment and have the firm's knowledge workers as key actors. An

instance is the research to explore the organisation's internal capability through extensive component reuse. The trade-offs between exploitation and the exploration activities studied over a period of time, with findings that companies are to set up exploitation activities in physical and social spaces in which exploration activities take place, in computer laboratories, using similar mediating elements such as electronic equipment and terminology (Oshri, Pan and Newell 2005: 22). This can help develop the firm's expertise and reduce the tensions on conflicting views of knowledge and knowledge transfer in the workplace (Oshri, Pan and Newell 2005: 22; Lin 2006; Von Ledebur 2007).

Effective and efficient use of knowledge, as an intangible resource in a firm, can be led by learning to build dynamic capabilities; a necessity in knowledge transfer, vital in this era of globalization (Huang and Lai 2004; Jackson 2005; Davy 2006; Apostolou, Abecker and Mentzas 2007: 280–283; Allee 2008).

2.8.6 Intangibles

Generally, accountants use the term *intangibles*, whereas economists typically prefer *knowledge assets*; whilst business people speak of *intellectual capital*, although the simpler term is gaining ground (Allee 2003: 155). A widely used premise is that intangibles are non–physical claims that if deployed wisely, have future benefits to the organisations (Ehin 2000; Allee 2003; Warner and Witzel 2004; Buckman 2004; Lehaney *et al.* 2004). Despite the efforts made, measurement of intangible resources is still in controversy. Future researches

on intangibles are needed to give more light on this issue. With the emerging groups like the communities of practice, CoPs and networks of practice, NoPs, people in various organisations are finding new ways of creating and integrating intangibles to unleash more new wealth than ever before.

Intangibles include 'skills, knowledge, processes, customer relationships, brands, reputation and culture' (Ward and Peppard 2002: 384). Microsoft, Buckman Labs, Nokia and others practise these types of relationships, thus this study was set to explore these intangibles for insights in knowledge-driven organisations as they proceed in various ways for value creation processes.

2.8.7 Intellectual capital

There are so many ways of subdividing (IC). Writers of IC mostly divide it into three major parts, commonly known as *relational, organisational and human* (Allee 2003; Lehaney *et al.* 2004; Roos, Pike and Fernström 2005). In a concise way, *relational* parts include all relationships suppliers, consumers, partners, owners and others closely related to these. *Organisational* parts include all infrastructures, resources, like the brands, the information system. While the *human* part include attributes such as competence, skills, tacit knowledge and personal networks. Intellectual capital although it has existed quite long in history, an explicit recognition of its importance to business is a relatively new phenomenon. This is due to the failure of traditional resources as drivers of competitive advantage for they are increasingly being open to

substitution and copying, (Gamble and Blackwell 2001: 188; Andriessen 2004); also, such copying is a reason for the ever-pervasive networking.

In outstanding organisations, 'success comes from being able to attract, retain, and use the talents of an outstanding workforce' (Pfeffer and Sutton 2000: 57). This study uses IC whilst recognising the controversy, due to the difficulties of measurements and its effects in value creation process, seen through the cframeworks (Viedma 2004; Bou and Sauquet 2004; Andrikopoulus 2005). In synergy with the intellectual bandwidth concept (Qureshi, Briggs and Hlupic 2006; Bach and Zhang 2011); the concept of IC is strengthened in its how it can be approached through KM strategy. Its importance in the value creation process is seen but as it is an intangible asset; its measurements have to be based on adopting and deploying new effective organisational paradigms. The concept IC plays a central role in this research project, which shed more light on IC identification, and its possible measurement for evaluation tasks.

2.8.8 Knowledge

At the individual level a person can relate information to his or her external environment; or groups of people can agree on how to interpret new information. Maula (2001: 10) says that, 'knowledge grounded in Western epistemology, focuses on the nature of knowledge, modelled as ... an unambiguous, reducible and easily transferable construct,' whilst knowing is associated with processing information. This research study, explores

knowledge both tacit, that part which is in a person's mind and the explicit as the already codified part of knowledge that can be shared or used by others (Buckman 2004; Allee 2008). Whilst a part, which is in a group, the organisational knowledge; is obviously distinct from one organisation to another enabling innovation and identities (Almeida, Phene and Grant 2004).

Organisational knowledge is much linked with the culture of the particular organisation in focus. This reality is the essence of knowledge that is perceived as a product of human reflection and experience which depends on context and a resource. This is located in an individual mind or collective, or embedded in a routine process of the organisations, (Wang 2004: 233).

But it is not possible to acquire the organisational knowledge, unless first there is an organisational culture that foster and nurture the tacit knowledge sharing. This is a claim for emphasis on knowledge sharing and dialogues in the organisations settings. When organisational culture is well set, it can act as a good springboard from which to nurture ideas that may later be valuable for future value creation process within the organisation. The meaning behind all these can be seen in the following work of Klein (1999: 170), who argues for the importance of tacit knowledge as in the existing organisations; an excerpt:

> *'In organisations, much of the knowledge is held within the heads of the workers and is never shared. ... tacit knowledge. In most organisations, the culture seems to ignore the expertise that already exists, to take for granted. If a skilled worker retired after... years on the job and tried to leave with a favourite personal computer, or set of tools, he/she would be stopped. But ...lets the worker walk out with all that expertise, which is worth far more than...minor equipment, never say a word … nor notices the loss'*

Knowledge flow in the organisation is what is needed to share with others the usefulness of this resource, (Nissen and Levitt 2002; Sense 2007; knowledge flow theory (Nissen, Orr and Levitt 2008)). Knowledge is a word in common use but this time, it is specifically used to enable organisations process their way to future growth and create other ventures that are beneficial. In a richer context, Collison and Parcel (2006: 23) has a definition of word knowledge from Consice Oxford Dictionary as 'familiarity gained by experience' but went on to say that it is not as simple as it is shown for it has attributes such as know–how, know–why, know–what, know–who, know–where and know–when.' In this case what comes is not only experience but also trust as one of the crucial components of knowledge. Usually, basing on the expert experience, knowledge obtained from the experts, is in a higher understanding than information alone. The explicit information comprises facts or data that is organised in a structured way; whilst knowledge incorporates values, beliefs,

perspectives, judgements and know-how (Lehaney *et al.* 2004: 16–17). Knowledge in others' eyes, 'is something pursued indefinitely, perhaps even profligately if its pursuit leads in expensive directions involving specialized training, new equipment...' and likely to lead into 'paradoxical situation' that make some economists to call knowledge a public good (Fuller 2005: 49). Knowledge is a real valuable intangible in all specialised activities of the firm.

2.8.9 Knowledge-driven organisations

Competition that prevailed in industries forced many companies to use whatever conceivable and possible options were available to survive. After the Second World War companies were successful if they managed to offer the best products to the market and they were called product-driven organisations. However, the marketplace in the 1980s changed to the extent of making the companies produce, even sell and deliver everything, the product lines from other suppliers their customers needed (Buckman 2004: 30). The trends grew to the extent that each company had to search for whatever available potentials that they have for survival amid competition. Knowledge was now crucial for success even survival; the marketplace no longer became product-driven or market-driven it rather later became knowledge-driven. It can be said that, in a knowledge-driven market place, knowledge sharing the pooling of tacit knowledge and understanding from mind to mind across a whole organisation is what separates the leaders from others (Buckman 2004: 31).

Organisations have to find ways of catching the spark of change, the information flow, with knowledge gushing in abundance through networking inside and outside their boundaries. Those who have the ability to catch and carry the sparks are the knowledge workers in the organisation. The best means are for the organisations to allow an increase of the KM practices especially the Communities of Practice (CoPs) and Networks of Practice NoPs, taken as the basic groups that deliver the precipitates from the whole process of knowledge flow. These sparks, are the raw ideas that are being conveyed fast through networking, office outlooks and in face-to-face sessions. 'Life is about creation, an ability of life to create itself' is captured in a word, *autopoiesis* (from Greek, meaning self-production or self-seeking). Buckman (2004) portrays autopoiesis as life's fundamental process for creating and renewing itself for future growth and a sustainable change.

Whilst, Steiner (2009) explores 'actor-network-theory' ANT, and autopoiesis as ability to analyse complexity of management in organisation that can self navigate in uncertainty and change. Merali and Allen (2011: 44) describe autopoietic unity as self-referential, self-regulating, self-producing and self-organising as an entity that in reflection is seen to portray a capability that allows individual components to adjust to local environment and maintain a stable global organisation; it explains why interaction and networking surge. Metaphorically, the act of holding back streaming water has a limit; a time comes when it is no longer possible to hold it any longer unless the structures

of the holding vessel are robust enough and are continuously maintained. The same is applicable to the evolving picture of new organisations. With knowledge workers and capable dynamic networks, there are some means of preserving and synthesizing new ideas that are being floated around in spark like ways. It is only the dynamic readiness type of organisations that can sustain the momentum and the speed of change. Some organisations have successfully managed. Instances are the Buckman Laboratories, Microsoft, Nokia, Motorola and the like. Other organisations have to learn how to live in this era of chaos that is largely caused by the information deluge. The concept of knowledge-driven organisations is central as it contributes and acts as an operating platform in the study's critical actions so purposely in organisations.

2.8.10 Knowledge management

KM, as a concept came into the fore largely through the work of Karl Sveiby in mid 1980s. Initially, Karl Sveiby was trying to create better businesses by improving them through the use of knowledge (Sveiby 2003). This posed a challenge, the way an organisation was formed in terms of structure and the run of normal activities could not give much access and utilization of the actual knowledge that was available. It was in search of better options for help that knowledge will be; created, recognised, stored, enhanced, shared and be beneficial in increasing the organisation competitiveness, KM (Wright 2005: 160–164); in cultural traits (Abou-Zeid 2005: 148–154; Larreche 2008: 55).

Zhu (2004: 67) defines broadly knowledge management as a loose set of ideas, tools and practices focusing on the creation, communication and utilization of knowledge in organisations; and that, KM may become 'the most universal management concept in history.' This has also aroused controversy on its use and definition, as argued by Wilson (2002); Galup, Dattero and Hicks (2003); Zhou and Fink (2003); Zhu (2004). In a way, much work needs to be done to seek for more insights on the KM controversy. In addition, in the ever changing environment, KM strategy will increase efficiency and effectiveness through knowledge flows in organisations largely due to its use of intangibles in the ICT, as management by issues (Millet 2005).

The cause of controversy in the KM definition includes the meaning of the word 'Knowledge' in its ordinary usage. At the same time the word 'Management' has its own limitations since knowledge cannot be managed, it is an intangible resource residing in the knower's mind. In addition, Hurley and Green (2005) describe KM as 'the process by which an organisation creates, captures, acquires, and uses knowledge to support and improve the performance of the organisation.' The explicit knowledge is about hard facts, quantifiable information, policies and procedures, whereas tacit knowledge is the experience, wisdom developed overtime in the use and application of information. Nonetheless, significance of the internal and external environment also the historical culture of organisation in relation to the

industry are aspects that require due diligence for synergy effect (Lehaney *et al.* 2004: 20–21; Andriessen 2004: 138–139; source of knowing (Zhu 2008)).

KM has taken a vital role, since it has activated these organisations to benefit in so many ways in various undertakings globally. In realising this rise Lehaney *et al.* (2004: 14) describe that, organisations which are increasingly knowledge-driven should recognise that technology–based competitive advantage are transient; that the only sustainable advantage are employees and that the locus of success in the new economy is not in the technology, but in the human mind as the human capital that enrich the organisational memory.

The realisation basically insists on taking care of not only the upcoming technologies, but primarily the people in the organisations. The knowledge workers are the prime agents of creating, adapting and integrating knowledge with technologies in gaining a higher competitiveness through value creation. They uphold the theoretical foundations (Baskerville and Dulipovici 2006); where it is possible for practising knowledge sharing through interaction at workplace (Peltokorpi 2006). The effects and benefits of the practices are evidenced with the claims of the variety of online products that use continuous networking to solve complex problems and create favourable solutions, which hinge on the use of intangibles like the trustworthiness (Wang, Ashleigh and Meyer 2006; Gupta and Bostrom 2006; Cox 2007: 4; Allee 2008: 6–10).

The aim is to nurture and unleash the hidden potentials from the minds of the workers and possibly store them within the organisations as knowledgebase within the firm's portals. The future use of this knowledge will create value through organisational activities, (Gratton 2000; Gamble and Blackwell 2001; Allee 2003; Birchall and Tovstiga 2005; Helfat *et al.* 2007). Organisational capabilities are to be enhanced and thus create high valuable intellectual bandwidth with which intellectual capital can be realised and utilised to foster value creation process (Nunameker, Romano and Briggs 2002, Qureshi, Briggs and Hlupic 2006). In the study, KM is a core to the construct and offer fabric platform for action in a new meaning, hope and enthusiasm to change.

2.8.11 Organisational paradigms

Paradigms can be seen as patterns or models for understanding. While the word organisation's literal meaning is the establishment of an institution that is run for specific purpose in a society. Generally, organisational paradigms are taken as set of assumptions and patterns that underpin our ways of thinking and doing various tasks in an organisation. With information, communication and technology, ICT, organisations are experiencing new shift in the way they operate. Drifting away, although slowly, are the days that organisations used to practice bureaucratic rules and policies. The attainment of high levels of change management involves a mindset change together with task of building favourable culture of high understanding in the organisations. Usually a 'paradigm shift can sometimes take place in a dramatic fashion… where

different paradigms coexist and compete…' and thus '… people defend their existing understandings, and strong impulses are needed in order to bring about a questioning of them' (Sanberg and Targama 2007: 16). It is about each person in an organisation cultivating a mindset that can act to bring a sustained and profound change that has incisive logical underpinnings, to form knowledge and truth that are evolving through interaction, (Mingers 2008: 70).

The importance of building this capability is the most needed flexibility in this time of dynamic change. A mental picture of streaming waterfalls in a riverbank can act as patterns of paradigms that provoke insightful thoughts in the direction of natural change. But who is to initiate that change of perceptions loudly in an organisation? For this to be effective, a start might be from those leaders in the organisation. Of all of them, the Chief Executive Officer, CEO, of the organisation has a major role to play. If this change of perception is initiated or starts somewhere else, in some firms, the resistance to change may be exerted with such a force that is difficult to counter. Though, when the change is initiated and supported by the CEO and management team, they will possibly act as change directors. As change directors, management teams through strategic plans and policies are to safeguard the organisations from disruptive changes to the fabrics of the organisation. The initiative for change should only not impede meaningful change, but might also be those that are likely to open new horizons for survival and growth, while exercising wisely policies that allow a tolerance for ambiguity. Nevertheless, as Allee

(2003: 142–143) portrays, our moves to a more complex, interconnected world, most truly challenge us to develop the inner technologies of mind that shape our social systems, our relationships, the businesses we create and in real sense, the world we live. It is fair for one to acknowledge efforts that are being taken on various frontiers of knowledge, that are likely to clear up controversies on KM and IC, (Cress and Martin 2006: 283 – 288; diagnosing knowledge sharing (Bou and Sauquet 2004); Bosua and Scheepers 2007; knowledge sharing the 'root factor' (Johnsson and Kalling 2007: 168 – 169)).

2.8.12 Strategy

Whilst defining strategy, Jarzabkowski (2005: 40) describes it, 'as a pattern in a stream of goal – directed activity over time.' It has disadvantages, for example of defining the organisation too sharply and too simply to the point of stereotyping, losing the rich complexity of the system through misrepresenting and brewing in distorting effects. Though as described by McGee, Thomas and Wilson (2005: 5) of all concepts in Management, strategy attracts the most attention and generates the most controversy. Almost everyone agrees its importance, almost no–one agrees on what it is. This led Mintzberg, Ahlstrand and Lampel (2005: 26–27) to five Ps of strategy as a *plan, ploy, pattern, position* and *perspective* possibly easing the complexities of understanding the concept of strategy when linked to its intrinsic and empirical meanings. Once again, these are ways of strategising for plausible options to underpin shared perspectives for collaboration (Hepsø 2009: 288).

In linking KM issues in the organisation there is no way one can do away with strategy. With such understanding the issue of strategic process comes in naturally due to the interconnectedness of the activities in the value creation process. Hence, the need for clarity as to what is strategy process. Regardless of the decades of work, scholars have no universal agreement about what strategy process is. The reason for differences include the broad domain of strategy process and how diverse are the investigated phenomena; since strategy process underlie mechanisms, which invariably involve administrative systems and organisational practices that are rife with prominent roles for managerial behaviour, in terms of decisions and actions, making them inherently dynamic (Helfat *et al.* 2007: 33). When looking at strategy process there is a direct relationship with knowledge management and intellectual capital issues. Components of KM and IC underlie the issues of dynamism.

2.8.13 Tangibles

The Oxford Dictionary (2005: 1057) defines tangible as 'able to be perceived and touch.' In plural the 'tangibles' are assets that are the most common, the tangible assets; meaning physical assets. The hardware parts of the IT infrastructure constitute largely tangibles; tangible assets that even virtual organisation cannot afford to lose. They constitute the backbone of the entire ICT machineries. These are, 'tangible resources that include land, buildings, computers and networks' (Ward and Peppard 2002: 384). The down side of tangible assets is the economic principle of diminishing returns which is

readily applicable, gradually reducing the competitiveness of the organisations due to rising maintenance costs (Checkland and Poulter 2006: 107).

Organisation cannot do away with tangibles in the immediate future. Despite of technological advancement, new hardware is needed to replace the old that no longer achieve the purpose. Incidentally, a reflection on 'terotechnological considerations gives a description on the tangibles; a terotechnology as branch of technology and engineering concerned with the installation, maintenance and replacement of industrial plant and equipment, (Checkland and Poulter 2006: 108) which need a keen watch. Such practices for physical assets are vital in pursuit of economic life-cycle costs. The concept of tangibles in the 'developed framework' is help from a trap of 'tero-technological dilemma' (Checkland and Poulter 2006: 109) that is likely to paralyse the dynamism which need reckoning on the use of tangibles before being obsolete.

2.8.14 Value creation

Much needs to be unveiled, because the value creation concept is associated with knowledge found within the people in the organisation. The notion of how efficiently, effectively, they use the resources and their ingenuity in achieving organisational goals is still not a clear issue. This concept keeps on changing as to how it is perceived with the increase use of ICT and knowledge management strategy initiatives (Hlupic and Qureshi 2003; Coakes, Bradburn and Sugden 2004). As organisational models with geographical boundaries

thinking are phased out due to high Internet usage, organisations think and act in terms of organising in the flow of information and knowledge rather than to geographical locations. The flow of knowledge is what creates value, in the web of connectivity at workplaces (Buckman 2004: 42; Allee 2008: 15–16).

The issue of value creation extends around many organisations across the globe and is much associated with ongoing change. As shown by Ehin (2000: 16), it requires being comfortable with continuous change, uncertainty and complexity of our own making. It is a solace which needs understanding of in-depth evolving human qualities; such as the quest of self-organising systems.' In organisational settings, strategy is always seen as a focal point of the management system. It is imperative then to formulate dynamic strategic plans that can encompass perpetual change (Corley and Giola 2005; Senge *et al.* 2005; Cavanagh 2007; Sarabia and Sarabia 2007). In fact, alignment is an explicit part of the management process while executive leadership is crucial in strategy execution. It link conducive environment that encompass KM and IC to build and enhance dynamic capabilities for value creation process, (Birchall and Tovstiga 2005; Kaplan and Norton 2006; Helfat *et al.* 2007). This concept is core in the study; it is being used as a metaphor of optional processes in the firm's resources usage to strategize for value creation processes and later in the critical evaluation that use the developed framework.

2.8.15 Virtual organisations

What is a virtual organisation? But why should there be virtual organisations? Responding to these questions requires a historical overview of the past twentieth century. Large companies managed mass production that required workers to be in geographical locations for better organisational activities. But with the increase in usage of information technology it became possible for the workforce in an organisation to work efficiently and effectively while located in different places (Wiesenfeld, Raghuram and Garud 1999; DeSanctis and Monge 1999; Warner and Witzel 2004, Ylimaki 2006; Cavanagh 2007: 106).

In the Higher Education sector, Harman and Harman (2008) explore strategic mergers in higher education institutions in formal amalgamation as institutions look for competitive advantages through merging. In their work they address the challenges these institutions face, for instance, creation of the new University of Manchester aiming at a position among the top 25 universities in the world by 2015. Similarly, Huggins (2008: 277–279) explores knowledge clusters, particularly, the Silicon Valley (US), Cambridge (UK), Ottawa (Canada) and Helsinki (Finland); finding models that are based on connectivity and consolidation are prevalent. Huggins (2008: 287) describes the evolving pattern of knowledge clusters as it develops critical mass of knowledge workers for growth; metaphorically, they act like 'centripetal magnet for new capital inputs' that attracts knowledge intensive undertakings.

Huggins (2008: 287) criticises the trend of studying and investing on replication of structures rather than shifting to the softer infrastructure involving networks and collaboration. The growing trend for networks shows vast, evolving, creating advantages, for instance, in global supply chains (Wind, Fung and Fung 2009: 311), whilst posing threats, for instance, through terrorism (Ganor 2009: 455–466; Denning 2010: 199), child pornography (Quayle 2010: 348), web hackers (Furnell 2010: 180), identity theft and fraud (Smith 2010: 273–275). Although virtual organisations transform life, it needs global partners to combat internet crime and the spread of diseases; such global challenges need joint efforts to win (Teh and Rubin 2009: 482–487). The perspectives address the benefits of investing in networks and to be aware of vulnerability that can be anticipated in the dynamics of the knowledge flow.

The changes and flattening and decentralisation of the organisations that they bring raise new ‘challenges for organising in a virtual setting’ (Wiesenfeld, Raghuram and Garud 1999). Whilst addressing the challenges, new types, the virtual organisations emerged with many features, works and tasks that are performed, and facilitated by use of ICT and other emerging technologies. For the curious minds, it fairly fits as a definition, where DeSanctis and Monge (1999: 693) describe virtual organisations as, a collection of geographically distributed, functionally and culturally diverse entities, linked by electronic forms of communication that rely on lateral, quick, dynamic relationships for coordination, innovation and are now a vital source of value creation process.

Hackney, Burn and Salazar (2004) explored value creation strategies of online markets and had insights on virtual business communities' growth fuelled by continuous innovation and adaptation into dynamic organisations. The flow of information and expertise enable initiatives that enhance virtual alliances.

Whilst addressing innovation, Nambisan and Sawhney (2009: 149) explore approaches that will allow organisations to look at external networks and communities; to renew the internal capabilities and amplify innovation speed that ultimately pave ways that provide quality and innovative outcomes. Despite its diffuse nature, a 'common identity holds the organisation together in the minds of members, customers, or other constituents.' Likewise, Warner and Witzel (2004: 147) define virtual organisation as, 'an organisation that uses communications technology to substitute for physical structure, enabling work to be dispersed and decentralised, organisation itself becoming more flexible and fuzzy in nature.' Pure virtual organisations are non-existing, for they need bases as headquarters where people architect, plan and coordinate activities; back-up relationships and support innovative efforts. Due to the ever-changing environment, virtual organisations are here to stay. The concept of virtual organisation widens the mind's horizons, to awaken a flow of new ideas. The networked externalities like virtual organisations perspectives are worth to explore for creating value in the changing dynamics of business environment (Lim, Kankanhalli and Raman 2004: 270–280; McGee, Thomas and Wilson 2005: 463; Da Nóbrega *et al.* 2007: 175–188; Spender 2008: 161).

2.9 Emerging research questions

The problem context and the relevant concepts have revealed that organisations experience inflexibility to change and are slow in effective use of intangibles in workplace. The changes experienced due to technological breakthroughs have enabled interconnectivity which requires joint efforts and new approaches of using intangibles to develop and improve practices for creating value. Drawing such insights from theories, past research and experience helps to link theory and practices to address knowledge gap which is caused by the rapid changes. The study with its aim and objectives was designed as a mixed methods (MM) approach to explore the problem within knowledge-driven organisations using the following research questions:

(i) How should organisations work towards unleashing potentials of their knowledge workers making them more competitive?

(ii) How do interconnectivity due to technological advances, the use of knowledge and intangibles affect existing practices of value creation?

The research questions were addressed in two case studies. In Case study 1 to develop the conceptual framework (described in Chapter 3 for methodology and Chapter 4 for empirical work), and Case study 2 used (Chapter 5 for critiquing, Chapter 6 for qualitative and Chapter 7 for quantitative data analysis). These explained the themes and features of the framework whilst answering the research questions to meet the aim and objectives of the study.

2.10 Summary

Chapter 2 gave in detail the problem context and the relevant concepts for the study. The concepts as building blocks for the entire construct of the study connect components between the research's theoretical underpinnings divulging framework themes and features. The review of concepts partly fulfils the study objectives (i), (ii), and (iii) as providing the theoretical terminologies as connectors to converging evidence. The review of concepts provided the basis of using intangibles like commitment, trust, hope and others in the data collection I and II, and the data analysis that divulged emerging themes, features of the conceptual framework; prior to the critiquing process.

The problem context is simply a synopsis of contemporary problems emerging due to looming changes as result of technological breakthroughs. Critical evaluation of the strategies for value creation in the knowledge-driven organisations has been the focus in order to elicit evidence of issues that capture value in quest for competitiveness. The concepts described helped as a focused guide in search of new insights. The concepts were instrumental in obtaining inputs and facts that enabled the conceptual framework to be developed and critiqued. For instance, Chapter 2 on the problem context and relevant concepts gave knowledge base to draw insights into formulation of two research questions that embrace intangibles and practices used in case study 1 and 2. Chapter 3 will give the research methodology, which describes how mixed methods (MM) approach is used to underpin theory into practice.

Chapter 3

3 RESEARCH METHODOLOGY

3.1 Introduction

Chapter 3 describes the methodology adopted in this research and provides the background to the methodology; giving an overview of qualitative and quantitative approaches including the use of mixed methods (MM) approach. The chapter narrates the research process stages from planning, data collection and analysis with highlights of the critiquing process. It is a methodological facet that signposts the project's milestones and partly includes the study objective (i). The chapter ends with a critique of the MM approach to enhance study plausibility and summarises the events in a diagrammatic representation.

3.2 Background to research methods

The methodological background describes research approaches in an attempt to augment the clarity of the adopted design. Normally, the research methods use qualitative or quantitative approaches and in recent times the use of MM, design is on the rise. Elements common to all include the aim, research questions, objectives, problem definition and design. These elements are used either in deduction or induction research to enhance focus of a specific study (Gherardi and Turner 2002: 91; Trochim and Donnelly 2007: 16–17). An overview of each approach is given for clarity, with reasons for MM design.

3.2.1 Qualitative research

Qualitative research evolves, whilst exploring meaning, interaction and relations of people's activities; constructing new knowledge with social reality underpinnings (Corbin and Strauss 2008: 55; Flick 2009: 21; Alvesson and Sköldberg 2009: 301). In an attempt to describe qualitative research, Denzin and Lincoln (2005: 3–8) call it a 'situated activity' in which observers use a set of options to interpret and make sense of phenomena with multiple methodological practices as their tools. Broadly, qualitative research cuts across disciplines from physical sciences to humanities. It is characterised with research designs that use of interviews, observations and other multiple practices to carry data collection, analysis and interpretation for exploratory, descriptive or explanatory purposes (Hesse-Biber and Leavy 2011: 10–12).

Depending on the needs of social inquiry, a variety of research methods approaches are common; for instance, case studies are good for an in-depth understanding of issues (Byrne 2009; Yin 2009; Vogt *et al.* 2011: 299). Whilst action research as participative inquiry, emancipate practical approaches with new abilities to solve problems. Such practices create new knowledge out of everyday experience, for instance, connecting workers in the process flow at workplaces (Reason and Bradbury 2008: 4–5; Dymek 2008: 578–582). Social inquiries use variety of qualitative approaches to search and establish meaning. Nonetheless, they underpin contextual realities of issues under studies; whilst firmly focusing on reliability and validity of outcomes.

Oftentimes, through interviews and observations, data gathering in research process of qualitative researches are able to form qualitative knowledge sought in various undertakings (Schofield 2002: 175). For example, Mason (2002: 59–60) underpins logic of decisions that lead to the methods taken to carry the study, entailing that ontology and epistemology shape validity and reliability of the study. Nevertheless, plausible arguments that may extend from a study, which often contributes to body of knowledge, can be attributed to method used. In essence, the appropriate method is crucial for understanding a study.

3.2.2 Quantitative research

Quantitative research is prevalent when there is need to cover large number of respondents if human beings form the units of inquiry within the sampling frame of the study. Experimental approaches in scientific and social researches use samples to discover the prevalence of the wider issue under investigation. In such cases the use of quantitative approaches are dominant, allowing for probabilistic approaches that use statistical inferential data analysis for interpretation. In general, quantitative research is characterised by use of hypotheses, questionnaires or other experimental data gathering instruments which allow data collected to be analysed through inferential statistics to draw insights. Quantitative research is sometimes undertaken to cover countries, for instance, Magnier-Watanabe, Benton and Senoo (2011: 20–25) explored in their study 'knowledge management' KM enablers across countries Japan, USA, France and China. They explored organisational factors crucial in KM

targeted business functions with 2666 respondents. Through questionnaires the study had findings that was analysed in descriptive statistics and regression analysis. Taylor *et al.* (2009: S72–S73) conducted a study on simulation modelling, in which they had a results total of 576 papers from the simulation modelling journals. Such survey findings were summarised and analysed descriptively. Similarly, Burstein *et al.* (2010: 81–82) conducted a survey that examined top managers' perceptions of the roles and responsibilities of a KM strategy in terms of development and implementation. This study used a questionnaire to collect data from the top 900 companies in Australia with analysis presented in the form of graphs. However, in quantitative research the similarities lie in the collection of data, analysis and interpretation which quite often rely on numerical data to present results.

Whilst quantitative researches favour restrictive options; they are characterised with research process which contains standard interrelated steps. Such studies can be easily operational and replicated (Sarantakos 2005: 107; Trochim and Donnelly 2007). Bayaga (2010: 291) conducted a quantitative study with the aim of demonstrating and evaluating the use of multinomial logistic regression on risk analysis. The study population comprised 100 risk analysts. Statistical inference was used to analyse data as in other quantitative inquiries. The most notable features in quantitative research are preoccupation with applying measurement procedures, using numbers, theory testing, being static, hard reliable data, and behaviour in artificial settings (Bryman and Bell 2011: 410).

3.2.3 Mixed methods (MM) design

In this study, MM approach was adopted because of its ability to search for deep insights using 'qualitative research,' with the 'quantitative research' augmenting results. Practically, MM can still have quantitative dimension augmented with qualitative depending on how the study is designed. Other research practices that add to the MM approach are case study research and action research. It is this proposition for the study that shows what type of research approach was taken that underpins the realities from the theoretical and empirical point of view. Although the study used a MM approach to obtain datasets that gave plausible evidence, other considerations were explored. For example, ethical consideration of informed consent based on anonymity played a significant role in case study 2 for critiquing the conceptual framework of case study 1. The plan of the study was to have a definite direction, to get credible results, raise understanding and clarity of the research rigour whilst under the lead of qualitative research (Rudestam and Newton 2007: 96; Lloria 2008: 79–86; Lee and Lings 2008; Zhu 2008: 120).

In combination with KM taxonomies, action research (McNiff and Whitehead 2000; Herr and Anderson 2005), has been used when observing participants introducing change by knowledge sharing and floating new ideas that lead to the identification of intangibles. This shows how to integrate intangibles when creating value in the organisation. These actions meant to enable the organisation to learn as the project unfolds, while observing insights that lead

to enhanced capabilities (Rego 2003; Senge *et al.* 2005). Within this fast changing environment, this type of study impliedly revealed facts that justified the use of MM approach. Options suitable for uncovering crucial insights from knowledge workers were vital in obtaining datasets that meet the research objectives and fulfilled the study's aim in the working environment (Liao *et al.* 2004: 27). However, when used at workplace, observed interactions, linked with scientific capability can trigger dynamics that create value (Berends 2005: 99; Walt 2006: 326–329; Denscombe 2008: 273; Stacey 2010: 5–20).

3.3 Research design

Whilst the focus of the study includes ways to identify intangibles as the strategic resources of the organisation, a look at existing practices led the search for reality. The targeted resources being strategic specialised, not easily copied, viewed for instance as knowledge, workers experience and other intangibles that use tacit knowledge (Gourlay 2006: 62–66). This can be seen in the use of intangible asset classification (Serrano-Cinca, MarMoliero and Chaparro 2004: 104–105). Insights from interviews helped to underpin that human capital, knowledge as capital and manpower go inextricably together (Gordon 2000: 174). The study is a quest for the links that reveal hidden potentials within the organisations. The study focused on ways of cultivating the active use of best practices as in (Coakes, Bradburn and Sugden 2004: 122; Tsai 2005: 221–226; Usoro *et al.* 2007: 199–203; Riss *et al.* 2007: 288–295).

3.3.1 Overview of the study actualities

(i) Case study 1: Data collection I – identifying intangibles

Case study 1 operationalised the two research questions that emerged from theories (subsection 2.9) by identifying intangibles through observations, interviews, seminars, workshops and scheduled meetings at the AB institute. Total of 14 intangibles identified were listed as items in a question, common to both questionnaires for AB staff and OHLI staff. Whilst a list of statement of practices appeared to all three questionnaires (Appendices D, E and F)

Data collection was, firstly, carried out using a questionnaire designed for students (future knowledge workers Appendix D), to explore primarily the satisfaction of web environment as part of learning experience. Secondly, a questionnaire (Appendix E) targeted staff as knowledge workers whose job is to mentor students. Thirdly, to corroborate the authenticity of the intangibles, unstructured interviews were undertaken by volunteered staff in a confidential mode (excerpts of interview transcripts given in Appendix C). The interviews covered issues enabling a person to unleash one's best potentials at workplace; considering individual roles and competences. The 20 interviews (20 to 60 minutes) were conducted to cover range of issues; exploring the existing practices at workplace. The distribution of AB staff questionnaire was done on a face-to-face basis to gain further insights. The participants who filled the questionnaires gave comments with insights that eased the data collection. The three separate activities were undertaken concurrently to ensure randomness.

(ii) Case study 1: Data collection II – the neighbouring organisations

Participants from neighbouring organisations widened coverage of the study. The context and purpose of the study were focused using questions suitably adjusted in a questionnaire (Appendix F). For instance, one question to explore intangibles at workplace, as the question was designed to cover AB participants and others in the neighbouring organisations; focusing on the 'driver of change in … workplace for enhancing value' (Appendix E and F). One question on teaching practices was kept in the three questionnaires to explore the link on learning practices from students to their mentors. The interviews, observation, filled questionnaires and information obtained from documents gathered, allowed the analysis and interpretation to be undertaken.

The verbal data was transcribed into textual data. Data from the completed questionnaires was prepared for analysis. In order to recall events and link them in analysis, memos were written to underpin various events of significance to the study. Such joining of interrelated events helped to form a coherence that led the research process to divulge two mental models. The mental models formed the conceptual framework that captured study synthesis. One of the two models underpins context and another knowledge worker practices. Together as framework, the models show how knowledge worker practices create value in the workplace. The first of the two models shows important features that influence value creation in the organisation. The second model reveals themes that are crucial to value creation. The themes

and features go together as each participant specifically responded to realities of individual performance at workplace. The knowledge worker needs the organisation as a context in which to practice a career, whilst the organisation needs the knowledge workers as agents to undertake knowledgeable activities.

(iii) Case study 2: Critiquing the conceptual framework

The conceptual framework, a synthesis of case study 1 had to be critiqued. The process began with the preparation of new critiquing instrument to help collect verbal and textual data. The process was carried out under strict informed consent procedures that safeguarded the study participant, interviewer and the research. The face-to-face interview instrument was designed to allow participants from all the levels of organisation to contribute.

The process was carried out first in UK and then in Tanzania. The number of participants who volunteered for interviews reached 57. The instrument used in case study 2 was split into three parts (appendices H, I and J). First, the informed consent form; second, general questions aimed at the practices of individual knowledge workers; and third, the conceptual framework, reflecting on whether what was done in the first part of the interview gauges to what one does in organisation; and whether the models shown in the framework helps to reveal the actualities of practice. The final section of the instrument had two questions that allowed the participant to fill the Likert scale questions as a way to finalise the critiquing process. The process helped to view the existing

practices at workplace in the organisation anew; and allowed further synthesis and adjustment of the models to underpin hidden issues which usually help interaction. The research process revealed insights that culminated into adjusting the models of the framework, analysis and reporting of the research.

(iv) Data analysis: case studies 1 and 2

Data analysis of case study 1 used critical interpretive approach on qualitative data. Focused coding aimed at condensing and interpreting the transcripts, gave higher categories as focused codes integrating with prepared memos, made themes to emerge. Empirically, the procedures used can be linked to grounded theory approaches (Charmaz 2006; Corbin and Strauss 2008; Hesse-Biber and Leavy 2011: 311). The quantitative data of case study 1 from results obtained in response to research instruments (Appendices D, E and F), were analysed using descriptive statistics, for clarity and understanding.

Case study 2 verbal data were analysed using focused coding. Quantitative data of two questions (appendix J) were analysed descriptively. A matrix of focused codes (Tables 6.1; 6.2 and 6.3) in themes and features, allowed the qualitative data summary to explain the critiquing process; with interpretation that gave insights to adjust the models. For instance, the insights helped to explore the strategic leadership role required to foster common understanding to create value in view of organisational levels of the knowledge-driven organisation; as a guide for steering organisation to attain competitiveness.

3.3.2 A study resilience

As an approach, the research used insights obtained from the volunteered participants for the inquiry. The study design led to information that drew insights within and around a particular organisation; making use of case study research strategy (Yin 2009: 69). The varieties of research instruments used facilitated the gaining of insights that eased information collection and led to a developed framework (Coolican 2004; Jupp 2006; Bryman and Bell 2011).

The research design allowed clarity and understanding of pathways taken to collect facts as evidence. The MM research design offers robustness to withstand shocks of field work dynamics. In context, complexity of organisational change encourages use of MM approach that uses pragmatism (Clark and Badiee 2010: 285). The MM attributes include, use of 'friendship method' or 'snowball design.' Practically, methodological attributes are safeguards against unexpected events that might unfold while undertaking the project, to provide resilience, enduring resource hurdles and other constraints.

3.3.3 Critical approach

The critical realism approach fosters the use of a critical approach in those involved; it helps to explore narratives and social artefacts that are hard to grasp due to their nature (Mingers 2008: 64–66). Intangibles fall in this critical category, with underpinnings, which can give unexpected breakthroughs in complex situations in actions that use strategic intuition (Duggan 2007: 40).

Coldwell (2007: 7) asserts the need to provide a study that effectively fuels evidence-based research. It is an approach towords a coherent ontological perspective that takes account of the reality of what it seeks to describe. It is argued that, critical realism provides the necessary backdrop for this to occur. Such expected realities are due to uncertainty found where research is being conducted. Normally, a use of more than one method helps to capture critical features. Such presumption led the research design to include and make use of triangulation approaches (Wisker 2001: 158; Robson 2002; Sapsford 2007: 19). This linkage enhanced the understanding that out different sources converging evidence can been sought (Worrall 2005: 253; Irwin 2008: 17).

3.4 Methododological attributes

Snowball sampling design was used, a non–probability sampling procedure allowed subsequent respondents to be contacted from information provided by initial respondents, (Saunders *et al.* 2003: 490; Cohen, Manion and Morrison 2011: 158–160). Similarly, Bryman and Bell (2011: 192–193) used snowball design to connect individuals in a research project and undertake the data collection. The study used special groups formed using the snowball as a friendship method (Tillmann-Healy 2006: 279), whilst ethical requirements safeguarded the research relationships. Tillmann-Healy (2006: 290) looks at confidentiality and informed consent and entire research relationships to be ‘ongoing negotiations’ in a project. Such ‘ongoing negotiations’ acted as a safeguard throughout the study period, with research process kept unfolding.

However, data collection regarding intangibles was undertaken systematically. The research instrument was designed and implemented to enable the collection of datasets that were specifically defined and refined through scrutinised information to form evidence in response to study objectives from:

(i) observations

(ii) internal documents and reviews

(iii) questionnaires.

(iv) interviews (structured and unstructured).

(v) external and other sources, (links to other organisations),

Observation of an interpretivist research design shows that it requires flexibility to accomodate practical considerations involved in social researches (Creswell 2007; Mabry 2008: 214–218). It is hardly a specific plan to be followed without deviation, but rather a series of guideposts to keep one focused in the right direction. As the study progresses, new aspects and conditions that connect links in the data collection, may make it necessary to change the plan as circumstances demand. For instance, the data collected using triangulation approach from organisation AB and OHLI, apart from being strength to data collection was an opportunity to use different sources of evidence as in (Yin 2009: 97). It ensured that the data collected met the criteria of rigor and relevance expected for the study. The evidence obtained is categorically from the information presented; as a synthesis of primary and

secondary data. Moreover, the data generated through primary or secondary researches, obtained from observations, questionnaires, and interviews (semi–structured and unstructured) fall under the category of primary data. In contrast, the data originating from documentation from institutions which had been collected previously for other institutional purposes, though useful, still fall in the secondary category (Hislop 2005: 249; Evangelou and Karacapidilis 2005: 254–259; Smith, McKeen and Singh 2006: 117–122; Cox 2007: 10–11).

3.5 Overview of data collection process

An overview and the attributes linked to data collection process are highlighted in relation to the prepectives involved in data gathering. The type of data collected, procedure adopted and souces of data are vital attributes of an inquiry. The overview is given to help clarify the research process.

3.5.1 Data perspectives

To highlight the research process and for the sake of clarity, data collection starts with a brief look at the basic meaning of data. Much has been written about data, nevertheless, this overview gives a smooth and clear understanding of what to expect from this research. '*Datum* is a unit of information that is recorded in a durable medium,' in plural terms, '*data* are commonly representing observations or readings … products of chosen procedures ... geared towards particular ends' (Krippendorff 2004: 81). In the qualitative approach, data are in the form of words and meanings, research materials and

collection of words, including data transformed and interpreted in words (Roberts 2007: 70–72; Lee and Lings 2008: 235–239; Yin 2009: 51). In this study, such data perspectives form a narrative of the qualitative knowledge.

Qualitative data can be in partnership with quantitative data, as they are likely to be mutually dependent, though quantitative data involve numbers and qualitative data deal with meanings (Dey 1993: 28; Tashakkori and Teddlie 1998: 75–76). Nevertheless, the partnership lies in the interdependence attributes that 'number depends on meaning, and meaning also depends on number,' also that 'measurement at all levels embraces both qualitative and quantitative aspects' (Dey 1993: 28). In essence, a research study needs data collected to converge as evidence of facts, linking in coherence, assumptions and the methods used to elicit them. Depending on the context and nature of the inquiry, some studies are set to explore facts which require an MM approach, especially when qualitative and quantitative methods act as complementary to each other (Sarantakos 2005: 46–50; Brannen 2007: 283; Rudestam and Newton 2007: 36–38; Lee and Lings 2008: 379–362).

3.5.2 Approaches of data gathering

The study uses MM approaches described in chapters 1.4.1 and 4.6; under the characteristics of multiple criteria of collecting data (Denzin and Lincoln 2005: 9–10; Sosulski and Lawrence 2008: 131), which include participant observation as in (Yin 2009: 112–113; Oates 2006: 208–2009). Documents

from various organisational settings, taken from workshops and meetings, formed valuable sources of evidence required to meet the study's objectives. Questionnaires were also distributed and collected as part of a planned quantitative approach, 'a face-to-face survey,' to increase response rate and elicit data which are attitudinal in nature (Blaxter, Hughes and Tight 2001: 179; Robson 2002: 238; Trochim and Donnelly 2007: 119). The MM approach facilitated the collection of data from multiple sources within the organisation. Such evidence increased a likelihood of accuracy and credibility of the study due to data triangulation (Yin 2009: 114; Sapsford and Jupp 2006: 89–90; Chen *et al.* 2006: 9; Creswell 2007: 73–76; Sosulski and Lawrence 2008: 122–142). Such MM approach, as a two-tier methodology provides sources of dataset richness that forms an epistemological justification to discern the truth (Lee and Lings 2008: 239; Yardley 2008: 239–240; Mingers 2008: 65–71).

3.5.3 Data collection plan

Whilst the study kept unfolding, action plan used tasks that gave critical facts to provide evidence for the undertaking. Such was among the most important issues under consideration, partly as vital steps taken in the mixed methods type of research. It was the presumption for a plausible option needed to elicit critical facts as evidence to realise the aim and objectives of the study, and to make the construct intact. In addition, the study phases, like the data collection stages in the research process as a construct of the empirical part of the study, was robust and of meaningful quality; as reflected in Sparrow (2005: 138);

Peltokorpi and Tsuyuki (2006: 39) and also reflection–in–action (Hasan and Crawford 2007: 240). The parts underpin theoretical and empirical issues that were given in the preceding section of the chapter, presumably to highlight specific areas due to type of datasets sought and expected ways of analysis. Conversely, it is the sampling frame that was used that underpins critical narratives of the sampling design which enabled the plausible data analysis.

Moreover, on data gathering, Rogers, Sharp and Preece (2007: 292–326) remind us that, the purpose of collecting and acquiring sufficient, relevant data hinges on strategies that are appropriate to acquire a set of stable requirements. Such requirements facilitated the development of a framework that can critically evaluate the strategies for value creation in knowledge-driven organisations. Among the requirements included were those needed initially to lay a firm foundation for a further search for issues which are hard to grasp but possible through interviews; with critical perspectives and probing questions, under practically established rapport, to elicit hidden meanings and insights.

Examples include reasons why persons would like to leave an organisation where they have spent some years, and why a person should resort to not do something which others presume capable; which is for the benefit of the whole organisation. Various techniques were required to gather suitable data that give proper leverage to understand major issues. However, Rogers, Sharp and Preece (2007: 342) suggest that, combining data gathering techniques like use

of questionnaires, interviews, focus groups and workshops, naturalistic observation and studying of documents need to be compatible with study objectives. Nonetheless, a plausible explanation of the mentioned data gathering techniques was required to explore strengths and weaknesses of each and in order to avoid chances of pitfalls. Such precaution was taken with diligence to underpin other links that enrich and enhance clarity of the study.

Furthermore, MM type of study (Creswell and Clark 2007) with a desired component of action research (Oates 2006) was designed with a caution on critical issues that might surface to allow flexibility of approach that reveal appropriate changes to the study. An instance which occurred is narrated to increase understanding of workplace dynamics when striving to build a dynamic capability shown by Pfeffer and Sutton (2006), Sandberg and Targama (2007) and Helfat *et al*. (2007). A workshop was staged by the organisation to enhance the capability of the participants in research supervision at the undergraduate level with some highlights of research methodology updates to allow reflection and learning. Participation was optional, but with an idea at hindsight that, it is about the issues of building competences. It was a three days workshop staged at AB Institute campus. The Facilitators comprising a team of internal seniour staff members conducted a research methodology workshop. Whilst sessions took three days, the actual comments from external examiners (anonymous) caused uproar. The uproar episode was mixed with dissents and misgivings; the issues raised revealed

weaknesses that could be strengthened through motivational perks and reflexive learning. However, dissents and misgivings encountered at AB institute, was a critical lesson in the future planning of forums for learning to avoid threats of failure. The 'continuous learning,' for capacity building at an organisational level needs wisdom to avert issues that inflame emotions. The episode was a lesson, an option that for the purpose of progress; in initiating meaningful and rapid change, multiple ways and tactics are needed to overcome resistant to change. The episode can be linked to Nystrom and Starbuck (2004: 104–107) who explored how organisations can avoid crises through unlearning to arouse courage and enthusiasm that can lead to success.

Burgelman and Grove (2004: 121–123) explored the strategic dissonance by aligning corporate strategy with strategic action in a changing reality. Senge *et al.* (1999: 241–275) offer various options that are helpful to overcome fear and anxiety to change. Such behaviour can be linked to shortcomings in the models of management related to knowledge workers in Shih (2009: 433–436) who investigated 'temporality and knowledge work' at Silicon Valey. The dynamics involved and the demands from management; to balance them with what knowledge workers are capable to offer raise a concern. Similarly, Mather, Worrall and Seifert (2009: 141) raised a concern on managers practices like having 'sought to make their assets sweat' due to intensity of work schedules. The issues were underpinned in the data gathering process.

In such challenges, Blackler (2004: 346–359) cautions that, conceptually knowledge and power are interrelated, making conflicts an expectation within generation of symbolic analysts and problem solvers, established professionals and managers. Such instances led to a choice that would work, subject to evaluation. It was to introduce change through a computer programme to enhance learning. An idea of using 'moodle software' (Sánchez and Hueros 2010; Escobar–Rodriguez and Monge–Lozano 2011) was brought onboard, though silently the idea was considered for use in practice. The 'moodle software' was later installed in the organisational intranet to create interactive systems as part of learning platform to nurture capabilities (Buckman 2004; Rogers, Sharp and Preece 2007; Nonaka, Toyama and Hirata 2008: 55).

With such perspectives, Bromley, Boran and Myddelton (2007: 132–134) investigated transferable skills, competence and behavioural indicators that are crucial to active learning in the higher education. In contrast, Helson and Srivastava (2002: 1431) explored issues of creative achievement and wise people as related to dynamic workplaces. Similarly, McNay (2009: 35–40) explored research quality assessment that is intertwined in diversity of systems, political agendas and pressures to adopt quantitative measures of assessing researches. However, instances of learning cues and techniques are vital. Nonetheless, appropriate ways to underpin suitable datasets were hard to grasp at first due to complexities involved in knowledge works. Though with due diligence, the study acquired zeal and momentum for in searching through

literature and observation with probing questions in interviews at workplace; it was possible to identify intangibles that are drivers of change. This eventually revealed insights; leading to a construct that developed a dynamic framework.

Observational methods, documentation and other wider needed data gathering technique were instituted as the study progressed so as to elicit appropriate and timely response for insights. Though, the link of intangibles to practice is still vital. The question remains, is it not possible to have higher levels of practice? Oftentimes, challenging issues require pragmatic approaches; a mindsets change, a knack for innovation and creativity requires a profound change.

The real facts require relentless search and timing to explore, using in-depth and semi-structured interviews to probe those 'hidden reasons.' An important issue was the use of appropriate sampling frame, selecting appropriately the to be respondents with prudence, while taking in mind the objectives of the whole undertaking, through methods chosen with sensitivity to accuracy, (Sapsford and Jupp 2006: 29; Sapsford 2007: 156). The levels to which the data were explored was presumed to be higher; but hinged on the premise of dynamic capabilities and competence building for the knowledge workers. It involved collecting views of academics, technical staffs and students (as future knowledge workers) who are active players in the changing environment of a society. Their noble roles apply to viable knowledge management strategies.

Instances were taken from the Information Technology Services at AB. In these categories, the existing practices and best practices can be found. The role of maintaining lively IT infrastructure, library services at a high level of quality and service are a relief to academic staffs with even greater benefits to students. Though, competences and capabilities issues require continuous updating. With the right participants, use of appropriate approach to develop the framework required resilience. The expectation was that, a framework can be prepared from datasets that are free of biasness with the collected data of good accuracy (Robson 2002: 260; Oates 2006: 95; Sapsford 2007: 156).

The data gathering in this mixed methods research, used data triangulation to ensure there is validity and reliability of the expected research outcome and its usefulness, (Kane and Brún 2001: 146). Nonetheless, the extent of actions in the life cycle of this project determined the outcome validity of the research. The data collection was necessary stage to encounter in search for evidence from responses across diverse contexts in triangulation (Coakes and Bradburn 2005: 65; Klein, Connell and Meyer, 2005:106; Wright, 2005; Montibeller, Shaw and Westcombe 2006; Denscombe 2008: 271; Irwin 2008: 419–424).

3.5.4 Results and analysis

After data collection, the information gathered and the results were organised and analysed to see whether give solutions to questions raised to meet the aim and objectives of the research project. The tasks involved in this phase

included the use of approaches involved in analysing qualitative methods shown in Dey (1993), Tashakkori and Teddlie (1998), Charmaz (2006), Creswell (2007) and Flick (2009). Although narratives depicting various scenarios were highlighted, analysis was undertaken to elicit meaning especially from the qualitative data. To facilitate this, descriptive statistics were used as planned to present the data in graphs and tables (Sapsford 2007: 178; Trochim and Donnelly 2007: 264). The data collected were from documents such as the strategic plans, the policies and various documents that were used by the organisation to steer them in the competitive environment.

Datasets collected through semi–structured or unstructured interviews were transcribed, categories were vital in undertaking qualitative analysis which divulged themes of the framework. Dataset collected using questionnaires with quantitative data were analysed using SPSS (Pallant 2007; Field 2009). Whilst underpinning the statistical information for meaning the complementary strengths enhanced clarity of the qualitative part of the study augmenting the gathered information to provide the required evidence for the study.

Data analysis and interpretation gave insights; clarifying the realities of practices at workplaces in accordance with existing practices. Participants prefer good practices arguing that best practices are elusive, and hard to grasp. Datasets containing key factors that constitute vital links for the knowledge workers aspiring to work towards best practices to create value require

authentic variables for evidence (Irwin 2008: 423). The argument is that, the datasets of the existing practices from existing knowledge workers have to be of high quality without superficial flaws. Instances of such data can be the record from the admission section, depicting actual students enrolled in an academic year. The enrolled list used to register students who report for studies in the particular academic year gives existing practices. The admission office's responsibilities include care and welfare of students in the institutes.

When reporting for studies, the students are registered and pay tuition fees. At this particular stage, registered students are entitled to all rights as per institute's outstanding policies within a programme and the category to which one belongs. The rights include usage of organisation's facilities, such as library and IT services. These resources are important to students, particularly as lectures start, to assist learning and other academic assignments, tests and examinations of the institute as dictated in policies. Such datasets formed a good link to other sources of converging evidence in the collection.

This type of existing practice is in line with higher education industry norms. The collected data helped to show whether there exists a best practice in how to register and continue with studies in regard to other normal 'higher education' activities. Again when can we say this is a best practice? There is no easy answer; because today's best practice may soon be out of date.

The results for the research helped to address episodes in the data analysis of questions raised regarding student's expectations. For instance, students' expected learning goals, and perceptions of AB students' practices– part of reflective practices (Table 4.3). Those undertaking studies at higher education institutions expect, when enrolled, to be assisted in terms of guidance and counselling, whenever needed, so that they can pursue the programme successfully. However, instructors at every level bemoan their levels stress for too much workload to the extent that it impedes their carriers, such as carrying out research and writing articles, manuals and books (Menzies and Newson 2007). The fate of knowledge workers is underpinned with facts that support the empirical data. The data collected and analysed showed impediments and hurdles that are encountered by the knowledge workers. Insights showed obstructions to goal attainment in practice; Menzies and Newson (2007: 87–89) reiterate their effects on social, economic and other intellectual overtones.

Information technologies bringing untold changes, at a pace that is unpredictable, the standards that can be used as a benchmark for best practices shift every day. To rescue these organisations from a fear of obsolescence in the area of technologies, there is a need to pinpoint issues that are crucial impediments and reveal plausible options for rapid continuous change in mindsets. It is necessary to delve deeply into existing potentials within the boundaries of a particular organisation. How then can datasets be extracted with sufficient quality to divulge and allow a reasonable explanation of those

hidden insights deeply in peoples' minds? For example, who is to keep pace with rapid change? Who is willing to risk resources in pursuit of change in order for the organisation to be competitive and successful in the contemporary world? Are the existing procedures and policies ready to cope with so much untold change? To some, questions regarding the best practices, let alone the ideal practices, are impossible, they are almost illusions.

Such challenges need to be addressed for a vibrancy existence of the higher education institutions in Tanzania. For instance, issues of reducing foreign funding dependancy require policy action (Gaillard 2003: 320–332). Decades ago, the challenge of output quality from the higher education organisations especially in the third World, were meant to serve the geographical locality.

But this is left to history, because IT, Cable Televisions, Internet use and other technological breakthroughs have catapulted untold change. Not only on new ways of doing things, but the mindsets of the public keep seeking new initiatives, as Greenfield (2008: 284) lauds change for the future. As expected, analysis of the results of this research project reveals clear interlinks and obstacles which require attention of leaders. The difference between existing practices, for instance, the need for dynamic capabilities in the workplace; a yearning for best practices seen practised elsewhere in the world, be it USA, UK or the whole of Europe, Asia, Australia is an open challenge. If the Internet and mobile technologies, such as smartphones have been adopted, so

why not challenges of building dynamic capabilities? It requires a change of mindset for knowledge workers; to use and strive for best practices in whatever they are doing; and possibly to attain a level of dynamic capabilities. It is possible through the harnessing of existing strengths, to build a zeal for change, using knowledge sharing whilst aligning the organisations' visions, missions and goals to adopt those best practices that really work.

However, does concern for best practice usage in a changing environment, expected from the data analysis to reveal a workable pattern? Such question was addressed in the interview; its answer gave insights from participants of Case study 2 to adjust the conceptual framework. The research instruments in case studies 1 and 2, metaphorically, were like fisherman's nets, casted to catch right fish from the 'sea of knowledge.' For knowledge workers, study participants (profile Table 5.2) had a level of education, experience with possession of status and vital responsibilities in their institutions.

3.6 Critique of mixed methods approach

When planning various tasks of the study, the MM approach offered strength to the intended research results. In this, Morgan (2006: 170) says that, the foremost step in the research design process is to select a principal data collection method that has strengths to address the project's goals. A pragmatic way of designing such a method was drawn from the study's prime intention to be undertaken with a high sense of thoroughness. The

effectiveness of the project can be linked to Morgan (2006: 171) who explains the importance of choosing a principal method because the input from one method improves data collection strategy, whereas another is used near the end of the project. The goal has been to maximize the value of information at hand, while giving meaning for different types of datasets added new strengths to the existing data. The idea was to make the principal method of the study qualitative with a touch of quantitative approach. The overall approach includes elements of action research using the two case studies for focus. The intention, literally, was to increase the strength of insights being collected; to form datasets for crucial evidence that offer plausibility which meets the aim and fulfils objectives of the research project. This presumption was adopted.

A research project, involving critical evaluation, requires different ways of viewing and observing, for example, perceptions of knowledge workers in regard to use of technologies in the networked environment to create value. Different types of tools are needed as linkages to sectors and levels in organisation for accessibility. As a cross–disciplinary research, MM approach require skills and mindset of using critical multiplism; with the notion that deploying the multiple ways of knowing needs options that require critical thoughts and choices (Miller and Crabtree 2005: 619). 'Multiplism' as a notion is about multiple methods in triangulation for stakeholders' studies that underpin perspectives in multiple lenses approach (Chase 2005: 651; Finn 2005: 169; Brannen 2007: 283; Tashakkori and Creswell 2008: 293).

However, there are differing views that oppose the use of an MM design in carrying out the research study. Among these is the fact that, 'combining methods is essentially a technical problem... which is coupled with an underlying problem ... from conflicts between different paradigms;' a cause of misunderstanding (Morgan, 2006: 166). It is impossible to avoid confounding effects of methods on measurements. In a single method, aspects of the results are inferred from the methodological approach used to obtain them.

The only feasible strategy is to use a variety of methods, in a complementary way to enhance clarity in interpretation (Robson 2002: 371). The importance of the MM approach, is shown by Denscombe (2003: 133a; 2008: 271) b), as a methodology that helps to see things in different perspectives; an opportunity to corroborate findings that enhance the validity of the data. It is acceptable in triangulation, as data come from multiple sources, to form vital information as evidence of a variety of techniques, to corroborate the same fact or phenomenon (Hair *et al.* 2007: 298; Rudestam and Newton 2007: 114–115; Jang *et al.* 2008: 221–224). Yin (2009: 115) portrays triangulation as a process that forms converging lines of inquiry from multiple sources of evidence. Such a process was undertaken in the case study 1 and also the case study 2.

Despite any misgivings about the MM approach, the nature of this research entailed 'critical evaluation' which uses a variety of techniques and approaches to gather evidence and facts that are imperative. Whilst the study

focuses on strategies for value creation in knowledge-driven organisations; it is characterised by critical research like emancipation, a critique of tradition, such as a non-performing intent. As a critique of technological determinism and reflexivity, it underpins emergent issues in the web environment, under the realities of existing practices (Oates 2006: 296–299; Creswell 2007: 27).

However, in the process of unlocking hidden human potentials, the case studies, partly under the lens of action research, presumed to observe changes which occurred within the period of the research project. This makes the design to fall under the critical research paradigm. Critical research entails perceptions that focus on understanding, evaluate and synthesise any emerging framework of action (Renzl 2007: 44–46; Dattero, Galup and Quan 2007).

The MM approach brings with it an appealing quality of multiple perspectives in variety of issues, (Patton 2002: 306–307). Insights from in–depth interviews helped to complement the documentary and observational data in clarifying the existing situation in context. Critical factors that enhanced or inhibited the adoption of best practices were scrutinised. The higher education context offers trust and ability to create value for tomorrow (Duggan 2003: 48–52, Jashapara and Tai 2006: 236; Martin 2006; Daneshgar and Parirokh 2007: 26–31; Riss *et al.* 2007: 294–295; Jiang 2008: 18–19). However, there are several limiting factors in this type of research due to its small scale compared with the challenge faced. These factors include constraints in organisational

resources acquisition, inadequate powers and advocacy required to influence and trigger multiple events to occur in action research; an expectation in such an undertaking (Ford and Angermeier 2004: 137–139; Montibeller, Shaw and Westcombe 2006: 126). If undertaken on a larger scale, this type of research is likely to divulge more insights that are valuable. This is to further a quest for realities as a knowledgebase to deal with uncertainties, hopes and expectations in workplaces for knowledge workers; an intrinsic motivation to unlock employee hidden zeal; a capability to attain challenging goals (McAdams 2002: 451–455; Latham 2007: 5–6; Hassan 2008: 28; Ehin 2008: 338–348).

Delicate issues concerning bias in the opinions of persons involved as participants were addressed by taking participants from all levels of organisations (Figure 5.3). Participation and adhering to acceptable ethical standards, balancing outcomes, made it a rather daunting undertaking. For example, maintaining confidentiality, whilst seeking consent for interviews was a necessity taken tactically to address ethical issues (Oliver 2004: 137).

The use of mixed–methods, MM, in data collection and data analysis divulged insights that help to convey the converged evidence. Through interpretation of such evidence, it has been possible to develop mental pattern that gave rise of the synthesis which divulged the conceptual framework. Ultimately through critiquing process, it became possible to develop a framework which is useful. The developed framework is the fulfilment of the study aim and objectives.

3.7 Summary

Chapter three discussed the methods undertaken in the study. The design entails different approaches used in gathering data. The issues raised in chapter three reflect insights captured from theory in the link to fieldwork. Issues regarding the quality of work have been highlighted to ensure that the data analysis was properly undertaken. The MM study approach, the proposed sampling frame and means of collecting data gave results free of errors and bias, allowing validity and reliability to be realised. The expected rigour and relevance in accordance with research norms have been stated with due care. Chapter three fulfils the aim of the study and specifically methodological aspects of objective (i) in order to realise study objectives (iii) and (iv).

Chapter 3 described the research methods used. The observation, explanation and clarification from the study participants on the existing practices, underpin intangibles, knowledge use, technology and other organisational resources in practices of creating value. The chapter helped to map the methods used to develop the framework. It ends with Figure 3.1 which gives a diagramatic view of the research process. The MM research design has two case studies. Case study 1 has study initiation, reflection, data collection I and II. The data analysis was done on results from documents, questionnnaires, interviews and memos to divulge the conceptual framework. Case study 2, is a critiquing process that gave the developed framework. Chapter 4 will describe the activities that helped to develop the conceptual frmework models.

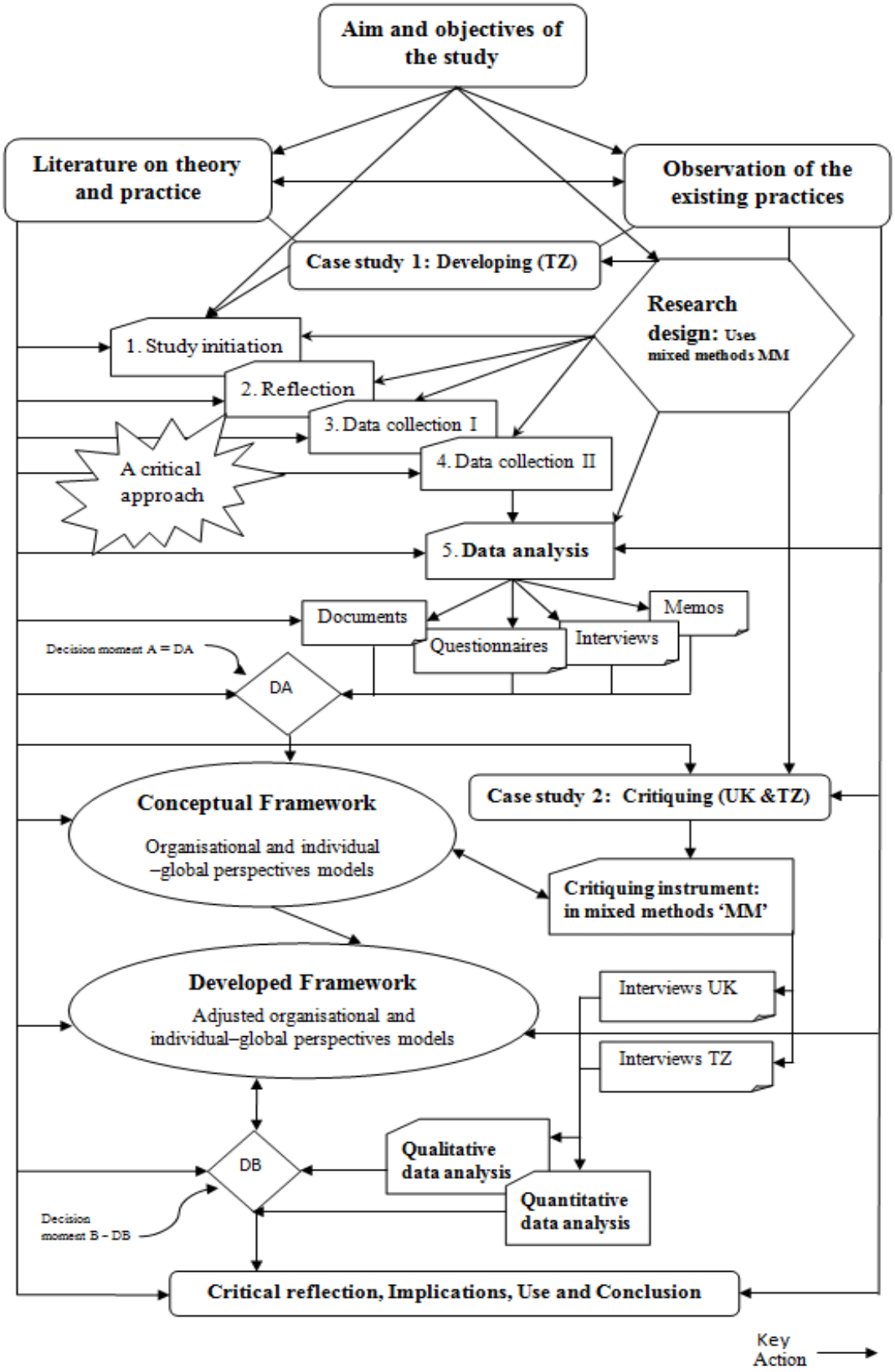


Figure 3.1 Study research process

Chapter 4

4 DEVELOPING THE FRAMEWORK

4.1 Introduction

Chapter 4 gives case study 1 which divulges the conceptual framework, fulfilling aim and objectives (iii) and (iv) of the study. Case study 1 focuses on higher learning institutes in Tanzania with Institute AB as an example of knowledge-driven organisation. Other higher learning institutes are included as surrounding neighbouring organisations. Chapter 4 describes, in context, the empirical background: Institute AB, the purpose of study, the structure of study, the instruments of case study 1. It gives the pertinent issues, analysis, interpretation of data, proposing the framework, analysis of qualitative data, the conceptual framework including a critical reflection and its conclusion.

4.2 Empirical background

Case study 1 addresses existing practices and value creation process that have been observed in workplaces as part of initial steps to develop the conceptual framework. Narratives are given, with the acknowledgement of other works. This is to create a body of experiential knowledge as a coherence of past which gave the present and likely to foresee the future. The use of higher learning as organisation is a starting point to create a space, for an opportunity to learn basic knowledge on which a future depends on how to create value.

4.2.1 Case study 1 unfolds

Case study 1 unfolds whilst describing a fulfilling of the aim and objectives (iii) and (iv). These objectives were mentioned in Chapter 1 and elaborated in Chapters 2 and 4. The study objectives include search for existing practices as lenses towards best practices and relentless search for ideal practices in creating value. The Institute AB in Arusha was the focus of case study 1, an initial place to begin a relentless search; later other higher learning institutions (OHLI) were encompassed in a mini-survey. The study at AB was conducted in phases. Phase 1 (eight months of initial stages) and phase 2 (four months of reflection) comprised of observations, meetings and workshops. Phase 3 (six weeks) involving data collection I, comprising 20 interviews, and 262 questionnaires. Phase 4 (four weeks) spent using a face-to-face on data collection II with 68 completed questionnaires from 3 other organisations of higher learning in Tanzania. Phases of case study 1 are shown in (Table 4.1).

4.2.2 Changing learning environment

Whilst the business environment changes; learning experience keeps changing too. Case study 1 addresses existing practices and value creation strategies that are in workplaces of knowledge-driven organisations, whilst capturing dimensions of knowledge (Lowendahl, Revang, and Fosstenlokken 2001: 916–924). This was done by observing work practices (Bhattacharya, Gibson and Doty 2005: 635). The idea has been to maintain a critical reflection as a tool to underpin the sober realities of existing practices at workplaces

(Messner, Clegg and Kornberger 2008: 72). Being an empirical work to realise the objectives of the study, this underpins drivers of value creation in actual workplace settings, using them as lenses to view pathways towards best practices. Initially, the focus of the case study 1 was at AB Institute in Arusha, Tanzania. AB which was established by the Act of Parliament as a public institution; is situated within Arusha Municipal; as of late 2007 AB experienced a remarkable growth from enrolment of 400 undergraduate students in 2002/03 to 2083 students in 2006/07, (AB Strategic Plan). This shows notable growth (Figure 4.2), due in part to a response to a sudden increase and widening demand for higher education in Tanzania which increased student enrolment (Luhanga *et al.* 2003: 76; Morley *et al.* 2007: 51). Such ideas kindled the zeal of AB's top management to steer the organisation into progress as the 21st century starts.

The use of information and communication technology (ICT) the internet and intranet for academic studies were experienced at local and global levels (Selwyn 2007: 87–90). Nevertheless, ICT revitalised the AB learning environment. The aim was to develop and achieve good quality in teaching and learning practices, using intranet and ICT-based learning; with increased flexibility in delivery despite the increase in AB students' enrolment (Carroll, Markauskaitè and Calvo 2007: 361; Eynon 2008: 19). This posed a challenge, on how to obtain optimal knowledge sharing, value creation through the adoption of best practices in higher learning and organisational competencies

(Nieuwenhuis and Woerkom 2007: 70; Dosi, Faillo and Marengo 2008). Despite the rapid changes of competitive offerings, knowledge and ICT technologies were adopted through internal training programmes to boost the adoption of latest ICT practices. This allowed staff members to polish ICT skills and foster quick reflective learning as a link to best practices, amid uncertainty on knowledge use, arousing enthusiasm and willingness to learn (Bridgman and Willmott 2006: 112; Spender 2008: 165; Lwehabura and Stilwell 2008: 186–189).

Basically, best practices adopted at AB included the use of outlook e-mails with attachments, making the internal-external communication instantaneous and maintaining web presence. This enabled students to obtain learning materials and other assistance direct from their subject lecturers. PowerPoint presentations and direct internet links to computer laboratories and classrooms fostered zeal and creation of a proactive learning environment. The portal and web Outlook helped AB staff and students to engage in ICT practices and internet-related activities (Massawe 2006: 54). AB tried to build necessary ICT infrastructure and capabilities, in short-term, whilst preparing for long-term needs of ICT infrastructure and usage capabilities as a bundle of challenging needs. AB offers higher learning education in the area of accountancy, taxation, business management, computer science and information technology. In building of a modern vibrant institute requires a dynamic vision, joint efforts from stakeholders involved.

4.2.3 AB: Higher learning in changing environment

The AB, being a higher learning institute in this turbulent environment, needs to equip herself adequately and be competitive in rapidly changing labour market. Nevertheless, it requires strategic leadership to traverse the adversity of globalisation and underpinnings of knowledge economy (Shitundu and Nyoni 2006: 51–53; Inkpen and Ramaswamy 2006: 124–125; Wyk and Higgs 2007: 67–68; Deem, Mok and Lucas 2008: 84–85). The vision with which the existing workforce can build dynamic capabilities of higher learning, had to infuse innovative ways of using knowledge and technological updates that are intertwined in the evolving value nets from local and foreign sources into transferrable skills (Caroll, Markauskaitè and Calvo 2007: 360–361). Growth in strategic value networks leads to focused activities within networks to create value (Möller and Rajala 2007: 898; Allee 2008: 6–7).

Intensity of knowledge production requires consideration of tacit knowledge, sharing and innovation (Mohrman, Wanhua and Baker 2008: 8–10). Whilst, the balancing the costs of required resources can foster and maintain momentum in achieving meaningful competitiveness (Larreche 2008: 222).

Among these capabilities, skill flexibility is vital in adapting to change and narrowing the widening gap of turning knowledge into action in our society, pointing to ‘knowing doing gaps’ (Pfeffer and Sutton 2000: 246–262). However, broad-based skills under evidence-based practices within the

cultural globalisation pose challenges (Bhattacharya, Gibson and Doty 2005: 625; Pfeffer and Sutton 2006: 217–238; Pagano 2007: 15–16). Higher learning institutes infuse knowledge through teaching and learning to students (who are the future knowledge workers). Through research undertakings, consultancy and dissemination using published research articles; knowledge transfer is effective when graduates carry vital competences and skills to the workplace.

Whilst graduates from these institutes of higher learning are expected to play a role in influencing meaningful change in their future organisations, ICT has brought new challenges to society as it needs continuous learning, alongside global technological changes (Nawe 2000: 24–25; Manda 2005: 273–277); Shitundu and Nyoni 2006: 51). Some studies show significant changes, mixed with impediments to higher education growth in scientific research, need to enhance competitiveness using appropriate strategies (Nawe 2001: 32–33).

In expanding education, the quality of research output is a high priority (Oketch and Rolleston 2007: 147–149; Gaillard 2003: 330–339). New institutions of higher learning are on the rise in Tanzania to meet the increasing demand for qualified professionals in various disciplines. Popular professional disciplines include accounting and finance, business management, taxation, information technology and computer sciences. Such knowledge and skills are in high demand within the labour markets and elsewhere in the Tanzanian economy, with a need to nurture and build

entrepreneurial space (Nkya 2003: 44–49). However, research in the higher education would renew organisational competencies and redress skills mismatch through a far wider higher education participation (Muchie 2000: 64; Gaillard 2003: 320–324; Frank 2006: 35; Morley *et al.* 2007: 38–50).

As a higher learning institution, AB started to operate amidst a fast-paced changing business environment, as shown in the works of Palmer and Hartley (2006) and Yao (2008). As the start of the new millennium, an environment conducive to smooth operational activities for both students and other stakeholders of higher learning is a prerequisite for the vision, mission and objectives for the strategic plans to work at AB; this can be linked to (Gaál *et al.* 2008), Bedi and Laroiya (2008), Marr (2009) with internal regulations and policies under the regulatory bodies of the government acting as safeguards.

Such policies include enrolment criteria for higher learning and governance from regulatory bodies in which the institute is registered. In this case AB, is a public entity, a higher learning in the Ministry of Finance, Tanzania (MoF, 2008) operating under the regulatory body through 'National Accreditations Council of Technical Education', NACTE, in registration (NACTE, 2006).

4.3 Purpose of the Study

The purpose of the study was to look at existing practices, metaphorically, as lenses to observe the best practices knowledge workers use to create value in the knowledge-driven organisations. This had to be undertaken amid raging competition to find how to build the required capabilities that are dynamic and competitive with inbuilt flexibilities to adapt in a fast changing environment. It requires knowledge workers to use dynamic capabilities (Buckman 2004: 236–237; Birchall and Tovstiga 2005: 58–63; Rasmus 2006: 32–33; Breuer and Breitner 2007: 29–33). Although, true competition is a battle of wits, it requires strategy which recognises mistakes, cultivates the best of human nature to free hidden potential within the knowledge workers that builds the required momentum; an inbuilt competitive spirit (Larreche 2008: 214–220).

Adapting to abilities that align organisational goals with inspired, commitment trust and entrepreneurial mindsets will stabilise workplace relationships. Such practices foster transparency that increases understanding as part of the organisational culture crucial for implementing dynamic activities in the value creation process, through learning by doing and assessing the challenge (Pfeffer and Sutton 2006: 237–238; Sandberg and Targama 2007: 155–58; Ruffa 2008: 167). Whilst uncertainties abound, reliable changes need extraordinary competences, skilled flexibilities and experiences of past achievements as vital lessons of what works, with a presence of mind and awakened awareness (Duggan 2003: 220–222; Senge *et al.* 2005: 223–225;

Zhu 2008: 115–118). In practice, using metaphor in KM helps in the knowing process (Andriessen 2008: 5–8). Such success is achievable in organisations that encourage individuals to learn, share meaning and deeper insights (Kim 2004: 48; Bartel and Garud 2005: 338) within collaborative networks (Cronin 2007: 148) and unleash one's utmost inner potentials at workplace.

Nevertheless, if nurtured using gauged managerial skills, knowledge workers with skills and capabilities, individually or collectively can deliver exemplary contributions. When supported without reservations and enabled to overcome constraints and other resource hurdles (Kim and Mauborgne 2005: 156–161), whilst actively engaged within the knowledge edge dynamics, knowledge workers can excel in creating value at the workplace (Ehin 2008: 338–341).

However, the willingness of knowledge workers who are skilled, flexibly trained and have capabilities to act hinges on engaging the knowledge flow (Sorenson and Fleming 2004; Carr and MacLachlan 2005; Sorenson, Rivkin and Fleming 2006; Sense 2007; Ichijo and Kohlbacher 2008). In essence, knowledge workers possess skills, cognitive abilities which if used wisely and appropriately with confidence, (Nsamenang 2005; Rix and Lièvre 2008); allow plenty of possibilities for creative initiatives. Such activities require knowledge, despite operational duties or extracurricula activities. In addition, it is beneficial for individuals to engage actively in collegiate memberships of professional bodies and other specialised practices. Network of practices

(NoPs) and communities of practice (CoPs) enkindle inner drives, whilst at institutional levels collaborative relationships are vital for future competitiveness (Inkson and Parker 2005; Litschka, Markom and Schunder 2006: 164; Lai and Lo 2007; Harman and Harman 2008: 106; Allee 2008: 5; Salisbury 2008: 221). Such issues spark new thinking for creativity.

4.4 The structure of the study

In order to achieve the research purpose described (section 4.3), a case study has been undertaken and from the study's onset, it was presumed workable to use research design that deploys the use of mixed methods (MM) approach (Tashakkori and Teddlie 1998; Creswell 2007: 246; Creswell and Clark 2007; Yin 2009: 174). A case study has the advantage of expecting to collect data that involves both qualitative and quantitative aspects. Most of the qualitative and quantitative data were gathered at the main venue of study. The remaining quantitative data were taken from neighbouring institutes of higher learning in Tanzania that seem to influence the prevailing practices at AB.

The advantage of such MM data has been to offer a comparative glance at the perceptions of other knowledge workers. Furthermore, at the planning stage of this research, four neighbouring organisations were earmarked alongside AB; aimed at availing the required information that constitutes crucial evidence to address the objectives of the study (Creswell 2003: 210–212; Oates 2006: 154–165; Hair *et al.* 2007: 134–135). Whilst undertaking the study, in the data

collection stage, resources and logistical constraints minimised the number of neighbouring organisations to three, such an approach may be linked to, for example works by Blaxter, Hughes and Tight (2001: 188), Oliver (2004: 126), and Stake (2005: 453). The neighbouring organisations are, for convenience, referred to as other higher learning organisations (OHLI) in the research study.

The data collected are from observation, documents, unstructured interviews and questionnaires as shown in Oates (2006: 219–221), in a chain of evidence (Yin 2009: 122–123). The ultimate purpose was to develop a framework as a useful tool that helps to critically evaluate strategies for value creation in the knowledge-driven organisations. The dynamism addressed in the framework requires a guidance that helps to underpin certain crucial elements; these are the intangibles identified in the data collection; commitment, trust, confidence, technological updates, hope as vital drivers for change. Such intangibles are embedded in organisational life; although taken for granted, they are the true sources of the dynamism. For example, lack of trust in the organisation may jeopardise workplace relationships and destroy the required zeal for work. The components that are addressed in models of the dynamic framework are metaphorically like beacons that represent more hidden but vital attributes. Case study 1 as a research process was carried out in five phases, made in triangulation to avoid bias (Table 4.1 page 118). The phases involves: study initiation, reflection, data collection I, data collection II and analysis of data.

Table 4.1 Phases of case study 1

Phase	Description	Venue	Instruments	Duration
1	Study initiation	AB - Arusha TZ	Observations, meetings, workshops	8 months
2	Reflection	AB - Arusha TZ	observations documentations	4 months
3	Data collection I	AB - Arusha TZ	20 interviews, 262 questionnaires	6 weeks
4	Data collection II	OHLI - Dar TZ	68 questionnaires	4 weeks
5	Analysis of data	Coventry UK		

The research process in case study 1 was undertaken in four phases of data gathering activities. The phases, first took eight months, the second four months, the third took six weeks whilst the fourth lasted for four weeks. The first phase of eight months encompassed a continued literature review to underpin theoretical perspectives mapping the contextual settings; and allowed time for sensitisation, to find interested participants for the action research, a component in the study design. This required active participation. Such dynamism was realised by distribution of questionnaire to students and staff in phase three. Whilst raising understanding, a publication was set outlining the importance and complexity of knowledge management (KM); with its milestones as an elaboration that underpins context (Massawe 2006: 54–55).

Students were selected purposely to complete questionnaires in order to gather their views and attitudes on the use of portal and other learning practices in the interactive learning environment of AB institute. Documents and unstructured

interviews undertaken plus 15 video clips of recorded dialogues ranging from 10–20 minutes were captured with ethical sensitivity overtones as shown in Undheim (2006: 31–36), Roberts (2007: 55), and Trochim and Donnelly (2007: 147). The report of this study, meant to divulge insights of the existing practices, presumed strong as per analysis that was undertaken, which can be related to the works of Owen (2001: 599) and Chapleo (2007: 35–36).

The end of phase three formed the initial climax of data gathering activities at AB. The data collection was based on informed consent, an ethical norm in research involving human participants, be it from sensitive documents, or questionnaires and interviews. This motivated respondents to participate in filling in the questionnaires and giving overviews that confirmed the reasons purported for the prevailing practices. Such cooperation from knowledge workers in the workplace provided a motivating factor in developing the study. An overview flow of data gathering tasks are in four phases as they kept unfolding in the case study 1 lifecycle as flow of events shown in Figure 4.1:

Data gathering tasks

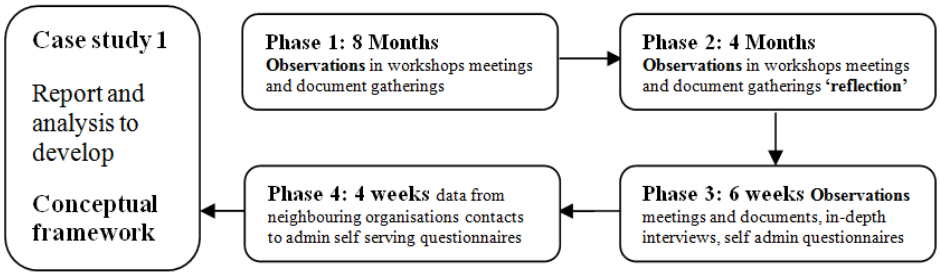


Figure 4.1 Flow of events

4.5 The instruments of case study 1

Cases study 1 used number of research instruments to collect data. They are observations, documents, questionnaires and interviews as explained below.

4.5.1 Observations

This research study was designed to use observation to enrich the relevant aspects of the research process. The observations were undertaken on regular basis using a participant observation approach in the workplace context, (Yin 2009: 109–112; Saunders, Lewis and Thornhill 2003: 221–223; Dunne, Pryor and Yates 2005: 59–65). In the workplace the researcher as participant observer was a head of department at AB. The role eased in the observation of practices that helped to underpin data used to clarify vital examples of existing practices. The insights drawn from observation, assisted the design of research instruments and helped in carrying out unstructured interviews to AB staff. Observations showed that existing practices when done innovatively can trigger future best practices. For instance, one session of the examiners' meeting used online service as practice of a cost cutting strategy, to minimise paper use, whilts embeding IT use as organisational culture in AB workplace.

The observations were enhanced with a second phase of four months in the field, during which it became possible to prepare research instruments suitable for the collection other remaining data. This was a time for reflection, to avoid mismatches that could allow stealth errors to come into the research process

and create bias. The third phase comprised six weeks on site, enabling the unstructured interviews to be conducted, research instruments tested and distributed to the respondents. In this study, respondents were knowledge workers (lecturers as academic staff, and administrative staff members) at the higher learning institute. Practitioners were staff such as accounting officers, information technology services (ITS) members, including the help desk staff who attended servers and dealt with ICT issues. Participant observation taken from the initial stages became instrumental in a further search of the literature to underpin vital theoretical and empirical connections that were fuzzy at the beginning of study (Locke, Silverman and Spirduso 2004: 104; Dunne, Pryor and Yates 2005: 55–68; self-reflection (Ashworth 2008: 17)). The observation paved the way for the insights embedded in practices that can help trigger deep learning in these surroundings, for the abundance of hidden, untapped knowledge (Andriessen 2004: 268–271; Birchall and Tovstiga 2005: 62–65).

4.5.2 Documents

Using the documents it was easier to establish the enrolment pattern, gather data regarding staff and other essential infrastructures like the servers and IT accessories including the availability plan for computers in the laboratories and workshops. Document helped highlight the growth trends of AB in terms of students' enrolment. Figure 4.2, shows a bar chart of growth over the past five years. Data used for this figure are from the AB strategic plan 2006/07–2010/11. The data show the AB student population grows quickly, responding

to gender balance, as national criteria for females to have equal opportunities with males in enrolment. This is one of AB's notable successes in a practice.

AB Student Population 2001/02 - 2006/07

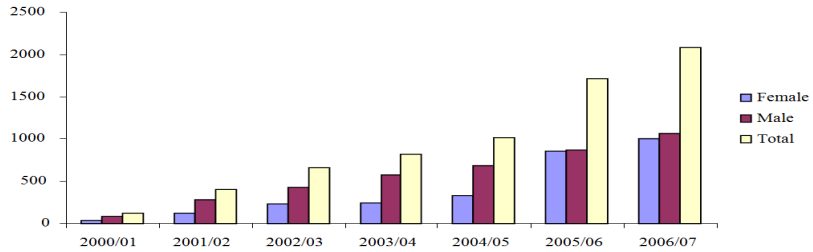


Figure 4.2 AB student population 'Strategic plan 1 [2007/08 – 2010/11]'

Figure 4.2 shows student enrolment at AB, from academic years 2001/01 to 2006/07. A notable issue in the general growth is the narrowing of the gender gap of the female to male, which reflects notion of gender balance at AB.

AB Academic Staff Profile 2007/2008

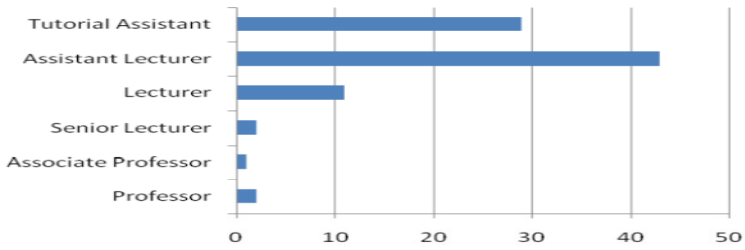


Figure 4.3 AB academic staff 'Strategic plan 2 [2007/08 – 2010/11]'

The above Figure 4.2 depicts the growth of student population, while Figure 4.3 shows the profile for the academic staff, revealing the mentoring of these

students is still low in quality. As expected, the final report revealed a picture of interest to critics of higher learning qualities in regard to what is transpiring in these organisations shown worldwide (Ylimaki 2006; Eynon 2008; Deem, Mok and Lukas 2008; Huisman 2008). Other documents which show some features of interest in the pattern of learning in Tanzania were collected from the XM University, on the fourth phase of data collection. The documents collected from the XM University largely shed light on behavioural influencing factors embedded in Higher Learning Institutions (HLI) Tanzania.

Another interesting feature to which attention may be drawn is how the process of building required skills repertoires for organisations that grow fast like AB are seen, in the way student enrolment is growing in terms of registration for various courses. The institute offered accountancy courses from the beginning but over time, there has been an expansion to accommodate other programmes. For instance, by June 2007, candidates examined, 911 accountancy and finance, 558 information technology computer sciences, and 432 business management. The documents shows postgraduate programmes, by then only two, postgraduate diploma in accountancy (PGDA) and postgraduate diploma in financial management (PGDFM), with total examined candidates 127. Person possesing proper undergraduate qualifications can join the programme to sharpen and enhance academic skills in a related field, with a strict adherence to admission as stipulated in entry qualifications for the particular programme.

4.5.3 Questionnaires

The research instruments used have three questionnaires, designed for three different levels of respondents earmarked for the study. First, undergraduate students (future knowledge workers) at AB institute completed questionnaire (Appendix D). Second, comprised lecturers and administrative staff, who completed questionnaire (Appendix E). Third, knowledge worker, other higher learning institutes (OHLI) staff completed questionnaire (Appendix F). Randomly selected AB staff tested the questionnaires, to test whether they were fit for purpose. The ethical issues were observed and taken into consideration in constructing the questionnaires. The data collection I and II involved face-to-face distribution, paying attention to remarks prior to filling a questionnaire. The number of questions asked differed in number from one level to another. The participant observer role was taken cautiously to avoid methodological bias, whilst upholding research ethics and protect participants, from misgivings, as the critical inquiry was in workplace settings.

The questionnaires to students centred on issues and features surrounding the use of intranet and learning practices, and aimed to elicit opinion as to how students view the interactive learning environment. The number of questions in the students questionnaires were less than those posed to the lecturers. The later were intensive and exhaustive in context, covering a variety of issues that are intertwined within practices in actual workplace settings. These minimised some doubts and questions, which might have been raised and covered using

brief interviews, about logistical and resources constraints. Being a participant observer at the workplace, issues were known to a certain extent but required systematic proof of their authenticity so as to underpin the prevalent practices.

Questionnaires were issued to: AB students [(i) Generic issues 35 questions (iii) Practices: List of statements (10)]. AB staff [(i) Generic issues 60 questions, (ii) Intangibles (14), (iii) Practices: List of statement (10)]. OHLI staff [(i) Generic issues 25 questions, (ii) Intangibles (14), (iii) Practices: List of statements (10)]. Questions on generic issues were on how to unleash potentials, use knowledge, intangibles and practices to create value as follows:

(i) **Generic issues.** In **'**Likert scale' (number of questions varied) examples:

In AB workplace interaction is adequate,

AB ICT facilitates knowledge sharing

Capabilities are from knowledge based activities, skills,

Technologies enable learning transfer

(ii) **Intangibles.** Drivers of change at workplace, (14 intangibles) examples:

Understanding, intrinsic motivation …commitment, confidences ... hope …reputation…

(iii) **Practices.** List of statement of practices (10) see the following example:

Having a formal agenda (*schedule of goals and topics*) for each class Session

Giving lectures that are clear and well organised

Few examples shown meant to clarify the research process of case study 1. Such pattern helped the data triangulation. (See details, Appendix D, E and F).

The questionnaires levelled at knowledge workers who were working within the neighbouring organisations were fewer than others, due to reasons of increasing response rate. The gap was covered using 'face-to-face strategy' with 'self administered questionnaires' (Wilson and Sapsford 2006: 93–102), used to effect the distribution and gathering of data at the neighbouring organisations. These questionnaires were pilot tested before the actual process, while negotiating access and it helped to know the environment ready for distribution of the questionnaires. The face-to-face allowed respondents to comment, which enriched understanding of scenarios of the higher learning institutions. The comments centred on the use of technology, how enthusiastic the management fosters the updating of IT services systems in the workplace.

The study purpose was to look at existing practices in the workplaces, to help establish framework. Clarification was available minimising questionnaire filling time to respondents. Such approach gave workable representation of existing practices at workplaces, as to how diverse factors such as understanding, hope, and 'environment fitness' affect knowledge workers.

Results and analysis of generic questions, for practical reasons were replaced by the qualitative part (observation 'memo' and interviews 'focused codes') which was the lead method in the MM approach used in case study 1. Observation and interviews enriched the study findings for providing the link to theories (relevant concepts), intangibles and the practices in actual settings.

4.5.4 Interviews

In a mixed methods (MM) research, interviews form a crucial basis for the qualitative part of the study construct. In this study unstructured interviews were undertaken at a time seen appropriate. Unstructured interviews were selected due to their nature of allowing the respondents the freedom to speak their minds about a topic. However, ethical precautions were taken to allow respondents to freely give views about existing practices with regard to best practices, as an example, see approaches shown in the works of Wisker (2001: 168), Denscombe (2003: 167–173), Creswell (2007: 140) and Yin (2009: 73).

In this case study, interviews were conducted on a one-to-one basis. This procedure was used to facilitate rapport in the interview; with flexibility to appointments for such interviews. Sometimes opportunities for interviews were overlapping; with requests to reschedule. The plan was to get 30 interviews; but oftentimes participants were not available due to official duties. Finally, 20 interviews were conducted, 15 video recorded (Table 4.2).

Table 4.2 Number of interviews conducted at AB

Interviewee	Targeted	Actual	Recorded
CEO/Acting CEO	1	0	0
Directors	3	2	1
Head of Departments	6	4	2
Academic staff	15	10	8
Non-academic (knowledge workers)	5	4	4
Total	30	20	15

Although there were responses, in many regards best practices were not easily acknowledged as it was seen that much was still to be done in response to fast changing conditions in the workplaces. It was also suggested that connections to allow some members of staff to experiment with much of what they think is the best way of adopting best practices; which was oftentimes curtailed due to lack of resources. Moreover, some existing practices like strictness on examinations protocols are best practices to be keenly observed and cherished.

The livelihood of the higher learning institution hinges on variety of issues; which are vital and crucial for its reputation and survival. One such key issue is in building confidence with stakeholders and imparting appropriate skills and capabilities to students who, after graduation will go out with that knowledge and share it with others in society. The critical value of such knowledge, made the management team at AB to look for ways of building organisational power to infuse members of staff with the required capabilities. Due to such pressing needs the government built new library to help organisation in the quest for knowledge acquisition and dissemination. Through long and short programs students and members of the public can benefit and learn. Amid global competition, capabilities in international consultancy, advanced researches with grants attached are still deficient at AB; owing to low low researching capabilities and a lack of professors to guide and conduct large-scale studies, only medium-size research projects and short courses are handled as in Hansson and Mønsted (2008: 669–670).

4.6 Pertinent issues

Whilst searching for clarity and understanding, it important to realize various tenets that connect inquiry issues together. Technological advancement, knowledge acquisition and people need to be examined under the context of organisation. Higher learning helps a person to acquire basic knowledge to use technology to build and create later new knowledge as useful resource in the workplace. The emerging environment with a workplace experience of connectivity and web presence require a refreshing look at existing practices. However, the complexity involved and the dynamics of organisational change are full factors that require critical eye in order to underpin existing realities (Stacey 2010: 128–135; Shang and Lin 2010: 19–21; Eoyang 2011: 327–328)

4.6.1 ICT enabling knowledge flow

A business environment needs a mindset change to identify and use intangibles as resources that, in collaborative networks, can foster knowledge flow that facilitate changes for organisations to adapt competitive stances, (McGee, Thomas and Wilson 2005: 709–715; Palmer and Hartley 2006: 477–483; Cronin 2007: 135–142; McGrath and Purcell 2008: 71–74). Changes have brought mixed challenges due to high costs of maintaining the IT infrastructure; with its costly updates and up-keeping training. Training intensification require prudence to acquire affordable ICT-facilities within its locality, (Duke 2002; Ashcroft and Watts 2005; Omona and Ikoja–Odongo 2006: 45; Belcher, Gwynn and Rosenberg 2006: 118; Olatokun 2008: 54–55).

However, it is common for large higher learning organisations to merge, collaborate and harness their individual organisational powers to compete in their industry and the global arena, (Huisman 2008; Harman and Harman 2008; Deem, Mok and Lucas 2008: 86–91). Smaller organisations are at disadvantage due to lack of capabilities, like strong financial base for success, reputation for intellectual expertise and ability to lure world class researches.

Nonetheless, a dynamic vision and strong leadership to inculcate trust, commitment, hope and confidence can help knowledge workers engage the knowledge flow. A nurturing of individual capabilities through best practices is likely to trigger coincidental actions that unleash one's innate potentials, in socialisation and networking (Nissen and Levitt 2004: 171; Litschka, Markom and Schunder 2006: 166; Sense 2007: 16; Ehin 2008: 340; Allee 2008: 12).

In networking, boundary spanning, collaboration and activities that require specialised knowledge, knowledge workers use information and computer technology (ICT) to share and create new knowledge and build a variety of strategies for value creation in the organisation, (Garnett 2001: 80; Mitchell and Nicholas 2006; Selwyn 2007; Salisbury 2008: 218). Such approaches require commitment and trust, combined with other capabilities to deliver results with technological development, that foster dynamism. At AB, commitment as a statement by information technology services (ITS) is vital

in building trust and dynamic growth organisation; an appeal for trust, confidence and hope in the services delivery at AB reveals open commitment.

> *The investment into ICT represents AB's commitment in providing state of the art technology to provide a modern learning environment for students. At AB, ICT infrastructure and resources are undergoing continued expansion for modernization in support of the growing Institute population.*

With such assurance, the knowledge workers use the dynamism of ICT that gives networking, nurturing, innovations with flexible capabilities needs; also gives safeguards from vulnerable chaotic market and cultural differences, (van Wyk and Higgs 2007: 68; Pagano 2007: 11; Selwyn 2007: 91; Eynon 2008).

4.6.2 Direction

Case study 1 was initial step towards building a conceptual framework, which was critiqued and tested in case study 2; giving clear and coherent picture of a workable framework. The developed framework was meant for critical evaluation of strategies for value creation in knowledge-driven organisations. The prevailing changes being felt worldwide led to serious searches for insights through which value creation processes can be conducted and be beneficial to organisations. Best practices include strategic options, which Kim and Mauborgne (2005: 188) suggest as those that make competition

irrelevant, metaphorically, in the 'blue oceans' type of strategies. The analysed data divulged insights that allowed the empirical development of a framework. Such a dynamic framework is a future tool for critical evaluation of strategies in the knowledge-driven organisations, due to evidence of practices in ongoing changes to value creation (Möller and Rajala 2007: 898–901; Alee 2008: 23).

It is hoped the study will underscore a mindset change in perceiving anew strategies of value creation as a contribution to knowledge. This is an empirical journey to underpin connecting parts that align the vision and mission of an organisation into dynamic realities of creating value. The data collected using MM approach is a basis of converging information from diverse sources in chain of evidence (Yin 2009: 123). Whilst critical look at intellectual capital links epistemological issues and underpins practices in activities that sustain workplaces (Roos 2005: 206–208; Mingers 2008: 67).

4.7 Analysis and interpretation of data

4.7.1 Logic of analysis

The findings of case study 1, allow data analysis to be carried out which leads to insights that are vital to enkindle the imagination and understanding of the construct of the framework. Emerging insights can lead to a mental model that show what words alone cannot do. For example, Star (2010: 86) explains pragmatism as an understanding based on consequences and not antecedents. Whilst trying to untie the logic of analysis it is seen as a process that looks

backwards in most modes of analysis where insights are being formed silently in the mind. Furthermore, delving deeper, Star (2010: 86–87) explores the act of choosing among conflicting interpretations as a constant struggle between selfhood, interruptions and how integrity can incorporate authority in actions. Whilst searching for certainty, emotional storms come in, as a way to select a few effective words to describe the situation as captured in the study; through coding and categories. In qualitative studies memos help a researcher to describe detailed account of incidents in the study context that allow insights that divulge meaningful explanations to emerge, raising understanding of the study results (Holton 2010: 272; Hesse-Biber Leavy 2011: 305–317).

4.7.2 The analysis of results

The analysis for case study 1 data has been an attempt to search for insights that formed a basis for the framework. The analysis in this section is on data collected through filled questionnaires from students, AB; AB staff and from other (boundary) higher learning institutions, In analysing the data, approaches used initially as those shown in Chen and James (2004: 6–12) were used to describe the results of each question separately. The approaches shown in Chen *et al.* (2006: 13–16) seemed feasible which is similar to Nelson and McCann (2008: 112–115). However, the student questionnaires which were filled were (n=220) but on data cleaning process, the questionnaires fit for analysis were reduced to (n=201). The purposive sample of students taken from AB was from the advanced diploma course in computer science and

information technology. The reason for selecting these programmes is partly the requirement of to posses and maintain robust and a state-of-art computing capability as a component in the structural infrastructure of the AB institute. For instance, in order to achieve and sustain these initiatives, issues related to individual training needs and ethical requirements have to be properly considered as in Steen (2009: 316) and Samra, Gatward and James (2008).

The learning environment is within the context of proactive environment. Portal use, exposes students to web environment, which is space worth exploring existing practices; as a learning that enhance academic experience. The ensuing interaction and networking abilities cannot be learned unless there is a practical application in situ. This brief narrative shows an attempt to build a robust digital environment; for dynamic capabilities have to be nurtured for web applications. As a simple example, the Portal at AB Institute signifies, , an attempt of acquiring mindset changes of ethos to build the required momentum towards feasible infrastructure of a web environment. The results show how perceptions as revealed through existing practices, with the importance of proactive environment; as ample space of learning experience.

The data analysis details are in Tables 4.3 up to Table 4.9 as the empirical work from filled questionnaires of data collection I and II of case study 1. In each row highest score is bolded for ranking R. The questionnaires used as research instruments to collect data for case study 1 (Appendices D, E and F).

Table 4.3 AB Students Practices – Perceptions

Practices\Perceptions score (%)	*i\j*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**R**
Having a formal agenda (schedule of goals and topics) for each class Session, (n=196)	**1**	8.2	5.1	11.7	6.1	8.2	7.1	6.1	11.7	14.3	**21.4** 3	**21.4** 3
Incorporating group discussion activities as part of each class Session (n=193)	**2**	1.0	6.2	4.1	8.8	14.0	8.8	14.5	12.4	**20.2** 4	9.8	**20.2** 4
Giving students an opportunity to revise assignments before a final grade is given (n=195)	**3**	5.6	10.3	6.7	7.7	10.3	12.8	**16.9** 8	15.4	8.2	6.2	**16.9** 8
Providing examples of 'superior' exam answers, 'excellent' projects an 'A' papers, (n=194)	**4**	6.2	5.2	6.2	10.8	8.2	10.3	6.7	13.9	13.9	**18.6** 5	**8.6** 5
Promptly reviewing homework, exams, assignments, etc. (n=191)	**5**	4.2	4.7	7.9	4.7	13.1	14.1	13.6	**15.7** 10	15.2	6.3	**15.7** 10
Asking for and acting upon student suggestions for improving the course (n=194)	**6**	12.9	**16.5** 9	13.9	8.8	11.3	11.9	10.8	4.6	3.6	5.7	**16.5** 9
Carefully explaining course goals, expectations grading and ground rules at the beginning (n =194)	**7**	**27.8** 1	12.4	9.3	10.3	10.3	3.6	9.8	8.8	4.6	3.1	**27.8** 1
Collecting student feedback regularly to determine what was learned, what was confusing, (n=194)	**8**	9.3	13.4	**17.5** 7	16.0	8.8	9.8	7.7	4.1	5.7	7.7	**17.5** 7
Helping students prepare for exams by offering special study sessions (n=189)	**9**	5.8	14.8	**18.0** 6	12.2	10.6	13.2	6.9	5.3	8.5	4.8	**18.0** 6
Giving lectures that are clear and well organised (n=191)	**10**	**23.0** 2	20.4	8.9	15.7	5.2	6.3	4.2	3.7	3.1	9.4	**23.0** 2

4.7.2.1 AB Students practices – perceptions

Table 4.3 shows 'Students practices-perceptions' results are given in their score, number 1 (n=194) at 27.8% insisting on the importance of 'carefully explaining course, goals expectations grading and ground rules at the beginning.' However, such importance can be viewed through the lenses of higher education works like that of Savin-Baden (2008: 108–111) calling for creating learning spaces where the notion of transition carries the idea of moving between spaces in transforming oneself into a new identity construction. Moreover, for clarity, Savin-Baden (2008: 104) shows a model of transitional learning spaces that helps to clarify challenges that students encounter, be it proactive learning, disjunction, liminal spaces as moving from one state or position to another (Savin-Baden 2008: 107), and engagement to transform / transit in spaces. Equally, Brockbank and McGill (2007: 57) recap on the need for an educational system that enables students to work and study to transform their individual conceptual abilities and self-awareness to engage in critical transformative action that involves getting into the heart of things.

Transformative learning as a process can be viewed in the notion of deep learning which McCulloch (2009: 179) says is iterative in nature and requires engagement with both the subject and others engaged in the process. Such an interaction is student-to-student, and student-to-academic staff which is crucial and which allows effective deep learning and transformation to occur. Nevertheless, the crucial aspect for students to fully benefit engagement

includes encouraging active participation in lectures (Morton 2009: 64). Further clarifications on learning spaces allows one to delve into engaging possibilities in which to allow explanation of practices in a rather wider horizons (Savin-Baden 2008: 69–102), for example, digital identities (operating in cyberspace, a feeling of disembodiment – a sense of being present but not being there p. 88). In addition, Savin-Baden (2008: 96–97) underpins cognitive mapping to provide an understanding of the co-existence of multiple worlds, as modes of knowledge foreseen and subsequently created. When coupled with pressure to prepare students for employment, a conflict arises whether to develop their critical faculties as agents of change, or get along with higher education's conflicting demands. The range of demands includes the students' earnest desires to learn and achieve, lecturers pressured to deliver lessons that reflect the contemporary ethos of specific disciplines.

Furthermore, according to Lucas and Milford (2009: 392), course goals, viewed as learning outcomes, should focus on areas of learning that are crucial to a transformation of understanding within a particular subject area. However, the few selected practices that were taken as drivers to capture students' (future knowledge workers) perceptions are only a synopsis of the changes being experienced in higher education settings; though such practices do foster a common basis for insights that trigger reflection on the dynamism in context.

Table 4.4 AB Staff practices - perceptions

Practices\Perceptions score (%)	***i\j***	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**R**
Having a formal agenda (schedule of goals and topics) for each class Session, (n=39)	**1**	**25.6** 4	7.7	5.1	7.7	2.6	15.4	12.8	7.7	2.6	12.8	**25.6** 4
Incorporating group discussion activities as part of each class Session (n=39)	**2**	5.1	5.1	17.9	**20.5** 9	10.3	7.7	10.3	20.5	2.6	–	**20.5** 9
Giving students an opportunity to revise assignments before a final grade is given (n=37)	**3**	2.7	2.7	8.1	10.8	**21.6** 7	8.1	10.8	13.5	10.8	10.8	**21.6** 7
Providing examples of 'superior' exam answers, 'excellent' projects an 'A' papers, (n=37)	**4**	–	–	–	8.1	5.4	8.1	8.1	8.1	29.7	**32.4** 2	**32.4** 2
Promptly reviewing homework, exams, assignments, etc. (n=39)	**5**	5.1	7.7	12.8	5.1	15.4	12.8	**20.5** 10	10.3	10.3	–	**20.5** 10
Asking for and acting upon student suggestions for improving the course(n=38)	**6**	–	13.2	10.5	18.4	**21.1** 8	13.2	–	7.9	10.5	5.3	**21.1** 8
Carefully explaining course goals, expectations grading and ground rules at the beginning (n=39)	**7**	23.1	**28.2** 3	2.6	12.8	2.6	5.1	10.3	7.7	2.6	5.1	**28.2** 3
Collecting student feedback regularly to determine what was learned, what was confusing, (n=39)	**8**	2.6	7.7	**23.1** 5	**7.7**	12.8	20.5	7.7	5.1	7.7	5.1	**23.1** 5
Helping students prepare for exams by offering special study sessions (n=37)	**9**	–	10.8	5.4	5.4	2.7	13.5	8.1	13.5	18.9	**21.6** 6	**21.6** 6
Giving lectures that are clear and well organised (n=39)	**10**	**35.9** 1	20.5	15.4	2.6	7.7	–	7.7	–	5.1	5.1	**35.9** 1

4.7.2.2 AB Staff practices – perceptions

However, in AB staff practices–perceptions' score number 1 (n=39) at 35.9% purports that if *lectures are clear and well organised*, the expected learning will be well achieved. However, Table 4.3 and Table 4.5 portray disparity of results to those from AB Staff. OHLI staff in Table 4.5 shows score number 1 as (n=53) at 39.6 % It makes one think again about transformative learning with students (future knowledge workers) as the focus of major activities and the process of learning. If their perceptions foster transformative learning then actions that support such perceptions are imperative in building dynamic capabilities. Achieving such a noble goal requires a shrewd mindset change.

In higher learning organisations supporting transformative learning allows such approaches to bring flexibility in the learning process. Nevertheless, as elsewhere in the World, academic staffs are being subjected to pressures of enhancing personal practice to earn the sought after carrier progression and credentials. For example, Fry and Ketteridge (2009: 469–470) narrate that, the academic demands of a career include, building a reputation for sound and well informed teaching (amid heavy teaching workloads). The expectation is that of scholarship in the particular discipline; a reputation for being an independent researcher with institutional expectation of timing excellent deliveries involving elements of administrative work. As the cue goes, with a diverse intake, large classes and the rise of student 'as consumer' puts more pressure on staff time; providing less time for gradual learning on the job.

However, if we reflect on the score number 1 i.e. (Giving lectures that are clear and well organised) as the highest priority for lecturers at AB (n=39) 35.9%), it is already a demand that needs much efforts to attain; due to forces of conflicting demands, some of them beyond endurance of individuals. Furthermore, reflecting on conflicting demands in recent times, these are exacerbated with economical and political turmoil. In business, Dacko *et al.* (2008: 460) explore a range of options for new products (NPs) that firms can use effectively with the dynamic capabilities to deliver. Whilst it allows a flexibility of use in acquiring resources, like financial and technological, to seize market opportunities amid raging competition yet it is impossible to meet the demands equally. Dacko *et al.* (2008: 464) conclude by recommending that firms willingly take risks, seize market and technology opportunities, even to cannibalise their own product development investments.

Similarly, in higher education (HE), Menzies and Newson (2007) deplore the increasing demands and time pressures which leave academics with no time for 'deep presence', for reflective practices; a space for creative intellectual works. Still, other practices have perceptions score which are not discussed to greater extent purport independence. Such instances of practices in higher learning prompt constant alertness. The AB Staff perceptions–practices shown in Table 4.4 portray extreme closeness, for example, in column R score numbers 6 and 7 have each 21.6%; also score numbers 9 and 10 have each 20.5% and the range of both is 0 in the practices; calling for further reflection.

Table 4.5 OHLI Staff practices – perceptions

Practices\Perceptions score (%)	*i\j*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**R**
Having a formal agenda (schedule of goals and topics) for each class Session, (n=61)	**1**	**26.2** 4	18.0	13.1	6.6	4.9	9.8	3.3	6.6	3.3	8.2	**26.2** 4
Incorporating group discussion activities as part of each class Session (n=59)	**2**	6.8	15.3	13.6	**20.3** 8	13.6	8.5	13.6	1.7	6.8	–	**20.3** 8
Giving students an opportunity to revise assignments before a final grade is given (n=57)	**3**	3.5	–	3.5	5.3	12.3	14.0	12.3	**21.1** 7	15.8	12.3	**21.1** 7
Providing examples of 'superior' exam answers, 'excellent' projects an 'A' papers (n=58)	**4**	3.4	3.4	–	3.4	8.6	5.2	13.8	**22.4** 6	19.0	20.7	**22.4** 6
Promptly reviewing homework, exams, assignments, etc. (n=58)	**5**	6.9	6.9	6.9	13.8	10.3	**17.2** 10	12.1	13.8	10.3	1.7	**17.2** 10
Asking for and acting upon student suggestions for improving the course (n=56)	**6**	1.8	10.7	5.4	7.1	17.9	17.9	**17.9** 9	12.5	7.1	1.8	**17.9** 9
Carefully explaining course goals, expectations grading and ground rules at beginning (n=57)	**7**	**35.1** 2	8.8	17.5	8.8	12.3	3.5	8.8	–	1.8	3.5	**35.1** 2
Collecting student feedback regularly to determine what was learned, what was confusing, etc.(n=54)	**8**	5.6	5.6	14.8	**25.9** 5	16.7	11.1	13.0	5.6	1.9	–	**25.9** 5
Helping students prepare for exams by offering special study sessions (n=53)	**9**	–	1.9	5.7	3.8	–	3.8	5.7	13.2	26.4	**39.6** 1	**39.6** 1
Giving lectures that are clear and well organised (n=54)	**10**	20.4	**25.9** 3	20.4	5.6	5.6	5.6	1.9	7.4	5.6	1.9	**25.9** 3

4.7.2.3 OHLI Staff practices – perceptions

The given Table 4.5 shows a belief that students need to be really helped to prepare for exams, where the score number 1 is (n=53) in 39.6 % of the respondents on this issue. The question may be posed, such as, is it a good practice to mentor our (students) future knowledge workers by almost overfeeding them with learning materials? It shows that students are only helped to pass rather than allowing them to deepen their understanding of what they are being instructed and to take in their programme's deliveries. However, score number 2, on course goals and number 3, on giving clear and well-organised lectures allow students to gain the required understanding of the taught subject and can be linked to 'approaches to learning' for clarity.

However, writing on approaches to learning, Bloxham and Boyd (2007: 17) underpin two emerging approaches as surface (with a focus on memorising and learning for examinations); a deep approach (with a focus on principles and meaning). Similarly, Fry, Ketteridge and Marshall (2009: 8–16) explain the deep approach with the goal of understanding and seeking meaning; whilst the surface approach is typified by the intention to complete the task; a third approach – the strategic or achieving approach has the flexibility of using both approaches. Moreover, for example, Brockbank and McGill (2007: 56) see HE as a creative space where students learn and engage in developing critical abilities. The reflective practices foster cognitive spaces that nurture a mentality of innovation and creativity, required in HE (Nutt 2010a: 183–185).

Table 4.6 Scrutiny of differing perceptions

Practices\Perceptions score (%)	*i\j*	**AB Institute Students**	**AB Institute Staff**	**OHLI Staff**
Having a formal agenda (*schedule of goals and topics*) for each class Session (n=196); (n=39); (n=61)	**1**	**21.4** 3	**25.6** 4	**26.2** 4
Incorporating group discussion activities as part of each class Session (n=193); (n=39); (n=59)	**2**	**20.2** 4	**20.5** 9	**20.3** 8
Giving students an opportunity to revise assignments before a final grade is given (n=195); (n=37); (n=57)	**3**	**16.9** 8	**21.6** 7	**21.1** 7
Providing examples of 'superior' exam answers, 'excellent' projects an 'A' papers (n=194); (n=37); (n=58)	**4**	**18.6** 5	**32.4** 2	**22.4** 6
Promptly reviewing homework, exams, assignments etc. (n=191); (n=39); (n=58)	**5**	**15.7** 10	**20.5** 10	**17.2** 10
Asking for and acting upon student suggestions for improving the course (n=194); (n=38); (n=56)	**6**	**16.5** 9	**21.1** 8	**17.9** 9
Carefully explaining course goals, expectations grading and ground rules at the beginning (n=194); (n=39); (n=57)	**7**	**27.8** 1	**28.2** 3	**35.1** 2
Collecting student feedback on a regular basis to determine what was learned, what was confusing, etc. (n=194); (n=39); (n=54)	**8**	**17.5** 7	**23.1** 5	**25.9** 5
Helping students prepare for exams by offering special study sessions (n=189); (n=37); (n=53)	**9**	**18.0** 6	**21.6** 6	**39.6** **1**
Giving lectures that are clear and well organised (n=191); (n=39); (n=54)	**10**	**23.0** 2	**35.9** 1	**25.9** **3**

4.7.2.4 Differing perceptions

Table 4.6 depicts the combined practices and perceptions of AB students (future knowledge workers), AB Institute Staff and the OHLI Staff results. Table 4.6 offers a chance for reflection of how each group differs from others. Data collection was undertaken with a safeguard to avoid bias between groups by any influence of prior knowledge of what is being asked, as in the works of Seale (2007: 386). The data gathered, though, in sessions of face-to-face ensured that participants were free from any intrusion. However, a threat of bias includes the presence of a researcher as an intrusion; yet strict precautions were set. Nevertheless, O'Cathain (2010: 546–552) illuminates the issue by pinpointing to the domain of data quality to include data collection and data analysis with five items, *data transparency, data rigour*, *sampling adequacy*, *analytic adequacy* and *analytic integration rigour.* The items count towards research validity, as attuned to the data collection and analysis considering circumstances relevant to a context and study purpose (Maxwell 2002: 42).

However, practices that allow fast feedback is almost seen as not of the highest priority but are the same for all groups, this is the 'promptly reviewing homework, exams, assignments' shown in Table 4.6. Score number 10; many perceptions of the practices put the emphasis on quick feedback for individual adjustment or to take alternatives approaches available for success. In a way it shows the sensitivity students (future knowledge workers), and academics have as to what best causes of action to take in the many things that happen.

Table 4.7 AB Staff perception score: Intangibles at workplace

A response to a question on drivers of change in a workplace which enhance value.
(*a scale from 1 to 10, with 10 being most applicable response taken*);

Driver of change for enhancing value\perception score (%) *i\j*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**R**	**Rank**
Understanding (n=41)	2.4	4.9	2.4	2.4	14.6	9.8	4.9	17.1	19.5	22.0	**22.0**	**7**
Intrinsic Motivation (n=40)	5.0	2.5	5.0	5.0	17.5	10.0	10.0	12.5	12.5	**20.0**	**20.0**	**8**
Extrinsic Motivation (n=39)	5.1	–	7.7	10.3	12.8	12.8	7.7	12.8	5.1	**25.6**	**25.6**	**3**
Commitment (n=40)	2.5	–	5.0	2.5	12.5	2.5	12.5	12.5	17.5	**32.5**	**32.5**	**1**
Confidence (n=39)	2.6	–	2.6	5.1	10.3	7.7	7.7	17.9	20.5	25.6	**25.6**	**4**
Hope (n=40)	5.0	5.0	5.0	2.5	5.0	7.5	27.5	12.5	12.5	17.5	**17.5**	**13**
Affiliation (n=39)	2.6	5.1	7.7	–	15.4	12.8	15.4	12.8	12.8	15.4	**15.4**	**14**
Collaboration (n=40)	2.5	2.5	7.5	5.0	10.0	7.5	15.0	17.5	12.5	20.0	**20.0**	**10**
Reputation (n=40)	2.5	2.5	2.5	2.5	**20.0**	15.0	17.5	12.5	10.0	15.0	**20.0**	**9**
Technological updates (n=40)	–	2.5	5.0	–	7.5	10.0	15.0	12.5	20.0	**27.5**	**27.5**	**2**
Environment ‘fitness’ (n=40)	2.5	5.0	2.5	–	10.0	15.0	15.0	15.0	15.0	**20.0**	**20.0**	**11**
Organisational resources (n=40)	–	5.0	5.0	2.5	10.0	2.5	15.0	17.5	**20.0**	20.0	**20.0**	**12**
Knowledge as a resource (n=40)	–	5.0	2.5	5.0	12.5	7.5	12.5	15.0	17.5	**22.5**	**22.5**	**5**
Intellectual trust; a resource (n=40)	2.5	5.0	2.5	5.0	12.5	7.5	20.0	10.0	12.5	**22.5**	**22.5**	**6**

4.8 Intangibles

4.8.1 Intangibles at workplace: AB Staff perceptions

The Table 4.7 shows the 5 most outstanding intangibles that drive change at AB Institute as: commitment (n=40) 32.5%; technological updates (n=40) 27.5%; extrinsic motivation (n=39) 25.6%; confidence (n=39) 25.6% and knowledge as a resource (n=40) 22.5%. However, 'intellectual trust as a resource' (n=40) 22.5% has the same score as 'knowledge as a resource.' The decision to select one and leave the other in ranking them is partly qualitative, drawn through observation with insights drawn from the organisational culture that underpins in context activities and power dynamics in a workplace; which can be linked to Mintzberg (2009), Stacey (2010) and Marr (2009: 197–201).

Alhough, commitment an outstanding intangible at AB is a crucial ingredient, vital in undertakings within the workplace settings. For instance, Paloutzian, Emmons and Keortge (2003: 130–132) describe the practice of cultivating gratitude at the workplace as able to inculcate commitment; 'the intangible quality that draws the most creative energy from people, like a 'spark'.' Paloutzian, Emmons and Keortge (2003: 131) recap that compliance alone is not enough without being accompanied by commitment. Though, compliance can be achieved through laws, policy and regulations at workplace; commitment as intangible is rather elusive. It requires a cognitive strategy to improve individual well-being, and lower toxic emotions at workplace such as resentment and envy (Paloutzian, Emmons and Keortge 2003: 130). Similarly,

Barret (2003: 356–363) says that, successful organisations are those that operate in the full spectrum of consciousness that encompasses a high degree of values alignment. On values alignment Barret (2003: 357) gives results with degree of values alignment, on which the three matching values between the employee's personal values and culture of the organisation to be commitment, integrity and friendliness. For an organisation, a long term success requires a vision, attaining it needs an internal cohesion in the form of a shared vision.

Though, the shared vision goes hand in hand with shared values, failure in harnessing the internal cohesion will also lead to a failure to tap the commitment, passion and enthusiasm of the workers (Barret 2003: 364). The reverse is the undisputed reality. Moreover, Kaufmann (2011: 156) sees the binding force of commitments and obligations to depend on the willingness; such a self–involvement on the part of agent who decides to bind his/her will to the future action; and that there is a mental gap that separate reasons and decision making and a gap between decision and execution. For example, Lepak, Takeuchi and Swart (2011: 355) see that knowledge workers hold clear commitments to their profession and may not engage in extra-role behaviour. Moreover, intangibles like commitment, technological updates and confidence and others in Table 4.7 affect the life of knowledge workers as they embed cognitive behavioural aspects involved in the organisational culture. The technological updates oftentimes require continuous renewal despite tight schedules and the need for support from constrained organisational resources.

Table 4.8 OHLI Staff perception score: Intangibles at workplace

A response to a question on drivers of change in a workplace which enhance value.
(*a scale from 1 to 10, with 10 being most applicable response was taken*);

Driver of change for enhancing value\perception score (%) *i\j*	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**R**	**Rank**
Understanding (n=67)	3.0	–	–	–	9.0	4.5	14.9	23.9	16.4	**28.4**	**28.4**	7
Intrinsic Motivation (n=65)	1.5	–	3.1	3.1	12.3	7.7	9.2	18.5	**26.2**	18.5	**26.2**	11
Extrinsic Motivation (n=65)	1.5	3.1	3.1	3.1	13.8	10.8	10.8	20.0	23.1	10.8	**23.1**	13
Commitment (n=67)	1.5	–	–	–	4.5	10.4	6.0	16.4	23.9	**37.3**	**37.3**	2
Confidence (n=67)	–	1.5	–	–	7.5	6.0	7.5	11.9	26.9	**38.8**	**38.8**	1
Hope (n=66)	3.0	1.5	–	3.0	10.6	16.7	12.1	**18.2**	16.7	18.2	**18.2**	14
Affiliation (n=65)	1.5	1.5	1.5	1.5	18.5	12.3	18.5	**29.2**	7.7	7.7	**29.2**	5
Collaboration (n=66)	1.5	1.5	–	1.5	4.5	4.5	19.7	27.3	**28.8**	10.6	**28.8**	6
Reputation (n=65)	1.5	1.5	1.5	1.5	9.2	4.6	7.7	20.0	23.1	29.2	**29.2**	4
Technological Updates (n=64)	1.6	–	1.6	4.7	12.5	9.4	9.4	18.8	**26.6**	15.6	**26.6**	10
Environment 'fitness' (n=65)	1.5	1.5	1.5	4.6	15.4	6.2	16.9	27.7	15.4	7.7	**27.7**	8
Organisational resources (n=66)	1.5	1.5	–	1.5	16.7	6.1	13.6	**25.8**	21.2	12.1	**25.8**	12
Knowledge as a resource (n=67)	1.5	3.0	–	1.5	7.5	6.0	9.0	14.9	26.9	**29.9**	**29.9**	3
Intellectual trust; a resource (n=67)	3.0	–	1.5	1.5	4.5	6.0	4.5	26.9	25.4	**26.9**	**26.9**	9

4.8.2 OHLI Staff practices – perceptions

Table 4.8 for other higher learning institutes, OHLI, shows results that the most 5 outstanding intangibles as confidence (n=67) 38.8%, commitment (n=67) 37.3%, knowledge as a resource (n=67) 29.9%, reputation (n=65) 29.2% and affiliation (n=65) 29.2%. Although reputation and affiliation have equal score, the face to face distribution of questionnaires gave more insight of the organisational culture attributes as viewed by respondents. Nevertheless, Schunk and Pajares (2007: 93–94) state that, no amount of confidence can produce success when requisite skills and knowledge are absent; although it has been observed that verbal encouragement increases confidence. The confidence and commitment of knowledge workers are so paramount that the range of difference between the two is 1.5% taking in consideration that participants are the same (n=67). With such a range it is possible to argue that commitment and confidence are closely related in workplace value creation strategies. However, the authenticity of such findings that commitment is the most paramount than confidence is not enough to warrant a conclusive claim.

Nevertheless, unstructured interviews were conducted to supplement this drawback to enable the development of construct with enough evidence. Being initial picture of what are the perceptions of knowledge workers on the identified intangibles, the results allow reflection on how to link them with the qualitative results to complement each other and give converging evidence of existing practices in the dynamic environment of the ensuing knowledge flow.

4.8.3 Intangibles at workplace to enhance value

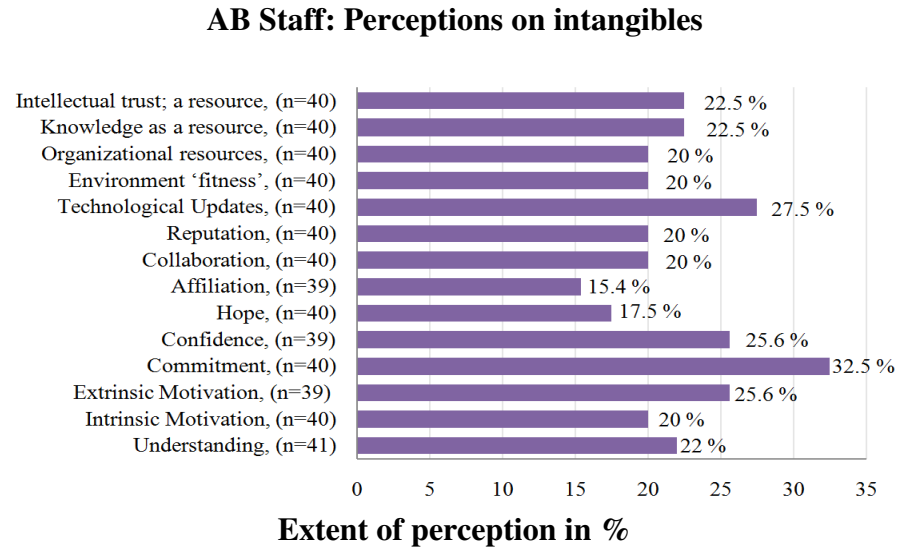


Figure 4.4 AB Staff intangibles - scores of perceptions

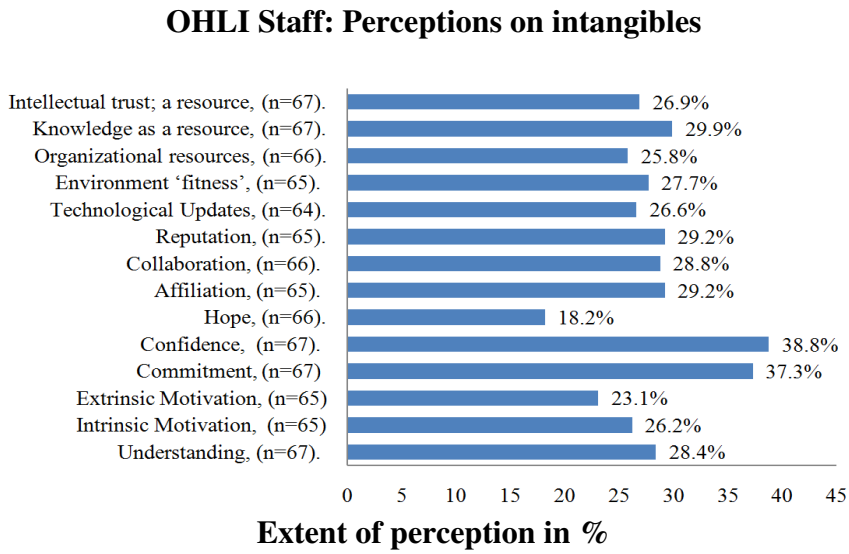


Figure 4.5 OHLI Staff intangibles - scores of perceptions

Figure 4.4 and 4.5 show perceptions of intangibles at AB and OHLI; with difference of perceptions as a source of continuous change in the context.

In a *response to a question on* ... what are ...drivers of change at workplace that enhance value? *(on a scale of 1 to 10, with 10 being a highest response);* Table 4.9 below gives the combined results; the intangibles at AB and OHLI.

Table 4.9 Combined: Intangibles - AB and OHLI Staff perceptions

Driver of change for enhancing value\perception score (%) *i\j*	**AB Staff**		**OHLI Staff**	
	R	**Rank**	**Rank**	**R**
Understanding, (n=41); (n=67).	22.0	7	7	28.4
Intrinsic Motivation, (n=40); (n=65).	20.0	8	11	26.2
Extrinsic Motivation, (n=39); (n=65).	25.6	3	13	23.1
Commitment, (n=40); (n=67).	32.5	1	2	37.3
Confidence, (n=39); (n=67).	25.6	4	1	38.8
Hope, (n=40); (n=66).	17.5	13	14	18.2
Affiliation, (n=39); (n=65).	15.4	14	5	29.2
Collaboration, (n=40); (n=66).	20.0	10	6	28.8
Reputation, (n=40); (n=65).	20.0	9	4	29.2
Technological updates, (n=40); (n=64).	27.5	2	10	26.6
Environment 'fitness', (n=40); (n=65).	20.0	11	8	27.7
Organisational resources, (n=40); (n=66).	20.0	12	12	25.8
Knowledge as a resource, (n=40); (n=67).	22.5	5	3	29.9
Intellectual trust; a resource, (n=40); (n=67).	22.5	6	9	26.9

The highest score 32.5% for AB Staff; 38.8% for OHIL Staff in case study 1 commitment emerges as a theme: 'Individual commitment' for the framework. Commitment, as an anchor is plausible for a construct in developing a dynamic framework with variables inherently used for value creation process. The contention is due to observation and interviews conducted at Institute AB.

4.9 Proposing the framework

The following section shows the proposed framework which emerged as an outcome of case study 1. Figures 4.6 and 4.7 form the conceptual framework.

4.9.1 The conceptual framework: A broader view

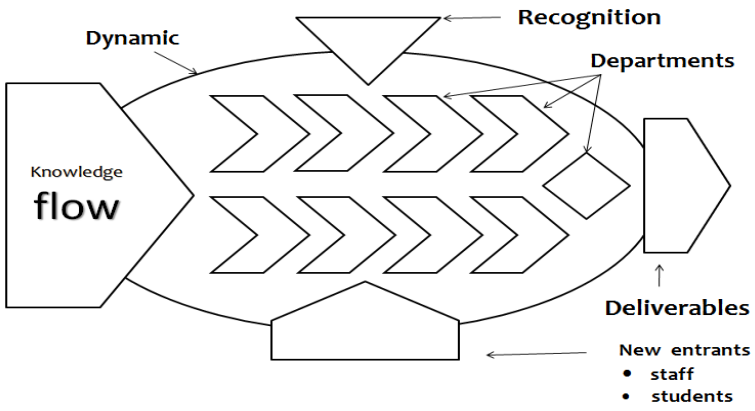


Figure 4.6 Organisational perspective

Figure 4.6 shows that Knowledge-driven 'organisation' builds dynamic capabilities that involve bold initiatives in the value creation pathways, which require collaboration for strong research ties and links. It needs a nurture of alignment; using networking to aim at breakthroughs for the organisation to utilise knowledge flow and deliver best deliverables. The deliverables include dedicated services, goods, and other associated products. In higher learning best deliverables foremost are the highly qualified graduates. In giving best deliverables and graduates; Clemons *et al.* (2009: 322) describe networks as validating self, group recognition; as links of fostering interaction for value.

4.9.2 Framework developing from the study

Interaction for value creation

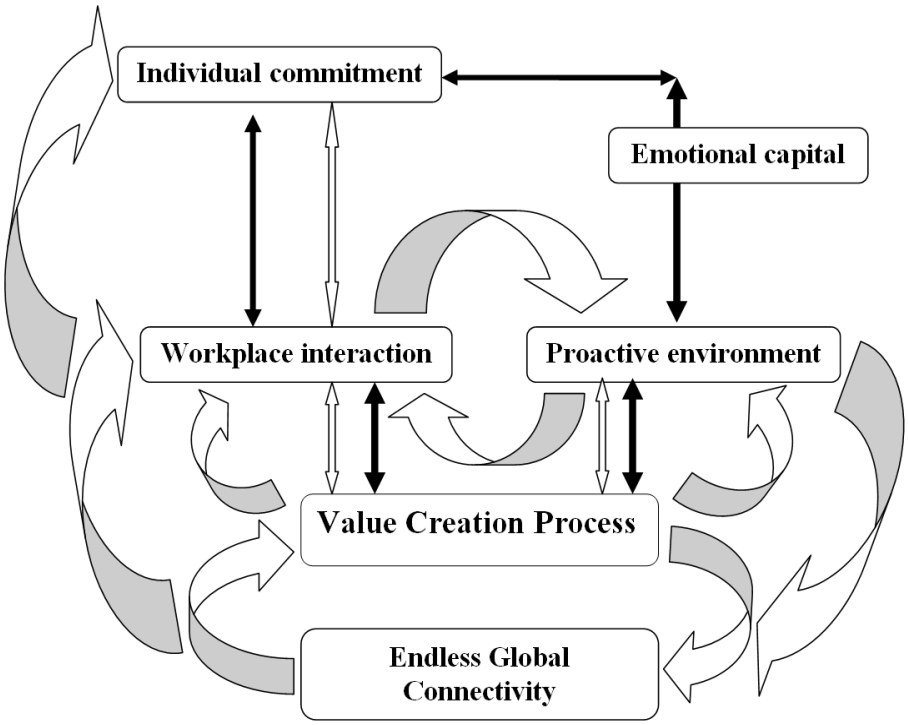


Figure 4.7 Individual – Global perspective

Key ⟷ The double sided arrow denotes decisive decision

⇕ The double sided arrow 'unshaded' denotes intentions

↻ Curved arrow denotes flow of information/ideas/knowledge

Figure 4.7 shows the individual – global perspective, a model of the proposed conceptual framework. The idea of the model reveals the dynamics of creating value for the individual role in the knowledge-driven organisations; augments the organisational perspective, (Figure 4.6 page 152) which underpins context.

4.9.3 Emerging themes for a dynamic framework

Outline for an interaction for value creation process; a link to emerging themes from mixed method, MM, analysis (case study 1), for a conceptual framework.

(i) Individual commitment

- Commitment rooted from zeal for steadfast goodness
- Innovative abilities endowed on individual
- Uniqueness as source of innovation and input to commitment
- Social ties as links to trust for team building
- Individual capabilities to be part of diverse settings

(ii) Emotional capital

- Complexities from individual perspectives evoke emotions
- Can enhance the chances for value creation, boost morale allow individual to unleash inner potentials and abilities to innovate
- May inhibit value creation process due to negative emotions

(iii) **Proactive / digital environment**

- Computing and perverse computer usage profoundly changes work environment by creating more user friendly digital environment
- Websites, ubiquitous technologies, portals for quality works
- A platform for organisation to process and codify knowledge
- Whereas, workplace explicit knowledge is codified ready for use

(iv) **Workplace interaction**

- Vital for knowledge sharing for research groups and workshops
- Fertile-ground for communities of practice, CoPs, network of practices, NoPs
- Sources of continuous outpouring of tacit knowledge

(v) Value creation Process

- An ultimate platform for value to be created continuously through
- Tasks which require knowledge
- Knowledgeable products
- Knowledgeable activities
- Skills building for nurturing activities (apprenticeships)
- Competence, capacities and capabilities enhancements

(vi) Endless Global Connectivity

- Global cyber links with satellite communications; cable televisions
- Search engines such as Google, Yahoo, AltaVista, etc
- Communications interlinks e.g. mobile phones, iPods and most recent wireless e–readers (e.g. kindle from amazon.com), likely to change reading habits (perceptions) of knowledge workers.

Themes were further explored for insights to make the framework be realistic.

4.9.4 Analysis of qualitative data

Case study 1 incorporated qualitative data taken from 20 in-depth interviews of which, 15 were video–taped (ranging from 20–60 minutes), transcribed and analysed. Initially, analysis was done through line by line coding with further analysis of focused coding to condense the data. In this process of coding, Charmaz (2006: 59) views focused coding as a tool to move across interviews and observations, compare people's experiences, actions, interpretations, and through emerging codes condense data. Moreover, focused coding provides a handle, allowing an emergent process to spur deep insights and divulge themes. Such a tool in this study was enhanced through writing memos as a reflection of interview experience. In practice, Pidgeon and Henwood (2009: 638) look at memo as a subsequent tool that can be used to discuss the emerging analysis. Moreover, Lempert (2010) regards memos as flexible narrative tools, viable in developing ideas, adaptive, elaborative in unravelling complex social worlds, raising clarity of issues through research.

However, Hesse-Biber and Leavy (2011) portray memo writing as a process of iterative reflexivity behaviour that take stock of what happened during data collection, analysis and interpretation. Memo writing foster clarity and track of ideas, scenarios of interviews sessions; linking analysis and interpretation; for clarity of fuzzy ideas to allow context, empirical and theoretical to merge. Thence, Corbin and Strauss (2008: 117) describe memos as specialised type of written records which contain study analyses and a refinement of products.

4.10 The qualitative process

4.10.1 Emerging themes from coding process

Table 4.10 Emerging themes

Emerging themes, features for the framework	Memo codes	Categories from 'focused coding'
A. Individual commitment **B. Emotional capital** **C. Proactive environment** **D. Workplace interaction** **E. Value creation process** **F. Endless global connectivity** **G. Knowledge flow** **H. New entrants** **I. Deliverables** **J. Departments** **K. Recognition** **L. Dynamism**	1. Working in globalised world 2. Dynamic environment 3. Act local, impact global 4. Seeing bigger picture 5. Capabilities to create value 6. Individual commitment 7. Renewing competences 8. Recharging zeal 9. Initiatives to opportunities 10. Underpin innate abilities 11. Knowledge workers, value creators 12. Offering deliverables 13. Lifestyle of deadlines 14. Unlocking talents 15. Watching impediments 16. Use emotional intelligence 17. Tapping innate gifts 18. Cultural differences 19. Breaking boundaries 20. Interactions in the web	1. Changing existing practices? 2. Realising individual potentialities 3. Nurturing motivation 4. Need to raise recognition 5. Managing with open mindset 6. Dynamic organisation 7. Tapping potentials of diversity 8. Accommodate, use ideas wisely 9. Manage tactically 10. Communicate promptly 11. Aligning 12. Checkout cultural holds 13. Transparency 14. Network and involve 15. Cultivate individual zeal 16. Being sensitive to workers satisfaction 17. Being willing to change

In all, 17 categories are taken from focused coding, 20 codes emerged from memos. Then 6 themes 'A–F' and 6 features 'G–L' emerged (Table 4.10).

4.10.2 Focused Coding

Through focused coding, you can move across interviews and observations to compare people's experiences, actions, and interpretations...codes condense data and provide a handle. Coding becomes emergent process (Chamarz 2006: 59). Extracts of interview transcripts (Appendix C) higher categories as focused coding in Table 4.11.

Table 4.11 Case Study 1: Focused coding

'Higher categories'	**Interviewer:** Theme is .... to see the existing practices in the knowledge-driven organisation... the possibilities of adopting best practices… … include *understanding, motivation, and commitment ... environmental fitness* in enhancing value creation in the organisation. What can you say about AB existing working practices? **Participant 1:**
1. Changing existing practices?	Firstly, when it comes to issue of understanding, ...example within our organisation, AB, the issue of understanding is for management to understand us as higher learning institute ... comprised of staff and students; you can see the management at AB fail to realise that their instructors have certain potentialities. This is why for an issue which could have been done readily using internal resources at low cost instead management tend to hire outside resources. By using external resources AB incur more cost. This is a problem which can be linked to issues of motivation in the organisation. Understanding – management failure to
2. Realising individual potentialities	
3. Nurturing motivation	

4. Need to raise recognition	understand staff as an important resource. Motivation is lacking. **Participant 1:** Workers at AB resort to do only the assigned responsibilities. Most of the staffs are not motivated but keep staying at AB due to flexible working hours. People perform their work at AB without much care due to low recognition accorded to whatever one is doing. **Interviewer:** *In terms of capabilities do you think that if there is enough motivation lecturers have the capabilities needed to deliver results?*
5. Managing with open mindset	**Participant 1:** One reason is that people are not involved and thus they do only the minimum to meet the deadlines. Remedy for the malaise at AB can be possible if there is to be, openness, prompt internal communication. Management has to consider its working attitude. The subordinates are human beings; the subordinates have potentials, and are everything to the organisation. **Interviewer:** What do you advice me in terms of the research project which I am doing?
6. Dynamic organisation	**Participant 1:** First remember, organisation is a living thing. No organisation is perfect, even in Europe, the developed world; we ... organisations

7. Tapping potentials of diversity 8. Accommodate, use ideas wisely 9. Manage tactically 10. Communicate promptly	are made up human beings; human beings are dynamic. Human beings are not stagnant, we are growing, and at the end of the day we get older, mature we retire, we die or whatever, whatever a product lifecycle, whatever. But again, the organisation, or the management has to understand that, first we are different as human beings, and we are different as individuals, [*so they have to cope with differences and diversity*] but again as an organisation we are one, because at the end of the day, we all aim at one thing, to achieve the organisational objectives or organisational goals. So let's leave our differences may be because you didn't excel in the past you are excelling when you are above 55, now you try to block other people. So understand that, whoever is here is here to achieve, to contribute and achieve, to contribute to the organisation and achieve something at the end of the day. **Interviewer prompt**: [*So you are trying to say they should have an open mindset to receive ideas and to accommodate even those chilling ideas so long as they can help them to...*] **Participant 1:** There is a possibility if not meaningful today, but it might be meaningful in the future. So, accommodate but it is not necessary you have to work on every idea right now, some ideas are for short term, some ideas are for midterm, some ideas are for the long term and

11. Aligning	may be some ideas are after long, long long term whatever; so you listen see what you can take now and see what can be taken later on. Cooperate and do not work in isolation. Be open where possible and where necessary, for not all issues that are to be open. Isn't it? For even management has its limitations, in cooperation there is limitations, in the openness there is limitations also
12. Checkout cultural holds	**Participant 2** The delaying of communication brews grievances. The knowledge of the organisation when people join in is vital. Without communication, to fill the void of no communication, then the corridor will be so fertile with rumour mongers. These in the long run can be infecting the organisation with sentiments of doom. **Interviewer:** *Is it possible to get the best practices out of what is in disoriented state now?* **Participant 2** We need to have a charter defining our activities, a time limit as a checklist to enable new recruits to join and be a part of the place.
13. Transparency	**Participant 5** Cultural background is sometimes a source of low understanding. The loud mouthed people are to be dealt-with. …, Management is not gender sensitive. There is a need to change, since things

14. Network and involve	go unchecked and bring untold problems. To put regulations – allowing people to talk freely as long as they adhere to norms and policies of the organisation. A need of having a sense of belonging to employees. **Interviewer:** *What can we do to have best practices?* **Participant 7:** Systems of networking for us, work environment are not encouraging everybody to come up with the full potentials, to be full real person. People should fully be involved in the working environment; it is about the linking people together more amicably.
15. Cultivate individual zeal	**Interviewer:** *What are the impediments?* **Participant7:** In my personal view it is not a big deal. **....** In organisational culture of AB … there is no system that has a way of fully recognizing individual contribution. Nobody recognizes you as you are somebody. Your existence is not taken as someone who joins the organisation to add value. Outside … AB staffs are adding value. Too much centralization is hampering people from giving out their best. It is a problem; needs to be sorted out.

16. Being sensitive to workers satisfaction 17. Being willing to change	**Participant 10** What I have observed at AB is completely different, may be due to culture. People are rigid, don't want to change, and don't want to understand. Don't care for the satisfaction of others. ... but it is not good where technology is ignored, environment is completely ignored. If you try to convince about something, they look at you as a trouble maker. Understanding! ... At AB no understanding at all. They don't care about satisfaction of others. They don't care about the faculty members' requirements, students' needs. This is a big barrier; a drawback where there is no willingness to change. **Interviewer:** *How do we create a platform for change?* **Participant 10:** Change is not easy; they are not prepared to change. May be due to culture of this area; that people are not ready to change their attitude. Willingness to accept change if is lacking; it makes a big problem to others. Those who are working at bigger cities *elsewhere* are ready always to be flexible for change. Leaders are confined themselves to their 'narrow wisdom' Grumblings will not help due to that, the workers have no authority and power. In other Institutions of higher learning, there are a lot of forums to help people air their views that depict their aspirations.

4.10.3 Memos: written memos to develop ideas

Memos helped to 'discuss the emerging analysis' (Pidgeon and Henwood 2009: 638). Memos are adaptable narrative tools to develop ideas and elaborate them in research (Lempert 2010: 247). Memo extract (Appendix B) linked to memo codes Table 4.12.

Table 4.12 Case study 1: Memo codes from memo extract

Memo codes	Memo extract
1. Working in globalised world 2. Dynamic environment 3. Act local, impact global	**The Narrow Wisdom** Participant 10 suggests that persons with 'narrow wisdom' if they are in the management tend to cling on power and justify their actions regardless of the consequences. This idea of 'narrow wisdom' sparked a reflection to the existing challenges of working in a more globalised world. Does this idea resemble thinking and acting without encompassing a larger evolving business environment? Is this the right thinking for this particular era? When trying to speculate to learn more about this narrow wisdom. As a response, a further light comes from the same person. He portrays working in different organisations in the country for many years with experience of seeing how others conduct business in larger cities. Change seems to hinge on balancing effects of issues that carry business forward. Alternatively, attempt to look at each word separately gives for 'narrow' words from online thesaurus like *confine, contract, constrict, get smaller, restrict, limit* …, while the 'wisdom' using online

4. Seeing bigger picture 5. Capabilities to create value 6. Individual commitment 7. Renewing competences	hesaurus is; *understanding, knowledge, perception, intelligence, acumen, good judgment, judiciousness, prudence, good sense, etc.* Combining the two words together 'narrow wisdom,' interesting results emerge like '*confined understanding,' 'restricted prudence,'* '*limited intelligence,'* with many combination possible out of such range of words, but all of them show a certain limitation or restrictions. Does the narrow wisdom as related to how the organisation is being run, means lack of encompassing big picture of issues, like opportunities and threats internally and externally affecting individuals at the workplace in the organisation? Participant 7 gave a response with a clue, suggesting that failure to recognise one's ability and contribution to the organisation deprive ones capabilities of creating value. The individual commitment one has at the workplace may be hampered by notion of 'narrow wisdom' that can be attributed to cultural and other traditional ways of running organisation not compatible in this evolving era of web interconnectivity. Participant 1 suggests a remedy for such issues to be continuous in–house training on attitude change and organisation behaviour. Organisation which keeps on learning is able to clear the hurdles of that nurture from hampering individual knowledge workers in realising their aspirations, to find the workplace fulfilling and

8. Recharging zeal	positively rewarding. One might link the narrow wisdom to Wind, Fung & Fung, (2009:314) who ask, 'If you don't see your company as part of a network, are you viewing your world too narrowly?' It is the workplace which needs to be linked and wisely coordinated to recharge one's zeal and enthusiasm to do well tasks and activities. Such notion gives hope and trust that can restore confidence; unlock potentials from knowledge workers for high value creation process, (Ehin, 2000).
9. Initiatives for opportunities 10. Underpin innate abilities 11. Knowledge workers, value creators	**Leadership Challenges in 21st Century** The leadership in the organisation faces challenges of nurturing and raising pathfinders among the existing workers. The role is to explore new avenues for fresh opportunities. The potentials within organisations, coupled with ingenuity of the knowledge workers can leverage efforts to build new services and products in line with goals and objectives of the firm. Equally, taking risk is one of attribute that need resilience to possess, with years of experience, relentlessness, and persons' innate abilities. With waves of change, whirlwind of economical downturns that hit organisations, such attributes of seeing bigger picture of the organisation future, itself is a rare alchemy of leadership, (Mintzberg, 2009). The challenge to CEOs and top management is how existing knowledge workers

12. Offering deliverables	as vital creators of value within the era web connectivity can deliver best results. Getting pathfinders needs patience and in–depth views of the organisational future position. With technological revolution, changing market behaviours, offering services and products to match diverse tastes, higher learning organisations have noble role of updating knowledge and awareness in the society. Organisations can find viable space to offer deliverables that underpin themes emerging in the contemporary digital economy. But aspirations of knowledgeable individuals are the challenges of leaders in the first decades of 21st century, (Greenfield, 2008).
13. Lifestyle of deadlines	Knowledge workers in the higher learning institutions, have practices that are project oriented, as Connell (2006:11) states, all are in tasks deadlines. It is such experience intertwined in web based type of life, in dynamic capabilities that leads to anxiety.
14. unlocking talents	**Innate potentials** Through much thought, the question to ask oneself is simple. How do we assist individuals with endowed gifts of talents of knowledge to open and use them in the organisation and for the benefit of our society? Knowledge workers have endowed gifts. The gifts are embedded in their minds. These gifts or talents cannot in mechanistic ways be opened. You force them by

15. Watching impediments	rules and policy to open, instead they completely hide. There is no easy way for managers to spot and nurture talents of knowledge workers under them. Among all, the participants 1, 5,7 and 10, argue and support that, organisational policies some of them are rigid and mechanistic in nature and do not have options for voluntary opening or give opportunities to open or unravel ones dreams easily. This is vague but its irony is on an obvious blockage to carrier path that always looks obscured from one's future rise. In worse situation if there is someone with dreams of future novels plans or issues, if by chance is being spotted, the person may be played down or emotionally harassed. Reasons for knowledge workers labour turnovers include negative intrinsic motivation. If a person is skilled and of high learning, the more is presumed to be in control to, manage; nurture one's emotional intelligence, (Goleman, 1996; Ariely, 2008; Gladwell, 2008) in challenging situations. It takes every opportunity to ethically unravel the innate gifts. The gifts are intangibles that organisations in our days yearn earnestly for them. The innate gifts, call them untapped skills, alternatively hidden or masked by one's intentions to be realised whenever right opportunities and support evolve. In such stance, one may reflect the role of cultural capital, as it affects individual capability and effectiveness to create value. However, some
16. Use emotional intelligence	
17. Tapping innate gifts	
18. Cultural differences	

19. Breaking boundaries	culture enhances advancement on personal levels, while fanning the growth in a wider circle. Instances of these can be related to those cultures explored by Hofstede, (2001) on PDI (*Power Distance Index*) as rooted to family and clan ties. Such backgrounds create fertile social spaces on which perceptions; individual commitment incline to incorporate social communities apart from organisational policies and occupational demands, (Sousa and Hendriks 2008). In a critical approach,
20. Interactions in the web	the contentions underpin interactions, the interconnectivity of internet in web based life to the profound sense of presence and spontaneous effects (Senge *et al.* 2005), in existing practices.

4.10.4 Tying together

The analysis of quantitative data Table 4.7 shows commitment (n=40) with 32.5% a decisive score and technological updates (n=40) with 27.5%. In addition, observation and qualitative data show vital roles of individuals in shaping the dynamic nature of the organisational environment. The reflection triggered insights that led to the emerging themes; split from A to F that focus on individual roles in global perspective, and G to L has organisational features, in the conceptual framework. Jointly, themes A–F and features G–L, form the conceptual framework; from memos and the focused coding.

4.11 Intergrating study outcome

4.11.1 The conceptual framework

The findings of this study of MM quantitative part descriptively analysed as in Sapsford and Jupp (2006), Trochim and Donnelly (2007) Bryman (2009), and Onwuegbuzie and Combs (2010). From the study it emerged that commitment, confidence and technological updates are the most outstanding intangibles for creating value. The analysed qualitative data link well with the grounded theory in Charmaz (2006); Corbin and Strauss (2008). The outcome is a conceptual framework presented in parts as A and B (Figures 4.8 and 4.9).

Part A covers features shown from G to L in Table 4.9, named as *knowledge flow, new entrants, deliverables, departments, recognition* and *dynamism* as features in the organisation. Part B has themes, A to F, named as *individual commitment, emotional capital*, *proactive environment*, *workplace interaction, value creation process* and an *endless-global-connectivity*. The feature named, knowledge flow in part A can be seen as a good link to the theme, endless-global-connectivity in part B, making a likely connection between both models. The link can be visualised when one explores Table 4.9, in the memos codes (3, 4, and 20) and the focused coding categories (5, 8, 14, and 17). It gives the joint implication of individual commitment as a theme through codes and categories; knowledge flow allows one to depict interaction in the study. Individual commitment was taken as the lead theme, purposely evidenced from the analysis, to underpin vital intangibles from the workplace.

The intangibles were identified in the period of staying in the field through observation, meetings and other workplace normal interactions. The choice of commitment is taken as an anchor on which individual decisions in the workplace environment rest. The choice of 'intangible' commitment can arguably be justified as the right choice due to the need for grounding the conceptual framework to the actual workplace settings. The prevailing realities of the contemporary business environment require competitive potentials and innovative capacities for survival (Colbert and Kurucz 2011: 405); where the binding force of individual commitment (Kaufmann 2011: 156) is imperative.

Furthermore, the models: organisational perspective and individual global perspective which form the conceptual framework have been designed that way to reflect the role of individual knowledge worker in the organisation. The organisation, being a created legal person use knowledge workers as agents of carrying out her works. In recent times, increased work pressure especially associated with deadlines, creates misgivings and other stressful situations. Such behaviour of the organisation, affect livelihood of the role players, (Morgan 2006: 310–312; Connell 2006; Menzies and Newson 2007). The two models allowed a reflection from knowledge workers' perceptions.

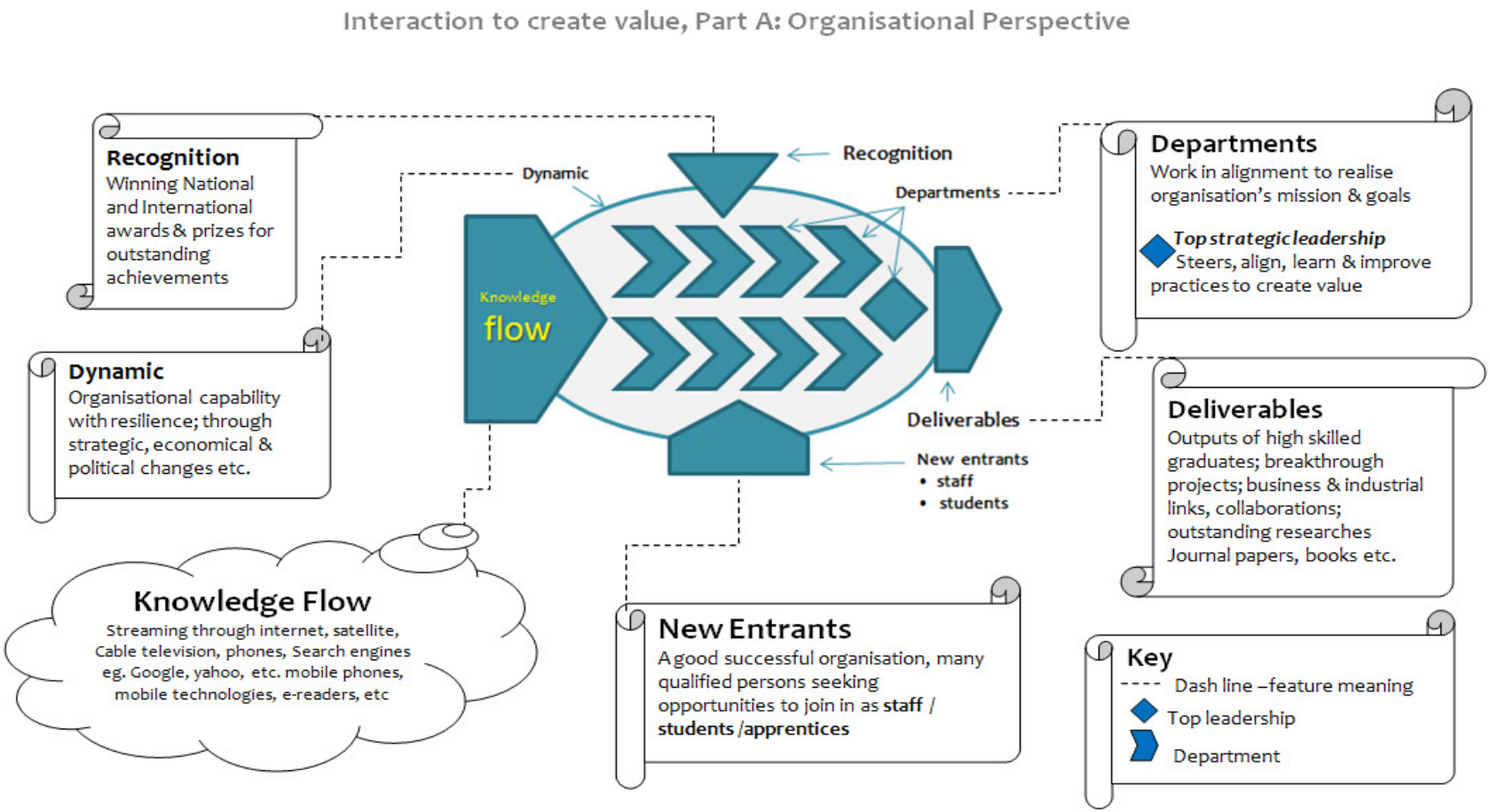


Figure 4.8 Part A - Organisational Perspective

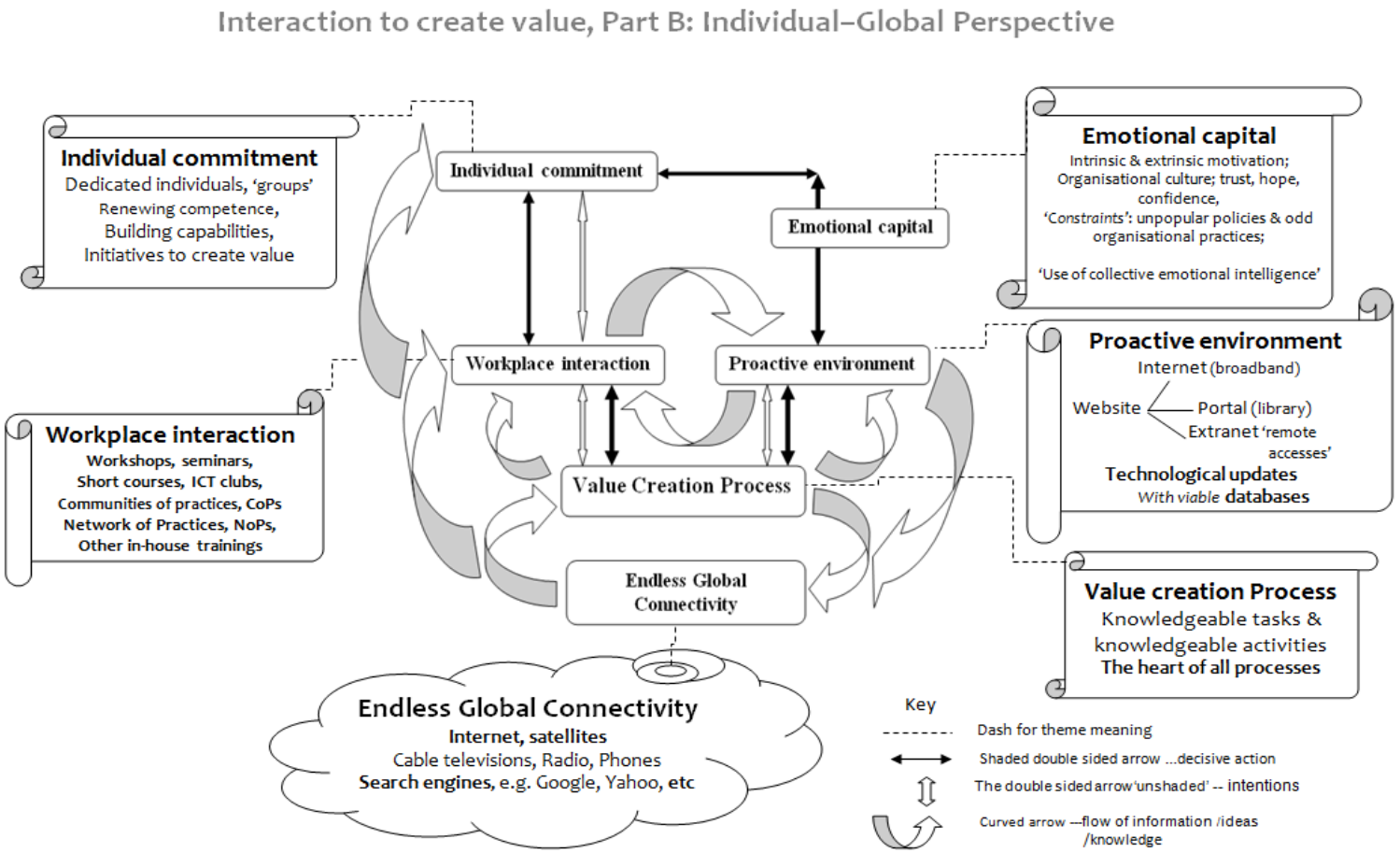


Figure 4.9 Part B – Individual–Global Perspective

4.11.2 Discussion for case study 1

This section considers how memo codes and focused coding are supported by evidence from the data corpus of this study. The support comes from the primary research (interviews, questionnaires and observations), and the secondary research from the literature review and the official documents. The outcome of the study is the conceptual framework. It has two separate Part A and Part B as shown in Figures 4.8 and 4.9, as two models which can be (mentally) linked with knowledge flow as a feature in Part A and endless global connectivity a theme in Part B, are shown as G and F in Table 4.9. Using numbers of memo codes and the focused coding shown above as routes to traverse back to memo and categories in the data. For instance, number 3 (act local, impact global) memo codes, leads to a memo on participant 10, as:

> *'...working in different organisations ... with experience of seeing how others conduct business …. Change seems to hinge on balancing the effects of issues that carry business forward.'*

Such an exchange helps to spark the thinking of knowing how others in other places work, how they experience their daily activities. When exploring such ideas, the possible feature or place to look is the internet for connectivity and networking to see what others do. Such a move allows a person to get plenty of ideas. The number 8 (accommodate, use ideas wisely) in the focused categories is a caution. In order to grasp the meaning as expressed by the

participant, it is require one to have a back view of the data. The chunk of data taken from vignette of a transcript as an extract is shown as follows:

> ***Interviewer prompt****: ... So you are trying to say they should have an open mindset to receive ideas and to accommodate even... chilling ideas so long they can help them...*
>
> ***Participant 1:*** *There is a possibility if an idea is not meaningful today ... it might be meaningful in the future. So, accommodate but it is not necessary you have to work on every idea right now, some ideas are for short term, some ideas are for midterm, some ideas are for the long term and may be, some ideas are useful after a long, long term ....; so you listen see what you can take now, and see what can be taken later on.*

The above is free advice of using the knowledge flow wisely. Using the same link, number 20 (Interactions in the web) in the memo codes, leads to more elaboration. An extract from the memo provides the following explanation:

> *[Cultural] backgrounds create fertile social spaces on which perceptions; individual commitment incline to incorporate social communities apart from organisational policies and occupational demands, (Sousa and Hendriks 2008). In a critical approach, the contentions underpin interactions, and*

> *the interconnectivity of internet in the web-based life, to the profound sense of presence and spontaneous effects, as seen in the existing practices* (Senge *et al.* 2005: 234).

The above chunk of words from memo show the existing practices from other authors' perspectives. When linked to number 14 (Network and involve), the focused coding categories provide details that gives further insight, an extract:

> ***Interviewer:*** *What can we do to have best practices?*
>
> ***Participant 7:*** *Systems of networking for us, in the working environment is not encouraging for everybody to come up with their …full potentials, to be full real person. People should be fully involved in the working environment; it is about linking people together more amicably.*

On methodological perspective, focused coding of memo and categories help the process of trawling in the data corpus in search of valuable insights; an instance of looking at the emotional capital as theme, leads to memos and categories, which have insights that are enriching. In this memo code number 13 (Lifestyle of deadlines); as the following extract from data corpus reveals:

> *Organisations can find viable space to offer deliverables that underpin themes emerging in the contemporary*

> *digitaeconomy. But aspirations of knowledgeable individuals are the challenges of leaders in the first decades of the 21st century, (Greenfield 2008: 177). Knowledge workers ... have practices that are project oriented, as Connell (2006: 11) states, all are in tasks deadlines. ... Such an experience intertwined in web based type of life, in dynamic capabilities leads to anxiety.*

On the theme of emotional capital, for example, it is easier to see memo codes 16 Use emotional intelligence (Table 4.12); in traversing to memo, see extract:

> *In worse situation if there is someone with dreams of future...plans, if by chance is being spotted, the person may be played down or emotionally harassed. Reasons for knowledge workers labour turnovers include negative intrinsic motivation. A knowledge worker skilled and of high learning is presumed to be in control to manage; nurture one's emotional intelligence especially in the challenging situations.*

The theme of workplace interaction in the conceptual framework has an important perceptual link to the proactive environment as a way to foster tacit knowledge in the organisation. Workplace interaction, involving formal and informal meetings, help managers and staffs to easily flout ideas and allow

initiatives and opportunities to be seized. This leads to memo codes number 9 (initiatives for opportunities); that is easily linked to number 10 (underpin innate abilities), elaboration can be seen in the following extract as shown:

> *The leadership in the organisation faces challenges of nurturing and raising pathfinders among the existing workers. The role is to explore new avenues for fresh opportunities. The potentials within organisations, coupled with the ingenuity of the knowledge workers, can leverage efforts to build new services and products in line with the goals and objectives of the firm.*

The memo quoted above is about 'Leadership challenges in the 21st Century'. It can also be linked to the feature of departments, where the top strategic leadership (Figure 4.8, page 172) plays a role in the deliverables. Number 11 (knowledge workers, value creators) in the memo codes; the extract as follows:

> *Equally taking risk is one of the attribute that need resilience to possess, plus years of experience, relentlessness, and a persons' innate abilities. With the waves of change and a whirlwind of economical downturns that hit organisations, require attributes of seeing the bigger picture of the organisation future…*

To realise organisational objectives and goals necessitates creating value in which knowledge workers require zeal. One is tempted again to look at memo codes number 8 (recharging zeal) an extract to allow more thoughts is shown:

> *... individual knowledge workers ... realising their aspirations, ... find the workplace fulfilling and positively rewarding. [In contrast] One might link the narrow wisdom to Wind, Fung and Fung (2009: 314) who ask, 'If you don't see your company as part of a network, are you not viewing your world too narrowly?' It is the workplace which needs to be linked and wisely coordinated to recharge one's zeal and enthusiasm to do well tasks and activities. Such a notion inspires hope and trust to restore confidence and unlock potentials of knowledge workers for high value creation process,* (Ehin 2000: 167).

The initial attraction that made one to join the organisation needs constant renewal. For in the fast paced workplace environment, the ever changing technological updates are part of a changing business environment. To fulfil the act of creating value calls for a high understanding of forces involved in the interaction and motivation. Such understanding will give rise to policies which improve performance whilst using the intangibles to enhance value creation.

4.11.3 Reflection on value creation

The study is an attempt to look at ways organisations can wisely make use of the existing practices of knowledge workers to unleash their potentials in the knowledge work context. However, looking broadly it requires a mindset change to enable identification and use intangibles in collaborative networks. More determined efforts are needed for knowledge flow to be used adequately enough for organisations to have competitive postures, (McGee, Thomas and Wilson 2005; Palmer and Hartley 2006; Cronin 2007). Such a mismatch needs a plausible framework such as this, to provide alternatives and address existing practices in regard to the value creation process. The developed framework is meant to address ways of fostering individual capabilities through best practices and ways to trigger linked actions that unleash ones' innate potentials through the effects of networks; for example, the sharing of web pages, online forums, data networks to social networks (Gruzd and Haythornthwaite 2011: 170–172) when linked to value drivers of business models (Zott and Amit 2009: 261) can facilitate the value creation process in the fast changing business environment. Whilst encouraging the use of new communications media, the framework supports the use of traditional sources such as books, professional networking events, conferences and journals.

In a repertoire of capabilities, skill flexibility among broad-based skills is vital for the adaptation of evidence based practices to change and fill the widening gap of turning knowledge into action in organisations (Bhattacharya, Gibson

and Doty 2005; Pfeffer and Sutton 2006). Such abilities are likely to help knowledge workers and their leaders build mutual trust to adapt, align and with inspired commitment to realise organisational goals. It is like an entrepreneurial mindset that stabilizes workplace relationships, to foster a transparency that nurtures understanding, as part of an organisational culture crucial for implementing dynamic activities in the value creation process, (Pfeffer and Sutton 2006; Sandberg and Targama 2007). Whilst uncertainties abound, reliable changes need extraordinary competencies, skilled flexibilities and experiences of past achievements as vital lessons of what works. Nonetheless, a shrewd presence of mind to see, and stimulate the knowing process into action to present and build a readiness to future challenges is vital acumen, (Andriessen 2008; Duggan 2003; Senge *et al.* 2005; Zhu 2008).

Success of that nature are in organisations that allow individuals to learn, share meaning and deeper insights in collaborative networks and unleash one's utmost inner potentials at the workplace, (Kim 2004: 41; Bartel and Garud 2005; Cronin 2007; Allix 2011: 139; Boisot 2011: 441; Fenwick 2011: 322). The current study attempts to divulge a conceptual framework which, if used as a tool with gauged managerial skills, individual knowledge–workers can be enabled to give their best contributions. Nevertheless, case study 1 looked at the existing practices as pathways to best practices in the workplace with a focus on a higher learning in Tanzania. It is an initial process at forming a dynamic framework which can critically evaluate strategies for value creation

in knowledge-driven organisations. It means to underpin existing practices of which case study 1 gave initial data accessibility to practitioners' views and the insights of workers in knowledge-driven organisation. However, it is recognised that case study 1 focused on organisations within the higher learning in Tanzania. Whilst such organisations share some common characteristics with the knowledge-driven organisations worldwide, they also possess unique characteristics. Consequently, to test for generalization of the conceptual framework, it seemed feasible to conduct case study 2 which extended the framework exposure to knowledge workers (researchers and practitioners) in UK and Tanzania to enhance clarity of the critiquing process.

The study is such an attempt of looking for evidence that can answer a question, as a basis for best practice for this study. The question is how do we assist individuals endowed with innate gifts to open them and be of use to organisations and society? Knowledge workers have a variety of gifts, (Alvesson 2001: 866; Choudhury 2004: 249) for intellectual work context (Connell 2006: 9). These gifts are naturally in their minds. These endowed gifts cannot be opened mechanically. Forcing them to be open through work policies, rules and regulations or laws will only make them hide. Knowledge workers nowadays with higher learning qualifications, work in various capacities; though possessing a variety of professional qualifications and with time they age, (Sparrow 2001: 300; Tagliaventi and Mattarelli 2006: 294; Russo, Berg and Lavanga 2007; Sands and Reese 2008; Tzabbar *et al.* 2008).

In the 21st century knowledge workers are plentiful, but how can organisations tap their potentials before they retire? Use of best practices can be looked as acts of 'building hope among employees to enhance organisations' missions,' Adams III *et al.* (2003: 369). Organisational policies rooted in nineteenth and twenty century philosophies are not feasible in this dynamic business environment. For it requires skills to nurture people's best potentials, to accomplish the finest and highest rate of qualities of value. It is a way of 'lean thinking' for 'lean solutions' (Womack and Jones 2005). The existing practices give insights as a lens for understanding the organisations to underpin parts of their strategies in the value creation process. In the views of knowledge workers, both Seale (2007) and Creswell (2007: 75) argue that insights lead to understanding; developing a realistic dynamic framework.

Case study 1 explored existing practices in organisational settings, through observations, documentations, questionnaires and unstructured interviews as ways to understand existing practices. Does this understanding of the organisational activities raise value creation process? In response, Lehaney *et al.* (2004: 95) says normative understanding in searching for truth is vital. When understanding is acted upon, value creation is perceived as the actions of knowledge workers in activities that use knowledge to encapsulate change and innovation that fosters the use of best practices as a pathway to actual fulfilment, (Tsoukas 2004: 414; Bartel and Garud 2004: 325; Roos 2005: 207).

4.12 Summary

This chapter has covered case study 1 of the research, which explored existing practices in higher learning institutes in Tanzania. The preliminary outcome of the study formed the conceptual framework. Study participants were (students as future knowledge workers) and other key knowledge workers whose practices amid challenges of the technological breakthroughs strive to create value at workplaces. The study explored views of knowledge workers in their status as directors, managers, lecturers, researchers, and university professors. The participants while in their respective organisations volunteered 20 unstructured interviews and filled 296 questionnaires. The data analysed in mixed methods divulged themes and features of the conceptual framework. Chapter 4 fulfilled the study aim objective (ii) by illuminating existing practices in context; while contributing and fulfilling objectives (iii) and (iv).

The conceptual framework was made possible through collecting perceived views of academics and practitioners in knowledge-driven organisations; starting at AB institute and from other neighbouring organisations of the higher learning in Tanzania. The qualitative and quantitative data analysed in mixed methods approach were instrumental in divulging the themes and features of the conceptual framework. Chapter 5 comes next as case study 2, has been designed to undertake the critiquing process for the conceptual framework by exposing it to participants for plausibility and generalisation.

Chapter 5

5 CRITIQUING THE CONCEPTUAL FRAMEWORK

5.1 Introduction

Chapter 5 critique the conceptual framework, a fulfilment of aim and objective (v). Case study 2 was designed to critique the output of case study 1, which began in Tanzania. The critiquing process starts in Coventry, UK, then Dar es Salaam and Arusha, Tanzania using in-depth interviews. The study included participants from Higher learning institutions, and other organisations. The knowledge workers as study participants comprised professors, lecturers, directors and managers as practitioners inside and outside higher learning. Basically, case study 2 focused on critiquing the conceptual framework by new participants, including those from the context of case study 1. In essence, case study 2 assessed the plausibility of the conceptual framework and began to generalise to an appreciable credibility.

Chapter 5 describes the use of informed consent. The participant information sheet and consent form (see Appendix H) were used for clarity and to enhance understanding of interviewees' verbal data. The piloting and critiquing used a mixed method (MM) instrument with Likert questions. The in-depth interviews gave space reflexivity allowing participant and interviewer to establish rapport, a vital element for eliciting insights in qualitative studies.

5.2 Informed consent

The use of informed consent in a MM approach has its root in confidentiality and protection. Patton (2002: 246) points out that informed consent is linked to procedures that allow researchers and human subjects to safely disclose information of valuable insight. Most of literature on the subject includes the Nuremberg Code and the Declaration of Helsinki as examples of good practice. Cook and Inglis (2009: 55) link them as safeguards for achieving good ethical research. Whilst addressing complexities on ethical issues, Rudestam and Newton (2007: 278–280) pinpoint elements of transparency crucial for an ethical process of collecting information and writing dissertations. In their discourse, they discuss 11 elements as important, with the remarkable 5 Cs, namely, *confidentiality, coercion, consent, care and communication* as research ethics principles that need thorough scrutiny.

However, if followed properly, these allow participants freedom to participate in the research undertaking. Informed consent is a safeguard for research which gives legal acceptance through diverse cultural backgrounds, mostly in studies deploying human participants. Though, unscrupulous use of information gathered, overtly or covertly, to underpin the purpose and benefits of the study, are checked for ethical dimensions to ensure validity (Smith 2003: 95–99; Abbott and Sapsford 2006: 291–298). Moreover, informed consent as ethical framework for respectful research is a rich source of debate particularly in online research (Hine 2008: 531). The use of internet data in

social science research, amid virtual landscapes that carry excitement with an aura of innovation, has been challenged for inappropriately neglecting the usual conventions of informed consent (Hine 2008: 531). The internet being embedded in everyday life, the online settings, necessity and practicality of negotiating informed consent, are daunting to researchers, placing the whole issue as methodological challenges. In ensuring anonymity and confidentiality vital to all types of research, Hewson (2008: 550) pinpoints obstacles that are likely to arise when using procedures aimed at eliciting elaborate information of sensitive nature from participants. Individual cases using e-mails or one-to-one interview on a personal topic are vulnerability as an e-mail can be traced or interviews can be intercepted if conducted over the phones. Hewson (2008: 550) points out that, when faced with such a dilemma, the individual researcher has to make judgements and decisions that are appropriate and reasonable to safeguard a specific research context.

Such explanation forms the basis on which data gathering for evidence to validate the conceptual framework was taken. In dealing with likely ethical quandaries, Patton (2002: 407–415) suggests the use of both informed consent protocols and confidentiality norms. Informed consent protocols largely cover the opening statements in interviews as to the purpose of collecting the information, usage, confidentiality, risks and benefits for the study participants. Confidentiality entails use of pseudonyms as way of protecting the identities of the participants and disguising the locations of the field for

privacy. Nonetheless, challenges arise for participants who take pride in their identities being revealed linked to activists as Patton (2002: 411) portrays. A presumption taken in this study, however, is to adhere to NT University ethical frameworks. Such ethical standards were the basis of case study 1 when developing the conceptual framework. Any attempt to deviate from such basic assumptions might jeopardise the basic premise reliance on which is the platform for the legitimacy, validity and reliability of the entire study stands.

However, as an attempt to delve deep into a quest to learn how to cope; the study explores the complexities of a fast-evolving digital age using in-depth interviews that hinge on informed consent. It is a quest for knowledge as the power of breakthroughs in learning how to improve understanding. Newell (2008: 236) says understanding usually grows and changes as learning continues. A premature evaluation impedes learning and short circuits the process. However, informed consent inferred above for studies involving human participants as subjects, requires high understanding. Moreover, an attitude that places ethics at the fore as it involves reflexive power dynamics (Stacey 2010: 223) allows intentions and actions to balance variety of needs. It includes protecting the researchers and participants from harm, as an ethics of friendship, (Tillmann-Healy 2006: 290; Brydon-Miller (2008: 208) explains this as respect for people's knowledge, experiences and dignity.

5.3 Undertaking a pilot study

A pilot study to test the instrument was done as a preface to critiquing of the framework. Essentially, it was to prepare a plausible instrument that allowed participants to give their views freely. The instrument was looked at by 4 participants (experienced researchers) who each agreed to be interviewed for an hour. Case study 2 adhered to ethical considerations as the MM approach was used in the study, it is critical that knowledge workers who are participants are treated with dignity and sensitivity to their individual rights.

Initially, the proposed instrument involved exposing the conceptual framework produced as an outcome of case study 1 to a variety of knowledge workers in UK and Tanzania and seeking their comments. However, the pilot study usefully pointed out that this might give rise to methodological errors in that the conceptual framework's models would put ideas into the respondents' minds rather than allowing them to come up with their own unbiased observations on value creation. The instrument was amended to consist of two parts; the first being an interview without showing the conceptual framework; and the second, being a direct exposure to the conceptual framework.

Critiquing of the instrument allowed the following observations to be made

(i) The participants accepted that the features and themes are vital for value creation.

(ii) A participant said that economic drivers are motivating factors for knowledge workers.

(iii) A participant also said the 'input–output' in the models will enhance the clarity.

(iv) It was recommended that the levels that framework addresses will allow enrichment.

(v) The conceptual framework should be separated from the participants in case study 2 to avoid a 'response effect', which would be a methodological error, or a threat to validity. Two respondents strongly recommended this.

(vi) It was suggested that the models show only things that we already know. However, it was noted that their significance lies in their validity and reliability and its subsequent use to focus on strategy through existing practices in relation to creativity and innovation.

(vii) One participant suggested that the conceptual framework can be validated using a 'mental model capturing approach or mind mapping'; insisting on separating the conceptual framework from participants.

Whilst the study objectives focus on the existing practices metaphorically, as lenses to best practices, the concern is how to make the best of existing practices whilst interacting within knowledge flow. The vital issue is to enable knowledge workers unleash their utmost innate potentials.

Case study 2 was set to critique the conceptual framework with consideration of the given highlights from a pilot study. Although, clear-cut solutions are rare, a concern for plausible ways to make case study 2 a success with credible results was a priority. Lee and Lings, (2008: 378) suggest that a research process with initial exploratory work as it progresses tends to be focused. The study was to capture participants' views of their practices in line with a conceptual framework.

In response to findings of the pilot study, the research instrument was prepared with two major parts. The first was about individual performance from getting better to the best; and the second was about directly critiquing conceptual framework. The first part is shown as the interview schedule in Appendix I, the second part is the critiquing instrument shown in Appendix J.

Table 5.1 Participants in organisation 'industry type'

Organisation 'Industry Type'	UK	Tanzania	Remarks
Higher Learning -Academics	26	10	Researchers
- **Non-academics**	5	1	Practitioners
Communications	-	5	1 Director, 4 Managers
IT industry	2	1	3 Developers
Banking	1	2	3 Managers
Law	-	4	4 Head of department
Total	34	23	57

Table 5.2 Participants profile: Interviews for Case study 2

Designation	UK		Tanzania		Remarks
	Academic	Non-Academic	Academic	Non - academic	
Knowledge workers 'piloting'	4	-			**Professors**
Executives	1	2	1	1	**Next-to-CEOs**
Director/deans	1	1	-	1	
H o Ds	3	-	3	4	**2UK Professors**
Associate heads of department	5	-	-	2	
Managers	5	2	-	-	
Knowledge workers	7	2	5	-	**Researchers**
Bank managers	-	1	-	2	
Telecom managers	-	-	-	3	
Human resource manager	-	-	1		
Total	26	8	10	13	57

Table 5.3 Participant profile in organisational levels

Organisational Level	UK	Tanzania	Remarks
Top level Executives, College Principals	3	4	3 Professors (1 UK, 2 2Tanazania)
Middle level Head of departments**,** Managers	11	13	2 Professors (3UK, 0 Tanzania)
Operational level Researchers	15	3	
Ordinary workers	5	3	
Total	**34**	**23**	**57**

Table 5.3 gives the profile of the participants in case study 2, viewed by organisational levels. A look at the existing practices helped to obtain insights of knowledge workers, how they experience the processes of creating value amid challenges of a web environment. For instance, participants relate challenges they face in coping with the pressure of work to the extent of the job being taken as a sacred occupation; an almost dedicated part of ones life. Such instances include comments like undertaking research problem being an opportunity. P10 [455-458] states that *Solving research problems; is an opportunity.* Whilst reflecting, P8 [434-437] asks with *Time frame-performance;* was the *work done with the heart*? Moreover, insights from the in-depth interviews with knowledge workers in the three levels enhance clarity of strategic leadership role (diamond-shaped figure 'Top Strategic Leadership' in organisational perspectives of the framework elaborated with Figure 5.4 page 203). Figure 5.4 offers the practice of 'common understanding to create value'; giving the essence of vibrancy in the knowledge-driven organisation.

5.4 Results from case study 2

Case study 2 had a total of 57 in-depth interviews (each interview ranged between 30 and 90 minutes). Of these, 34 were done in the UK and 23 in Tanzania. Targeted participants included knowledge workers in higher learning and others in different types of organisation. The knowledge workers ranged from operational to senior management levels. Practitioners who volunteered for interviews were software engineers, senior executives, directors and programme managers, lecturers and professors across total of 3 Universities, one in UK and two in Tanzania and five other types of organisations; two telecommunication companies in Tanzania. The UK participants included those from the health, banking and engineering organisations. The study tasks took seven months, from December 2009 to June 2010. Prior to the in–depth interviews, there were 56 weeks of observation. After data collection in case study 2, full analysis was undertaken. Using preliminary emerging results, study dissemination was done through a conference paper. The paper has been included in Appendix K.

In Figure 5.1 page 196, the perceptions of knowledge workers who critiqued the conceptual framework are revealed, showing the highest frequency scores, and how much they view the components as influential in the process of value creation in their organisations. It can be seen that individual commitment (76.9%), workplace interaction (73.1%) and proactive environment (70.6%); are emerging as the factors considered to be most influential in creating value

and nurturing intellectual capital. Other factors seen as important are dynamism (66.7%), knowledge flow (65.4%) and emotional capital (63.5%). The value creation process (60.8%) and deliverables (60.0%) come next in the ranking of influential factors. The attention of decision-makers and knowledge workers with regard to these aspects when developing strategy can inculcate zeal to ease implementation. However, the economic, political and the entire business environments are rapidly changing. The framework highlights importance of being vigilant to the change in perceptions to underpin the vital strands that can be seen to form parts of the themes and features shown in the framework. For instance, on the social nets, the recent phenomena like the wikileaks affair and phone hacking, though they are separate occurrences, can be seen to influence some change of policies, regulations even laws of the land in various countries. Such changes cause incremental changes to emotional capital, affecting other themes.

Furthermore, the online occurrences reveal vulnerability of the system which can be seen when one imagines the hackers, for instance, those who target various websites. Such trends in criminal behaviour can be seen and forestalled by those with right competences and skills, presumably renewable through networking within the web forums. The framework offers a guide to where the decision-makers can think and intervene in searching for options to solve problems or plan ahead with competitive teams. The theme individual commitment, underpins skills, competence building and capabilities renewal.

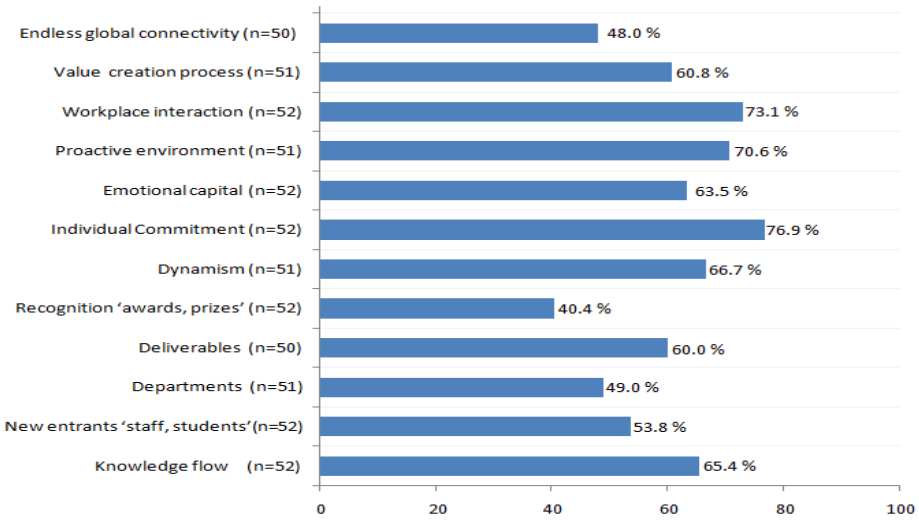


Figure 5.1 Outcome of Case study 2

In contextualising the framework, one issue which was raised by participants in case study 2 was to enhance clarity of the conceptual framework to allow themes to be presented in a linear format for clarity and understanding of both models. Revised models were produced (Figures 5.2 and 5.3, pages 197, 199). In Figure 5.2 two upcoming offshoots (web forums and social nets) of the endless global connectivity were added as a result of critiquing in case study 2. Though the offshoots are a recent phenomenon (Facebook and Twitter), they demonstrate the contemporary trends in how people in organisations interact with others outside. Such trends allow a fresh look at the importance of web forums for creativity and innovation. Figure 5.3 is an adjusted model with items added in the features: dynamic (staff development), new entrants (customers) and deliverables (dedicated services, goods and other products).

Interaction for value creation

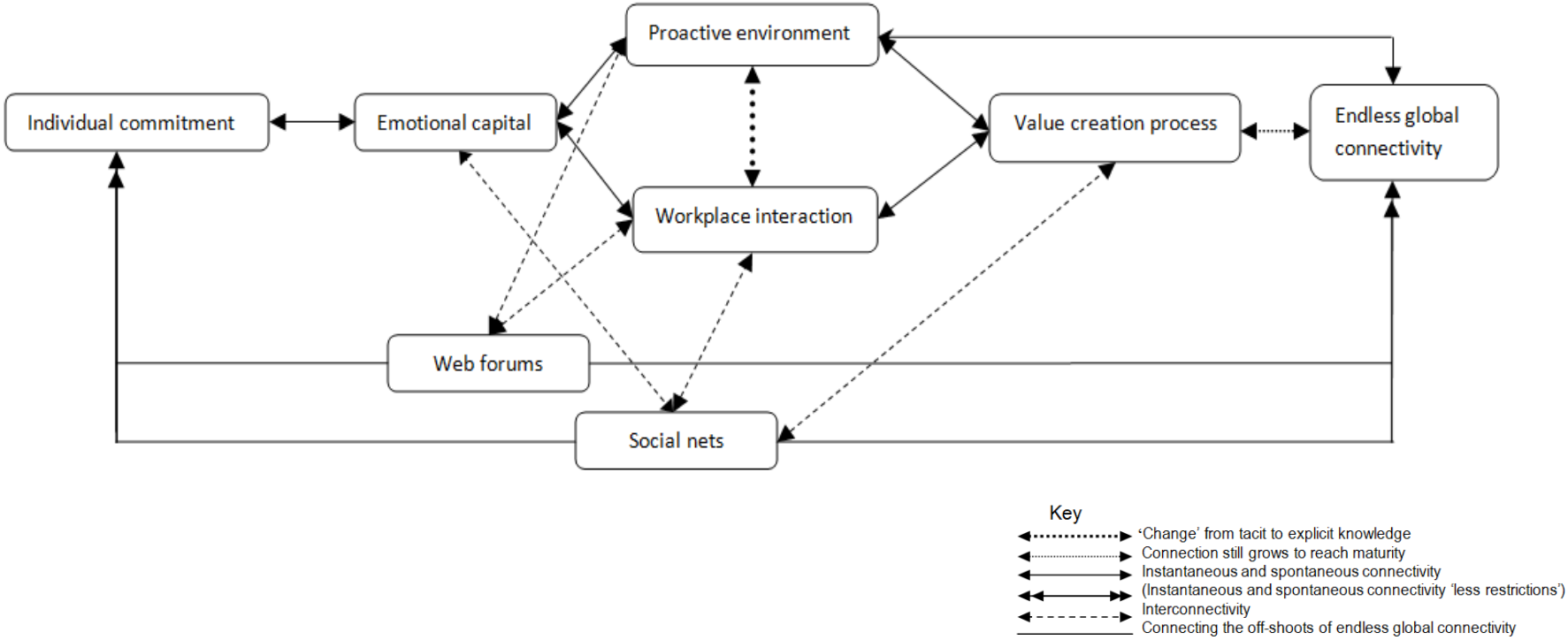


Figure 5.2 Individual global perspective 'adjusted'

Table 5.4 The framework components: Individual global perspective

Individual commitment	Emotional capital	Workplace interaction	Proactive environment	Value creation process	Endless global connectivity
Renewing competences ♦ Core competences ♦ Integrative competences **Building flexible capabilities** ♦ Core capabilities ♦ Supplemental capabilities ♦ Enabling capabilities **Underpin initiatives** ♦ Harnessing ideas ♦ Generating new ideas **Acquiring skill flexibilities**	**Motivation** ♦ Intrinsic ♦ Extrinsic **Organisational culture** ♦ Reputation ♦ Trust ♦ Hope ♦ Confidence **Organisational Policies** ♦ Popular policies ♦ Unpopular policies **Governing laws** ♦ Popular laws ♦ Unpopular laws Odd organisational practices Use of emotional intelligence	**Formal meetings** ♦ Short courses ♦ Seminars ♦ Workshops **Scheduled meetings** **Informal meetings** ♦ Communities of practices, CoPs ♦ Network of practices, NoPs ♦ Communities of learning **Other in house trainings**	**Websites** ♦ **Internet** (broadband ♦ **Portal** (library, hold of affiliates) ♦ **Extranet** (remote access) **Technological updates** Essential databases	Knowledgeable tasks Knowledge activities through ♦ Core processes ♦ Operations ♦ Sales ♦ Procurement ♦ R&D ♦ Maintenance ♦ Interaction	Offshoots of endless global connectivity: ♦ Social–nets ♦ Web–forums

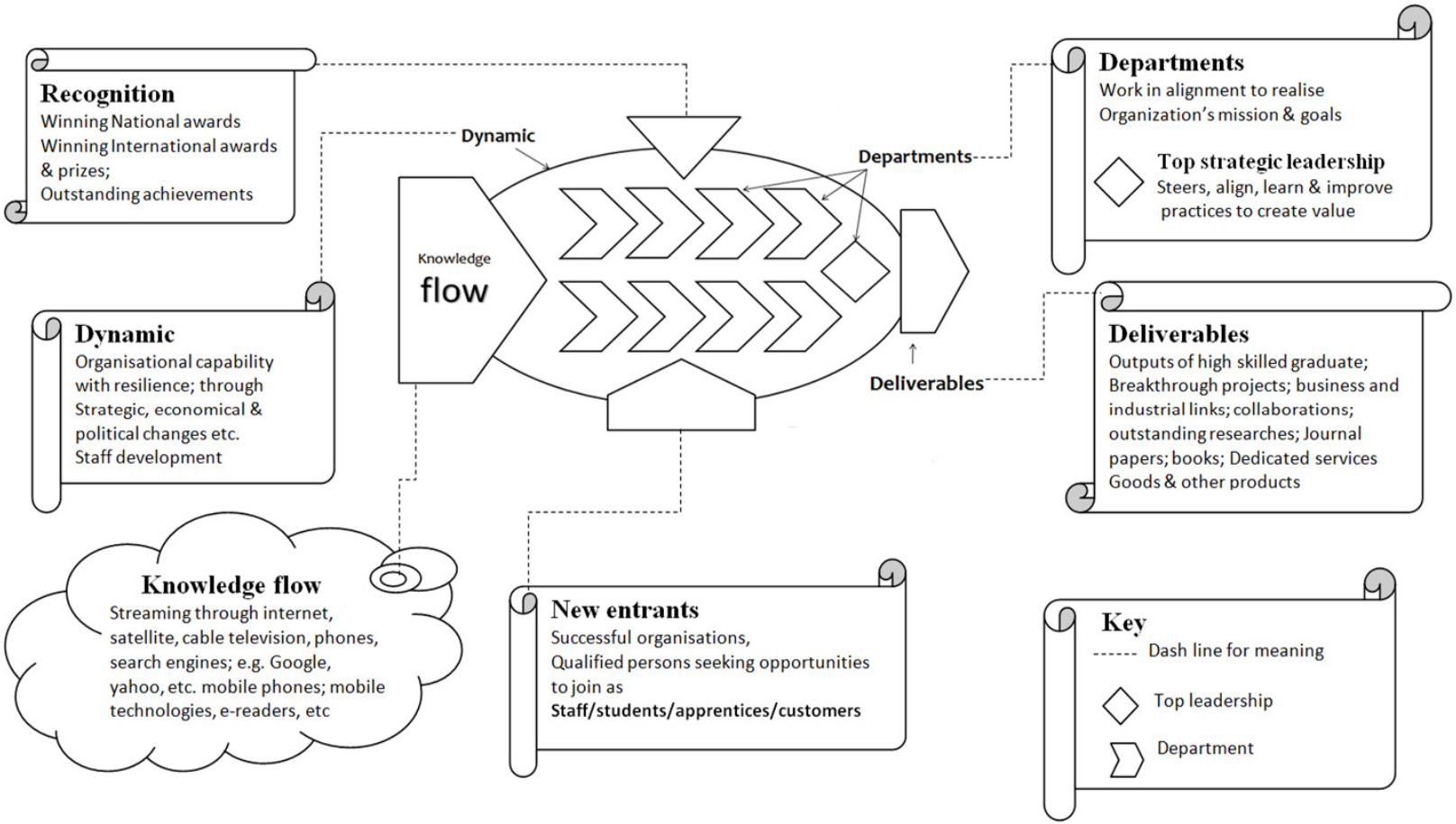


Figure 5.3 Organisational perspective 'adjusted'

Table 5.5 The framework components: Organisational perspective

Knowledge flow	**Dynamism (Dynamic environment)**	**New Entrants (staff/ students)**	**Departments**	**Deliverables**	**Recognition**
Information streaming internet ♦ Satellite communication ♦ Cable television ♦ Search engines ♦ Mobile phones ♦ Mobile technologies e.g. 'e-readers' They are source of ideas	Organisational capability with resilience ♦ Strategic capability ♦ Economical capability Political and economical changes Organisational culture Staff development	Qualified persons seeking opportunities to join as ♦ Staff ♦ Students ♦ Apprentices or ♦ Customers	Alignment to realise organisation's ♦ Vision ♦ Mission ♦ Goals **Top strategic leadership** ♦ Steer ♦ Align ♦ Learn ♦ Improve existing practices	Skilled graduates Breakthrough projects Business & industrial links Collaborations Outstanding research ♦ Journal papers ♦ Books Dedicated services Goods and products	Winning national awards Winning international awards Outstanding achievements

Figure 5.2 page 197, shows how an individual knowledge worker participates and offers contributions to enrich the organisation in relation to global 'presence' as a way of creating value. Figure 5.2 has the following themes:

(i) Proactive environment as a theme (technological updates as an item) maintain the connection of various important components in the models. A continuous search for plausible and better fitting modalities that work in a particular context is vital to ease the smooth functioning of each part of the model. This entails the need for contextualising the model for it to be useful in various places.

(ii) Components with the themes of *individual commitment, emotional capital, proactive environment, workplace interaction and value creation process* are found in the organisation. In addition, *endless global connectivity* together with the *web forums* and *social nets* (offshoots of endless global connectivity) are components in cyberspace, which are vital for spontaneous communication, coordination and exchanging of ideas, services and other products around the world.

(iii) The connecting arrows with to and fro indications show the instantaneous and spontaneous nature showing the 'real presence' of a web connectivity. The dotted lines show the desired needs for making these connections reach full maturity. Figure 5.2 depicts how an individual knowledge worker participates and offers a valuable contribution to enrich the organisation in relation to global 'presence' as a way of creating value.

(iv) The dotted line between the proactive environment (websites, intranets and extranet using the portals) and workplace interaction (meetings formal and informal) shows the possibility of changing tacit knowledge to explicit knowledge to be codified, either through sharing or otherwise through activities within the organisation and far beyond to reachable frontiers.

(v) The organisational perspective model (adjusted) shown in Figure 5.3 helps to show, metaphorically, the outer shell with essential features. For instance, the departments within which the individual knowledge workers operate (see the model shown in Figure 5.2). This causes interaction due to web connectivity at the workplace.

The framework addresses barriers envisaged as odd practices in emotional capital theme which underpin odd policies, rules or laws that impede success. It partly links to Grieves, McMillan and Wilding (2006) investigation of barriers to learning which addresses context in relation to personal cognition. For instance, individual commitment underpins initiatives in context of the organisational perspective (Figure 5.3 page 199) to address knowledge flow, within departments to build deliverables. The framework offers insights which can help to find approaches suitable to develop continuous learning capability using personal knowledge from in and out of the organisation (Dörfler 2010).

5.5 Common understanding to create value

The need for a common understanding to create value at organisational levels is prerequisite for success. It requires a top strategic leadership role, as illustrated by participants. For instance, from the categories: P24 [802–805]: *Understanding expectations of outside world and what works internally.* It entails grasping essence of value; embracing differing views, resolving them into action. P10: [459–465] *Aligning: merging individual dreams contribute to corporate value,* arguing that… merging individual dreams is the challenge. P6: [417–423] *Constant interaction as knowledge sharing leads to innovation.* Arguably, value creating activities require experience, sharing of ideas and insights for effective decisions (Bowman and Ambrosini 2007: 367–369).

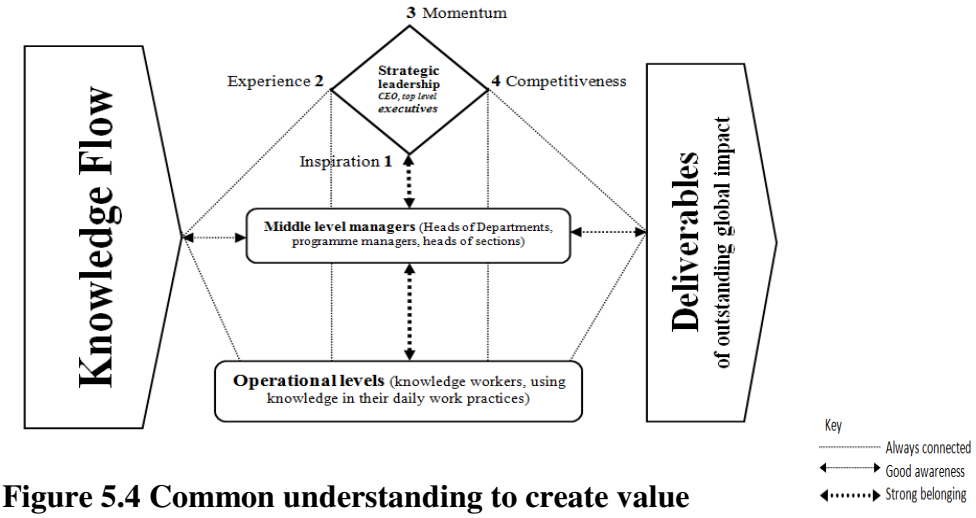


Figure 5.4 Common understanding to create value

Inspiration in practice nurtures confidence, trust and a due care to quality. In a transformation, the diamond figure of Figure 5.3 (page 199) links to Figure 5.4 with: 1 = inspiration, 2 = experience, 3 = momentum and 4 = competitiveness.

For elaboration, the diamond shaped figure with four tips numbered 1, 2, 3, 4, metaphorically, hints the major roles of strategic leadership in contemporary environment, as context, in features of organisational perspective (Figure 5.3 page 199). The streaming of information data that form knowledge flow gives an expectation that the strategic leadership role is to adhere, strive and invoke:

(i) **Inspiration -** The strategic leadership needs foremost to inculcate and inspire people involved in the teams; heads of departments or various teams involved in the organisational projects and other places of work within the organisation. Knowledge workers, each has individual aspirations; striving to achieve them through the workplace. Whilst that is not easy for the executives to know, by inspiring the workers even those who might be cynical can be motivated and encouraged to bend their beliefs and align them for the organisation. A selfless leader with dedication to help others achieve, may inspire others to hit and sometimes surpass performance targets (P49 [1232-1238]:[2-9]*Dedicated to work; sarcerdotal*). Building emotional capital through candid use of emotional intelligence can allow knowledge workers to unleash their best abilities to accomplish works even challenging tasks.

(ii) **Experience** – Organisation leaders have to watch the valuable experience as a resource, where to draw lessons of past successes and failures; for organisation to learn the past and avoid repeating the same mistakes. (P48 [1205-1209]: [2-11]*In context; don't lose what is best*).

(iii) **Momentum** – Allowing organisation to gather momentum in order to achieve higher growth and excellence through cutting edge researches, industrial links and collaborations. In all, to give new breakthroughs. Using example (P47 [1155-1161]:[4-10]*Decisions based on big picture*).

(iv) **Competitiveness –** making the organisation to have plausible competitiveness through bold and swift moves. Such initiatives that seize opportunities at new markets' frontiers through high tech savvy knowledge workers initiatives to deploy authentic strategies to make the organisation successful. It is a view echoed by participants, like P18 [654-661]: *improve, improve for better products;* - awakening call.

Knowledge flow as a feature, takes the inputs (information of all kinds) from three major layers. At the bottom, there is operational level (knowledge workers), where each has individual role, and takes micro–decisions; only scope of the decisions matters. The middle level managers' responsibilities involve linking the top level, strategic leaderships, and the operational level. With instant faster ways of generating information, and savvy knowledge workers in the departments, the head of department's role is full of challenges that require understanding and inspiration to create trust. Does the strategic leadership instil inspiration for the middle level manager to deliver motivational support to the knowledge workers in the department that allow their *individual commitment* and *engagement to work* ablaze with zeal; despite

of internal and external tumultuous changes? Does understanding of existing policies, rules and legal requirements being explicitly communicated to knowledge workers? Is it enough to allow a vibrant working environment for the high quality value creation process? Knowledge workers need motivation and encouragement as part of inspiration. Without inspiration, when things go wrong, people abscond. For order and control of knowledge workers is not the best remedial option. However, Marr (2009: 216–225) exhorts, it is better to learn and improve rather than relying only on order and control.

Literally, from responses of question 'what are the factors affecting your performance'. Responses of participants to that question vary, provoking a question. 'Is an understanding of how to create value, well shared and communicated within the layers of organisation without distortion?' Are the vision, mission and intentions well communicated and shared with clarity to knowledge workers in the organisation? Are rationales for decisions taken being shared to get feedbacks on acceptability or alternatives? Such underpinnings call for deep understanding of tenets in organisational culture. The essence is on the urgency to raise understanding and beware of attributes that allow informed decisions for individual professionals (Nutt 2010b: 457). The understanding needs to be explicit. For instance, the requirements of product or services offered have to carry expected value to the customer. Customers in the knowledge economy are savvy and can communicate flaws to others through social nets, with impact on reputation of the organisation.

Decades ago, such phenomenon was uncommon but with fast growing varieties of technologies, organisations have to rethink and deploy assurance of quality of value that is being delivered. Though arguably, quality depends on established standards; standards requires continous updating to accommodate technological breakthroughs. The premise calls for continuous renewal of competences and capabilities; to grasp the 'prudence of the web presence.' The strategic leadership for the organisation can effectively make possible internal and external trust, reputation and competitiveness.

The framework themes, like the endless global connectivity with its off shoots of social nets show causes of change of perceptions. Knowledge workers need responsive governing instruments with motivating policies, managerial styles organisational culture. For instance, observation and interviews reveal that, interest in new technologies wan fast due to too many technological changes. Metaphorically, changes become games the agents play (Stacey 2010: 106).

The framework describes participants' views of top strategic leadership role that fosters common understanding needed to create value. The subsection 6.8 gives the strategic leadership role in organisational levels to inspire and inculcate commitment into practices of value creation. The view demonstrates possibilities of using hidden capabilities in the organisation. It hints a possible future research using the framework to study and explore strategic leadership on knowledge flow. It underpins joint efforts required for competitiveness.

5.6 The developed framework

The final developed framework emerging form the research consists of three models: a model for individual global perspective (Figure 5.2 page 197); a model for the organisational perspective (Figure 5.3 page 199); and a model for common understanding to create value (Figure 5.4 page 203). Figure 5.4 stemmed from case study 2 participants' perceptions of the strategic leadership role in the organisational perspective which requires common understanding to harness the abundance of knowledge flow, and intangibles to create value for exceptional deliverables. The presumption is that if the three models used with prudence in organisations, the quality of value creation process will be highly enhanced. With knowledge flow, knowledge workers can use intangibles to create value with the quality of global awareness. The framework has been developed out of the analysis and findings of case study 1 and case study 2.

5.7 Discussion and implications

The role of knowledge workers in creating value in the organisation is more crucial in this era of web connectivity than ever before. Individual commitment, when nurtured in a proactive environment that is technologically up-to-date with good facilities for workplace interaction, may help to create value in the organisation. In contrast, emotional capital can be a barrier to good practices in an organisation. Knowledge workers need confidence, understanding, hope and trust in their working environment. The emotional

capital is factor in value creation not always recognised in the organisations. Successful organisations embrace emotional capital in their organisational culture through core values that are taken seriously in practice to help shape how organisations react in various circumstances (Goleman 1996; Pfeffer and Sutton 2000). Within the emotional capital, trust, emotional intelligence and leadership style are important in shaping the behaviour and attitude of knowledge workers (Martı and Enache 2008). Organisational policies, if well formulated at workplaces, can cause efficient utilisation of available resources.

5.8 The validity of the study

Contemporary advances in science, instant information access, processing, innovations and technological breakthroughs are attributes of capabilities to create knowledge from research and scientific developments (Birchall and Tovstiga 2005; Broesch, Stranneby and Walker 2009; Iacobucci and Salter 2009; Conway and Steward 2009). With roots linked to the efforts of shrewd applications of authentic criteria, ascertaining the validities and reliabilities of inferences and claims is underpinned by influences from technical, scientific and social inquiries (Lincoln and Guba 2002; Stone-Romero 2009; Hesse-Biber and Leavy 2011). Such relentless searches for scientific truth to advance frontiers of knowledge largely involve knowledge workers from diverse disciplines. Seeking trustworthy evidence from technological, scientific or sociological studies requires careful planning, approaches and methods to divulge insights of profound authenticity. For instance, in order to gain a better

understanding for a success in new product development, Owens (2009) shows various steps using models to illustrate how the process works. Similarly, Baker (2009) explores different parameters, including attributes within the 'influence of learning research on assessment' that underpin validity and reliability issues. Quite often such endeavours involve a set of activities in a series of actions; with interpretation leading to a decision (Mintzberg 2009: 240; Nutt 2010b: 450–455). Similarly, Stone (2010: 193–198) describes ways to address challenges facing organisations when they create knowledge, arguing that relentless efforts, ingenuity and study designs provide solutions to problems facing individuals in organisations and society.

The instances of such studies are endless, but validity and reliability are crucial precepts that allow candid assessment of worthiness of each in whatever form. O'Cathain (2010: 537) underpins some controversies surrounding 'language of quality', arguing whether it is appropriate to use terms like validity, legitimation, credibility, inference quality, quality, rigour or trustworthiness in relation to the quality of MM research. In ensuring that research inquiries include feasible issues, Guba and Lincoln (2005: 205) call validity an extended agenda that keeps on evolving with each serious study. Typical studies are those which human phenomena are linked with social experience in context; with moments of discovery that give leaps of understanding from new insights. Whilst validity stands as essential precept for study credibility, Hesse-Biber and Leavy (2011: 48) pose a fundamental

question to a researcher, saying 'how should one know whether generated findings are plausible and will be received as credible explanation or interpretation of the phenomenon one is studying?' With similar searching questions it has been possible to carry the study. Such a question requires practical consideration to elicit convincing evidence to substantiate claim legitimacy. It is true that all valid claims need credible evidence (White 2009).

The study to critique conceptual framework was designed to use mixed methods as in (Hesse-Biber 2010; Nastasi, Hitchcock and Brown 2010) which show how to collect evidence of trustworthiness. The aim of this second study was to see credibility of conceptual framework developed in case study 1 and to establish veracity of the framework's components (Massawe, James and Todman 2010). This study approach can be linked to Tashakkori and Teddlie (1998: 90) which lists important components in establishing trustworthiness.
By contrast, valid claims require supporting evidence (White 2009; Yin 2009) from participants. Knowledge workers as participants formed representation. A study using mixed methods (MM) has its challenges from conflicting paradigms camps of qualitative and quantitative researches as shown in (Yanow and Ybema 2009; Onwuegbuzie and Combs 2010: 412). This study centred much on the conceptual framework (developed in case study 1) with an aim of critiquing it in order to create required legitimacy. However, the focus endeavours to create plausibility in MM (Van De Ven 2007: 110; Seekamp *et al.* 2010). Nonetheless, the research process of case study 2 begins

with planning the instrument to collect evidence where there is informed consent (Allmark *et al.* 2009: 49) which plays a pivotal role throughout, from pilot stage to all interviews that were conducted. Such efforts were taken in search of chain of evidence (Yin 2009) to test plausibility of the conceptual framework. It needed to explicitly seek critical, candid views from knowledge workers in workplace settings on existing practices that are being used for value creation within the particular knowledge-driven organisation.

The instrument for gathering data through interviews is shown in Appendices I and J. The instrument had two parts. The first was an interview, eliciting qualitative responses. The conceptual framework was deliberately not shown to the participants in the first part of case study 2 data gathering. This was to ensure that participants' responses were free from bias towards the outcomes of case study 1. The second part of the instrument contained Likert scale questions and included the outcome of case study 1, namely the proposed conceptual framework. This part collected quantitative data and allowed direct critiquing of the conceptual framework. This part could be accused of introducing bias; nonetheless, efforts were taken ensuring unbiased responses. The MM prompted a balanced approach as it enhanced clarity for meaningful findings. The validity of the quantitative part was in question, especially in merging to qualitative. However, the designed critiquing instrument with Likert scale questions allowed participant to give final verdict through ticking any from strongly agree to strongly disagree. Such approach allowed

collection of both qualitative and quantitative data from the same participant. The questions helped culminate in a product of conversion between interviewer and participant. The interviews had the potential of being live due to an ensuing dialogue in which questions, doubts and reasons were raised instantaneously. The approach depicts a 'real presence' of views on workplace practices; giving momentous space for engaging. In critiquing the framework participants reflected on their experiences of professional practices which enriched the framework. In total, 57 interviews were undertaken, only 7% of interviews (n = 4) did not complete the mini-survey questions.

The organisational perspective model of the framework shows figuratively the features that are important need to be nurtured in the organisation. The environment for value creation in the organisation is seen with clarity through focused codes from the interviews. Interviews captured perceptions of knowledge workers as they practice at workplaces. Knowledge workers as participants in case studies 1 and 2 revealed their true experiences in the workplace. Such perceptions have been captured, developed and validated into this framework. Specific strategies and options in the lens of what the framework offers are shown through focused codes; offering knowledge workers experience in their efforts to achieve and realise organisational goals. In case study 2 each participant shared perception of work as practice of creating value. The participant was later shown the models and asked whether there is any resemblance and asked to affirm and fill the questionnaire.

5.9 Summary

Chapter 5 began critiquing the conceptual framework. It adjusts the six themes and six features that affect role of knowledge workers in relation to value creation in the organisation. The framework links to intellectual capital needs associated with factors like those in the emotional capital theme that underlies human issues such as challenges of web connectivity in organisations. The study attempted to look at how knowledge workers can maintain the zeal needed to create value. For example, the individual commitment theme underpins the importance of continuous nurturing competencies to build dynamic capabilities. The challenges are continuous as the knowledge workers share their perceptions in far wider areas, in cyberspace, than ever before in the history of mankind. Chapter 5 fulfilled the study aim and objective (v).

The framework themes and features allow a knowledge worker to view the organisation anew in relation to the web environment. Importance of the framework underscores the need to see how value can be created in the new environment. Metaphorically, the framework as a lens shows how to plan and craft a strategy and involvement while intergrating important issues. The emotional capital theme in the framework is a reflection on legal instruments that govern the organisation; putting the necessary facets to allow the organisation to compete. Chapter 6 on qualitative data analysis extends the critiquing process in clarifying themes and features in matrix of focused codes.

Chapter 6

6 CASE STUDY 2: QUALITATIVE DATA ANALYSIS

6.1 Introduction

Chapter 6 on qualitative data analysis of case study 2, partly fulfils aim and objectives (v) and (vi); explaining the analysis of data gathered through interviews to critique the conceptual framework. Based on mixed methods (MM) approach, the analysis depicts important strands that glue together themes and features of the conceptual framework. Such strands are seen through the perceptions of knowledge workers, shown in matrix of focused codes from interviews, which were about one hour long. Such time allowed interviewer and participants to go through the questions while sharing experiences of practices in a particular area of one's professional or job role. The discussions as part of interviews revealed areas of satisfaction and sometimes frustration, hope and a trust in future creative potentials that might be tapped if one is allowed and enabled.

6.2 The instrument for case study 2

The instrument designed for case study 2 simultaneously took both the interview as qualitative part and questions as the quantitative part of the study; for clarity, the analysis is kept separate to allow a deeper understanding. The instrument could have been only for interview, with another used as a

questionnaire. However, at design stage it was presumed that having quantitative ending to the instrument might give participants a more focused way of giving final judgement on the issues discussed in the interview. It allowed the knowledge worker to evaluate what he/she believes to be his/her stand on the particular issues involved. The instrument was designed to capture perceptions, some of which were presumed to be of a confidential nature. From that perspective, each participant was respectfully asked to sign an ethics form as part of their informed consent. In each interview, participant was asked to accept one of the options, video recording, audio recording and none-recording (only note taking). Most participants accepted video/audio recording; of the 57 interviews undertaken only 3 were unrecorded. The instrument designed for case study 2 is shown in the Appendices I and J.

6.3 Condensing the data

The interview data were condensed into 'focused codes' to fit with the features and themes of the framework. The condensing process involves transcribing verbal to textual data, coding, categorisation and higher categories that are linked to features and themes of the framework. It involves an iterative process from the data to the aim and objectives of the study and the questions posed and then underpinned in the interview data. In the process, the synthesis of the data is summarised as follows: Consider Table 6.1 where the focused codes are shown, for instance, P3 [330-334][1-9]*open interaction motivates sharing of knowledge* or P18 [654-659]:[4-12]*Improve*, *improve for better*

products. Participant P18, with the line numbers [654-659] in 'focused code' can be retraced to transcript vignettes as shown in Appendix G. In the analysis, findings which show focused codes that fit with themes and the features of the framework provide the legitimacy of the framework. This is what has been done in Tables 6.1, 6.2 and 6.3. These tables showed focused codes revealing what knowledge workers perceived in their workplaces. Using an example from the Table 6.2, the framework has *theme* **Emotional capital** with framework *feature* **deliverables.** The result is the P13 [568-571]: [2-11]*Use wisdom and skills* for success. The meaning for this is P13 line [568-571] vignette of transcript in the Appendix G, see an extract below:

568	and practical. …. [On emotional intelligence] So in managing difficult	
569	situation; just be nice to somebody, and it will diffuse a lot of things…. In	Use wisdom
570	everything you do, you need wisdom; you need to be able to use, you know,	and skills for
571	all your available skills to ensure that you get what you want to be done.	success

The superscript [2-11] means that the theme is appropriate in theme 2 and feature 11. The reason behind such explanation lie on the fact that, the interview was conducted, giving the perception of a knowledge worker as one sees the existing practices in the workplace environment. It underpins the context of the organisation and the role of individual knowledge worker. The interaction that goes on in the organisation is the source of the value which is captured for deliverables. The focused codes (Table 6.1; Table 6.2 and Table 6.3) are in the contexts of UK; UK and Tanzania; and Tanzania. They are in next pages.

Table 6.1 Qualitative data: Focused codes UK

Organisational /Individual global	7. Knowledge flow	8. New entrants	9. Dynamism	10.Departments	11.Deliverables	12. Recognition
1. Individual commitment	P1 [140-143]: [1-7]organisation can learn through reviewing all opportunities	P1 [35-39]: [1-8]Recruiting students	P3 [330-334]: [1-9]open interaction motivates knowledge sharing	P24 [802-805]: [1-10]Understanding expectations of outside World and what works internally	P8 [434-437]: [1-11]Time frame - performance; work done with the heart	P1 [189-191]: [1-12]Conference attendance, publications motivate
2. Emotional capital	P2 [250-255]: [2-7]Research exposes individual capability	P4 [379-382]: [2-8]Students' employment aid understanding	P9 [443-447]: [2-9]Innovative incentives work wonders	P10 [461-465]: [2-10]Aligning: merging individual dreams to corporate value	P7 [426-428]: [2-11]Produce what add value to portfolio	P2 [271-274]: [2-12]Peer pressure more powerful than money in research culture
3. Workplace interaction	P1 [77-83]: [3-7]Complexity and workplace dynamics	P20 [691-693]: [3-8]Learn to interpret facts	P25 [824-826]: [3-9]Feedback unlock potentials	P12 [538-541]: [3-10]Good practices communicate common understanding	P6 [409-414]: [3-11]Good deliverables nurture confidence	P4 [364-368]: [3-12]We organise better through new initiatives
4. Proactive environment	P2 [288-291]: [4-7]Technology has not delivered as per expectation	P3 [345-347]: [4-8]Real time application raises competence	P1 [155-160]: [4-9]Avoid blame culture; foster positiveness to problem solving	P11 [487-490]: [4-10]Lean business models	P10 [455-458]: [4-11]Solving research problems; is an opportunity	P18 [654-659]: [4-12]Improve, improve for better products
5. Value creation process	P10 [459-462]: [5-7]Preserving individual value!	P11 [478-483]: [5-8]Clients' based services	P2 [222-223]: [5-9]Competition source of change	P24 [807-811]: [5-10]Trends, research; knowledge of the environment	P2[303-306]: [5-11]Conundrum of delivering value	P9 [448-451]: [5-12]Ultimate reward; feedback; accolade, opinion they trust
6. Endless global connectivity	P3 [330-336]: [6-7]Open interaction motivates knowledge sharing	P21[716-719]: [6-8]Vital analytical skills	P11[506-509]: [6-9]Technical forums are indexed	P21 [731-735]: [6-10]Humility and understanding	P2 [306-308]: [6-11]Strategic insightful leadership sets tone	P21 [721-728]: [6-12]Inspirational leadership with charisma

Table 6.2 Qualitative data: Focused codes UK and TZ

Organisational /Individual global	7. Knowledge flow	8. New entrants	9. Dynamism	10.Departments	11. Deliverables	12. Recognition
1. Individual commitment	P 26 [827-831]: [1-7]Explore knowledge to engage	P4 [375-3679]: Trust glue workplace actions	P1 [67-72]: Collaborative Links need support	P24 [785-791]: Encouragement reinforce commitment	P17 [616-618]: Work keeps waiting for you	P39 [1028-1034]: [1-12]Systematic policy to invest, engage researchers
2. Emotional capital	P37 [976-978]: Scared of technology? Is it a challenge?	P21 [716-719]: Vital analytical skills	P13 [560-562]: Build rapport with peers	P14 [579-582]: Unpack bureaucracy	P13 [568-571]: [2-11]Use wisdom and skills for success	P16 [607-611]: Hidden driving force
3. Workplace interaction	P21 [711-714]: Develop community of learning	P20 [691-693]: Learn to interpret facts	P12 [549-554]: [4]Everyone is pretty busy no time to share	P34 [922-925]: [3-10]Teaching: Denied opportunity	P21 [699-705]: Set agenda cast them into stone	P48 [1173-1177]: Practicability the best option
4. Proactive environment	P19 [679-684]: Beware of security compromise	P33 [916-920]: Exploiting knowledge workers!	P41 [1065-1071]: Delivering knowledge to students	P16 [600-603]: Mindsets change vital	P18 [654-661]: Improve, improve for better products	P45 [1133-1136]: Gateway change, high quality of internet access
5. Value creation process	P38 [1011-1017]: Challenging conventional systems	P23 [746-749]: Beware; Learning only to pass exams!	P32 [910-915]: Organisation's oiler; trustful, ready to help	P31 [878-884]: Promotion based on publication	P22 [741-744]: Unlock, harness potentials	P31 [894-899]: [5-12]Individual style for time management
6. Endless global connectivity	P11 [503-507]: [6]Google an excellent technical resource	P40 [1052-1057]: exposure to workplace environment	P44 [1105-1108]: Get connectivity for interaction	P39[1039-1045]: Budget deficit stagnate Research	P30 [858-863]: [6-11]Highering only first class?	P53 [1270-1274]: [6-12]Broadband, capability; flexibility to compete

Table 6.3 Qualitative data: Focused codes TZ

Organisational /Individual global	7. Knowledge flow	8. New entrants	9. Dynamism	10.Departments	11. Deliverables	12. Recognition
1. Individual commitment	P38 [1019-1021]: The global exposure; a challenge	P48 [1189-1192]: [1-8]Competent people will deliver; but!	P49 [1214-1219]: [1-9]Work under Global watch; stressful	P46 [1139-1143]: [1-10]Fear at workplace	P 43 [1099-1104]: [1-11]Define culture with clarity	P48 [1202-1205]: [1-12]Individual environment vital for hope and trust
2. Emotional capital	P47 [1148-1157]: [2-7]Peaceful: bold conscious decisions	P36 [967-970]: [2-8]Balance; work postgraduate studies	P49 [1232-1238]: [2-9]Dedicated to work; *sacerdotal*	P31 [903-907]: [2-10]Supports to staff increase confidence	P48 [1205-1209]: [2-11]In context; don't lose what is best	P31 [888-893]: [2-12] Research initiatives; constraint
3. Workplace interaction	P45 [1122-1127]: [3-7]Ensuring connectivity in Tanzania	P41 [1076-1080]: [3-8]Handling various roles; a constraint	P52 [1261-1265]: [3-9]Knowledge workers room for interaction	P41 [1081-1087]: [3-10]Managing with heavy teaching	P41 [1087-1090]: [3-11]Quality of academic support	P 38 [986-989]: [3-12]Reflection of reality for academic environment
4. Proactive environment	P44 [1109-1113]: [4-7]Awareness of today's communication	P45 [1128-1132]: [4-8]A bridge to connectivity service	P49 [1227-1231]: [4-9]Internet a backbone at workplace	P47 [1155-1161]: [4-10]Decisions based on big picture	P38 [1003-1010]: [4-11]Mindset change required	P44 [1114-1119]: [4-12]E -business not practised in Tanzania
5. Value creation process	P43 [1095-1098]: [5-7]Clear published data	P41 [1072-1076]: [5-8]Students'-number a problem	P30 [863-867]: [5-9]Continuously innovate to create value	P39 [1035-1040]: [5-10]Research to solve problems	P34 [926-929]: [5-11]Research: Fund driven	P42 [1091-1094]: [5-12]Reaching the best, a challenge
6. Endless global connectivity	P53 [1277-1282] [6-7]Guaranteed quality of service	P45 [1137-1138]: [6-8]Studies with video conferencing	P44 [1105-1108]: [6-9]Get connectivity for interaction	P48 [1193-1201]: [6-10]Review practical workings	P45 [1133-1136]: [6-11]Gateway change, high quality of internet access	P51 [1248-1254]: [6-12]People want endless connectivity

6.4 Themes, features linked to focused codes

The focused codes (Charmaz 2006: 59; Hesse-Biber and Leavy 2011: 311) in tabular form for framework themes, and features, show case study 2 transcripts (Appendix G) with perceptions that underpin existing practices.

Table 6.4 Themes linked to focused codes

Framework theme	Focused codes - higher categories
1. Individual commitment	[1,5]Involvement in multiple roles of high trust; evaluation [1]Individual performance! difficult question [1-2]research exposes individual capability [1-9]individual value is questioned, being put into critique [1]Nurturing competences with real time systems [1-3]Learn, think real time applications; creates mini proactive environment [1-2]Interesting for free thinking on real time application [1]Solving research problem an opportunity [1]Preserving individual value! [1]Performance closely related to quality of resources available [1-6]External expectations, e.g. courses popular with applicants—growing market [1] Overseas quality academic delivery [1]Understanding of expectation internally and externally [1]Understanding expectations of outside world and what works internally [1]Intellectual capital! Knowledge as understanding experience, information and ideas [1]Legal and regulatory manager [1]Contract review sheet to ensure collective responsibility [1-10]Aligning: Merging individual dreams contribute to corporate value

2. Emotional capital	[1-2]Research exposes individual capability [1-2]Interesting for free thinking on real time application [2]Validated programmes not franchises [2]Multifaceted role of knowledge worker [2]Management structure should be beyond blame [2]Words 'Proactive environment' not fit for current environment [2]Self-esteem a great motivation to knowledge workers [2]Conference attendance and publications motivate knowledge workers [2]Standards against knowledge [2]Conference attendance and publications motivate knowledge workers [2]Internal culture vital for research; peer pressure powerful than money in building research culture [2]Cynicisms create difficult complex working environment [2,4]Students employment; initiative create interaction and trust [2,8]Students' employment aids understanding of students problems [6,2,5]Dynamic expectations from society, employers; create chaos [2]Take risk to be competitive [2-6sn]Teamwork requires transparency; puts peer-pressure [2a]Time frame and performance; was work done with heart. [2]Innovative incentives work wonders [2]Ultimate reward; sincere feedback; accolade to have opinion they trust [2]Time on lecturing is managed precisely [2]Expectations and resources availability [2]Transmitting signals fibre optics 'rights of way' policy constraints

3. Proactive environment	[3]Technology hasn't delivered as per expectation in virtual environment; [3]Technology in higher education hasn't solve much simply people's business [4-3]Open interaction motivates knowledge sharing [3]Create enabling environment: web presence for people to deliver [1-3]Learn, think real time applications; creates mini proactive environment [5-12,-3]Constant interaction as knowledge sharing leads to innovation
4. Workplace interaction	[4-7]Internal complexity; workplace dynamics [4]Teaching a complex business [4]Communicate; people's interaction hugely vital [4-3]Open interaction motivates knowledge sharing [4-5]Workplace interaction motivates individual to deliver [2,4]Students employment; initiative create interaction and trust
5. Value creation process	[5]Quality enhancement [5]Survival, growth and prosperity vital despite competition [5]Competition for research works; consultancy and funding [4-5]Workplace interaction motivates individual to deliver [6,2,5]Dynamic expectations from society, employers; create chaos [5-9]Specifications for deliverables trigger confidence and due care to quality [5-12,-3]Constant interaction as knowledge sharing leads to innovation [5]Good practice communicate common understanding

6. Endless global connectivity	[6]Collaboration opposite of competition [6]Collaborate where there is no threat [6]Collaboration – competition in universities; tricky [6,2,5]Dynamic expectations from society, employers; create chaos [6]Expectation of higher education and trends in the industry [6]Google an excellent index [5-6]web products to many client s [6-5]Broadband, capability; flexibility to compete
	▪ **Web-forum** [6wf]Trends, research; knowledge of the environment [6-5wf]Initiatives to create web products [6]Technical forum are indexed [5-6]Clients-based services
	▪ **Social-nets** [2-6sn]Teamwork requires transparency; puts peer-pressure [1-6]External expectations, e.g. courses popular with applicants—growing market [2-6] Relationships in universities are mostly on individual members [5-6sn]Lean business models

Framework feature	Focused coding – higher categories
7. Knowledge flow	[3-7] Create enabling environment: web presence for people to deliver [7]Interaction to increase awareness [12-7]chance to interact, improve to solve problems
8. New entrants	[2,8]Students' employment aids understanding of students problems [1-8]External expectations: courses popular with applicants—growing market [8]Students' feedbacks multidimensional [8]Recruiting students
9. Dynamism	[5-9]Specifications for deliverables trigger confidence and due care to quality [1-9]Individual value is questioned, being put into critique nowhere to hide [9]Produce what add value to portfolio
10. Departments	[10] User department involvement to build trust [1-10]Aligning: Merging individual dreams contribute to corporate value [10]Line manager: manage create linkages internally and externally ▪ **Top Leadership** [10TL]Leadership in academia; enable people to achieve [10TL]A momentum: dynamic, strategic, ambitious, [10TL]Insightful forward looking
11. Deliverables	[2-11]Ultimate reward; sincere feedback; accolade to have opinion they trust [11]Take risk to be competitive [11]Keep improving for better products [11]Update and renewing skills

12. Recognition	**Internal** [3-12]Milestones of contract management - live document [5-12,-3]Communication and constant interaction as knowledge sharing leads to innovation [10-12]We organise better through new initiatives **External** [12]Strategic, dynamic leadership set organisation tone [12-7]chance to interact, improve to solve problems
Extras 1	P 27 [833-837][1-9]Powerful resistant; negative culture P51 [1253-1260]: [2-11]Woos of privatisation P52 [1264-1269]: [2-11]Awake the zeal and enthusiasm P52 [1261-1265]: [3-9]Knowledge workers room for interaction
Extras 2	**P50 [1239-1247]: [2-11]Quality quantity and proper tools vital** P49 [1227-1231]: [6-11]Internet a backbone at workplace P49 [1222-1226]: [6-11]Internet a backbone at workplace P28 [842-846]: [2-11]Raise people aspirations
Extras 3	P35[954-958]: Involvement to build trust P25 [594-597]: [2-10]Labour laws too strong P14 [583-592]: **[5-11]Wholly Educational field** P13 [563-569]: **[4-11]High rapport to all** P12 [524-528]: [2-10]Validating oneself for good performance P29 [852-856]:[3-9]Quick on time decisions P29 [848-852]:[6-7]Information rich society

Extras 4	P47 [1167-1169]: [1-10]You live by example P48 [1173-1175]: [5-11]Practicability the best option P48 [1176-1182]: [3-11]e-mails not enough P48 [1182-1187]: [5-9]Constant Communication P4 [364–368]:[10-12]We organise better through new initiatives P35 [944-949]:[3-12]Milestones of contract management – live document

In reaching this stage, the main task involves seeing those codes that are similar in meaning and merge them; creating new higher categories. These higher categories reveal another level of understanding of the framework perspectives. Codes that appear to involve more than one theme or feature will be left unchanged; this is further reflected in the joint matrix of individual-global and organisational perspectives of the framework. Table 6.5; Table 6.6; Table 6.7 … Table 6.18; display how a theme or feature is linked to the focused codes drawn from interview transcripts to explain the framework.

6.5 Nurture and renewal of capabilities

Whilst complexity in our workplaces due to web connectivity is an ongoing phenomenon, critical examination of every detail of an activity or task might reveal knowledge gaps. The knowledge gaps are likely to point out a need as renewal of skill or competences of doing particular task more efficiently. In achieving such a move, one needs to question each and every significant issue related to the activity or task. Most of the time this is not easy due to pressure

of time, financial and other economic costs involved. However, unless earnest questioning is continuously undertaken, improvement will be hampered and opportunities lost that could improve quality and fine-tune the value creation process. Such is an instance of change required to continuously cater for the dynamic environment. Many organisations are currently doing this. What the framework offers is to reveal the possible opportunities for creativity and innovation and build an awareness of value creation in the knowledge flow.

Organisation performance in the contemporary dynamic framework needs initiatives that can allow knowledge workers rejuvenate their skills and competences so as to nurture organisational capabilities to create values that society demands. The markets of organisational deliverables are global, and in that perspective, organisations require new initiatives that will address the internal customers who are the knowledge workers. The mindset change the way knowledge workers are being treated and be alert to address issues likely to trigger discontent that may in the end jeopardise the innovation zeal and ingenuities of the knowledge workers. Across the globe, the real time of sharing information now has been constantly shortened due to recent phenomenon like the social nets. The social nets effect (eg. Facebook and the Twitter) have allowed people to share messages and connect with each other globally in real time, maintaining web presence and affecting people' perceptions.

The challenge posed now is that, strategies that used to work some years ago are no longer feasible due to real-time sharing of product experiences or services experiences. Such instances make managers of knowledge organisations to join in partnerships with their co-knowledge workers to ensure that strategies are being continuously reviewed to enable them deliver the right type of goods or services which the suave cyber space customers demand. These products require real time approach due to their nature. In that perspective, online shopping is most vital area organisations are doing their business now. However, higher learning organisations are not capitalising much of this type of opportunities, although they are consumers of goods.

If one looks at the adjusted individual global perspective model, it clearly shown that, at the value creation process, the link to the endless global connectivity is still being developed to address the gaps that exist in the organisations. The steward/stewardess of an organisation is responsible; especially, the strategic level leadership needs to be alert on how they can cater for the emotional capital of the organisation to leverage the individual commitments (inner untapped potentials) of the knowledge workers. The inner untapped potentials are rooted from the desire and zeal of each individual, as from the onset of applying to work in the organisation. They largely send the message that the value creation processes within these organisations need more adjustment to cope with the new digital environment. Participants P1, P7, and P10 when interviewed criticised the current models of universities.

Participants, P1 and P10, for instance, point out that Google and Microsoft are among the contemporary good models of knowledge-driven organisations. Arguing that, if nothing is done for the better change, then it is easy for universities to deprive themselves of best achievers, though, they are mentors of knowledge workers; for the young graduating knowledge workers are likely to aspire and work for other successful knowledge-driven organisations.

6.6 Legitimacy of the framework

However, reasons for change are shown and depicted with scores; though in qualitative sense, it is possible to see another angle that might aid understanding of how best to cope with chaotic situations and continue to pursue value creation. Such thinking generates the desire to look more closely into the qualitative side of the study and see how the results from the interviews conducted to elicit legitimacy of the framework shed light on this.

The creation of value has been taken as the centre of the study; involves the desire that the work in the organisation require coordination, organisation and sensible interaction with a focus on delivering an outcome of value to the customers in the society. The value in this respect is rooted from the ingenuity of individuals collected together in production of services or physical products that customer demand. The organisational culture, managerial styles and workplace environment, under the direction of governing instruments, the policies and laws, contribute much to the value of the final deliverables.

Table 6.5 Link to interviews: Individual commitment

Theme		Focused – category	Excerpt from the interview
1.	**Individual commitment**	P10 [461–465]: [1-10]Aligning: merging individual dreams contribute to corporate value	**…**what is interesting really, how can we come up with a framework that can preserve individual value, and this individual value, okay, the thing is valuable, that can contribute to the corporate, the corporation value as well, you know the organisation value, how can I, your agenda is not like mine. Merging the individual dreams is the
		P2 [256–261]: [1-9]individual value is questioned, being put into critique	You are, you do a consultancy or you do a piece of research or you do funded research, or you publish an article – journal, then your value is questioned…. And you got to be able to get criticisms. ... there is nowhere to hide!
		P2 [251–254]: [1-2]research exposes individual capability	… mental capacity or the capability or desire to do the research, okay ... you know because doing the research actually exposes you. .. if there is any weakness it will be seen... not hidden is not like in the classroom closed doors…
		P3 [313–316]: [1]Nurture competences with real time systems	… I try to think of good examples for students, asking students to think of big issues. ...in the class I ask students to think about the applications of real time systems and asking them to describe a system and afterwards do a design implementation of a particular system…
		P24 [784–789]: [1]Performance closely related to quality of resources available	all that sorts of things affect my performance ... the course needs resources to be delivered successfully; ...managing the department activities is very closely related to the quality of resources that are made available … set objectives, … and the encouragement … by Dean and the Vice Chancellor suppose; …affect my performance!

Table 6.6 Link to interviews: Emotional capital

Theme		Focused – category	Excerpt from the interview
2.	**Emotional capital**	P1 [161–165]: [2]Management structure should be beyond blame	I think the opposite of that is where people don't do things they say aw not my personal –for me to resolve, and that is usually right because you have a management structure which is based on a blame so if something goes wrong even though you try honestly to resolve the problem because you haven't been told to do it you get blame…
		P1 [177–181]: [2]Self- esteem a great motivation to knowledge workers	… motivation in education is not about offering people an extra twenty quid here and there, is actually about self esteem I think…. to a much knowledge; knowledge organisations exist in societies' which groups where most of the basic needs are met, …
		P2 [276–279]: [2]Cynicisms create difficult complex working environment	**…** we started applied research... change … [create] a lot of cynicisms ... alot of doubts whether we can change ... It is always so difficult [to work effectively] when you find yourself in such sort of complex environment.
		P9 [443–447]: [2]Innovative incentives will work wonders	Get incentives right in the organisation and you have cracked it, ... We do that in engineering; after all, control systems, the feedback that the system gets; is what controls it. If you get that feedback wrong it goes wrong. Get that feedback right, it works; ... you reward the right things, the organisation marches in the right direction…

Table 6.7 Link to interviews: Proactive environment

Theme	Focused – category	Excerpt from the interview
3. Proactive environment	P3 [336–340]: [1-3]Learn, think real time applications; creates mini proactive environment	**…** I mean students come with interesting ideas. That is very useful, not only from textbooks. … we read books we read articles, but this form of methods of communication I think it is useful. … Because student is not there just to wait for answers or something … you know we are sharing the knowledge.
	P2 [288–291]: [3]Technology hasn't delivered as per expectation in virtual environment	You know, technology never solves problems really and quite often technology is an additional cost which doesn't return any investment. But sometimes you end up having to do it like the managing learning environment or virtual learning environment
	P2 [202–205]: [3]Create enabling environment: web presence for people to deliver	…if we take web presence it hasn't changed for some years design of the website, marketing international office extra extras. It was ongoing developing the website, providing the structure for other people to deliver…
	P6 [417–423]: [5-12,- 3]Constant interaction as knowledge sharing leads to innovation	… if you are working in a team, communication is most important thing … be aware of what other people are doing and other people should be aware of what you are doing. So is like, sort of constant interaction with people that … motivate you … and then you discuss things with them is like product you share knowledge and … basically result in a more sort of product work it leads you to more innovation.
	P3 [335–340]: [1-3]Learn, think real time applications; creates mini proactive environment	… teaching higher level like final years, masters or supervising PhDs students; …students come with interesting ideas. That is very useful, not only from textbooks. … we read books, articles, but this form of methods of communication I think is useful. … because student is not there just to wait for answers … we are… sharing the knowledge.

Table 6.8 Link to interviews: Workplace interaction

Theme	Focused – category	Excerpt from the interview
4. **Workplace interaction**	P1 [78–82]: [4]Internal complexity; workplace dynamics	… hopefully, you always think you could have done better, if you are looking back, so that there is always truism. There is alot of things we could do better … and I think some of it is about the way maybe … supports, I mean internally is a complex system, internally is not just faculty is the University, with other faculties…
	P1 [96–98]: [4]Teaching a complex business	… I mean you must know teaching itself is a complex business in fact being in the classroom is complex bu siness; managing that is a complex business.
	P1 [140–143]: [4e]organisation learn through reviewing all opportunities	… this idea you carry on conventional wisdom so you do one thing, and a lot of people just follow that along... but you know, maybe that is not always the case, may be an organisation has to learn through reviewing all opportunities.
	P3 [329–334]: [4-3]Open interaction motivates knowledge sharing	… just applying the knowledge, yeah, I mean we are doing research,…all the time, so teaching is one likely to deliver; to deliver your idea in teaching. Right, so sometimes …it is a two way communication as well, … students will come with ideas, …you find it useful... you say, …why not extend this idea, … it can be an approach, it can be a suggestion, …
	P3 [353–354]: [4–5]Workplace interaction motivates individual to deliver	… I recommend the workplace interaction, but at the end of the day it depends on individual. Workplace interaction I strongly recommend.

Table 6.9 Link to interviews: Value creation process

Theme	Focused – category	Excerpt from the interview
5. Value creation process	P1[86–88]: [5]Quality enhancement	…our partnerships we deal with other faculties so you got multiple faculties involved, there is always a central unit we have got a quality enhancement unit as part of the process, they do the approval
	P2 [219–221]: [5]Survival, growth and prosperity vital despite competition	We want better quality students, we want more of them more than anyone else, because that means our organisation has enough finance to survive, grow and prosper.
	P6 [407–413]: [5–9]Specifications for deliverables trigger confidence and due care to quality	…the specification in everything is defined… what people need is there defined; if you do more than that is meaningless. So if you do whatever is necessary or whatever is like promised in term of your research … getting more knowledge that's better …done deliverables and I have done a lot of readings in various areas as well; that's sort of self satisfaction so you get more confidence and get more knowledge ... in term of delivering them.
	P5[389–391]: [6,5]Dynamic expectations from society, employers; create chaos	Changing all the time. But as you react to that so you have to change very dynamic and interesting. Everything changes and we will never be stable we are in chaos; [Due to] expectations of the society and employers.
	P12 [535–543]: [5]Good practice communicate common understanding	…best practice I believe … in operation ... is about two way communications …between management and staff and that decisions made are negotiated... but the outcome of negotiations are clear set of actions. ... So most conflicts and …poor practice occurs when …two parties who have different expectations …expecting the same thing …interpreting the two different things differently; so … talking …same words … completely differently; when …good practice is…gain common understanding about what is the issue.

Table 6.10 Link to interviews: Endless global connectivity

Theme		Focused – category	Excerpt from the interview
6.0	**Endless global connectivity**	P2 [240–244]: [6]Collaboration – competition in universities; tricky	… it is always interesting as to how this competition – collaboration works, is never clean, is never clean in a business sense. But it is definitely never clean in university sense, of course, you can have corporate relationships, you know, institution to institution, but clearly a lot of universities relationships are much, much lower down.
		P24 [813–818]: [6]Expectation of higher education and trends in the industry	…quality for **external expectations** for example understanding what we are trying to achieve; … what is expected internally I must understand how are we to develop in terms of research development reasonableness of how to deal with that better knowledge of environment, expectation of higher education trends of the industry on the other side of it.
		P11 [494–496]: [5-6] web products to many clients	… I think we have around 10,000 people; perhaps little less than 10,000 customers or individual users who use our products for different things may be e-mails, may be others entire desktops...we can supply...
		P11 [499–505]: [6]Google an excellent index	Oh Google? …We use that as a technical resource…if our support team, and if they ever come across a new problem in our system, we use Google for that; because Google is an excellent index if you like…
		P53 [1270–1274]: [6-5]Broadband, capability; flexibility to compete	…initiative … to study… better Telecom solutions to our customers, we embark on broadband services … that offer high speed connections… but the challenge … is the investment, with a flexibility to compete…

Table 6.11 Link to interviews: Endless global connectivity web-forum

Theme	Focused – category	Excerpt from the interview
6.1 Endless global connectivity ▪ **Web–forum**	P24 [807–811]: [6wf]Trends, research; knowledge of the environment	… good knowledge of the accreditation requirements, opportunities, the extent which we have the freedom to do things the way we want to; or on the other hands we must constrain things very specifically to suit the requirements of the accreditation; so my understanding of expectations of the accreditation bodies certainly affect my performance.
	P18 [639–649]: [6-5wf]Initiatives to create web products	... […there is a lot of change in IT, how does it affect you?] You do have to keep up with the latest of technologies … the trends, the way the systems develop ... what sorts of systems they are available ... and that can influence the product that you can decide to design… sort of the web systems I design, … you got multiple technologies for say developing …in your products, …[in] designing the number of things you can do … it expands
	P11 [506–509]: [6]Technical forums are indexed	a number of major technical forums are indexed very well by Google, so you can type in a particular error message and Google will find a forum or a resource which has the answer to that. So Google is made useful…
	P11 [477–483]: [5-6]Clients' based services	At the start … we do technical review **…** how they currently working, what systems are in play and also …their services are centralised on their servers or whether they are distributed in individual PCs; so is partly hardware based review … partly software / services based review….we get good idea …how currently working, and …we then start improvement.

Table 6.12 Link to interviews: Endless global connectivity social-nets

Theme		Focused – category	Excerpt from the interview
6.2	**Endless global connectivity** ▪ **social nets**	P6 [398–402]: [2-6sn]Team work requires transparency; puts peer-pressure	… when you work in a team work …if there is sort of visibility of work within the team you have to be extra careful because team shouldn't lag ... behind because of you. It is like ... in a team there is sort of peer pressure as well ... on promise what to deliver... We plan our work according to those deliverables milestones.
		P2 [242–246]: [2-6sn] Relationships in universities are mostly on individual members	…you can have corporate relationships … institution to institution, but clearly a lot of universities relationships are much, much lower down can be individual member of staff to individual member of staff …even if the two institutions are in direct competition.
		P11 [484–491]: [5-6sn]Lean business models	… [the players who make those things to happen **...** how many?]… … probably between 30 or 40 people … but in revenue terms we're over 6 million a year ... which again we find that particular business model seem to assist us because we need few people to support a very high number of people, I think we have something in the region of probably 10,000 users of our products
		P7 [426–428]: [6]Produce what add value to portfolio	… From the **s**olid pool of analysts e.g. marketing analytics pool of executives. You are to ensure that whatever you produce has to add value to the portfolio.

Table 6.13 Link to interviews: Knowledge flow

Feature	Focused – category	Excerpt from the interview
7. Knowledge flow	P2 [202–205]: [3-7]Create enabling environment: web presence for people to deliver	… for example, if we take web presence it hasn't changed for some years, design of the website, marketing international office extra extras…. ongoing developing the website, providing the structure for other people to deliver to all these players.
	P1 [107–110]: [7]Interaction to increase awareness	…Just people being able to communicate ... talk to each other about things knowing what is going on. I mean there all work tracks seminars … things like meetings, formal and informal…
	P1 [113–118]: [12-7]Opportunity to interact, improve; solve problems	…I think a lot of what goes on in the organisation is actually in the informal level. Although you might have short chefs in the organisation, it actually doesn't matter, you know, you people talk about having hierarchical structure whatever, it doesn't really matters, because what matters is how people are given opportunity to interact to improve each other and solve problems what matters is people are given [necessary support].
	P18 [633–638]: [7]Renewing skills and competence	… I have to study **...** how to put these things together but also is largely it sorts influence on what the clients want ... is like a two way process I have to work with them to find out ... and going through once, you know it is iterative once you do it once you learn how things, how you did there and what you can do to improve on the next time ... and gradually you get better at over time…

Table 6.14 Link to interviews: New entrants

Feature	Focused – category	Excerpt from the interview
8. New entrants	P5 [386–388]: [8]Students' feedbacks multidimensional	You do get feedback from students from what they say, and what their views are ...there is no easy answer. ... it is multidimensional ... it is always changing, it is always evolving..
	P4 [377–382]: [2,8]Students' employment aids understanding of students problems	…You have to treat your staff with degree of trust but also have systems in place that if they can't be trusted, if they betray that trust, then they get penalised ... give completely new perspectives on student experiences... I understand the student problem for I had the same problem last year. …Can explain better to staff the circumstances surrounding the problem.
	P24 [792–798]: [1-8]External expectations: courses popular with applicants—growing market	…in a growing market, we don't have to be feeling insecure about students number on the courses; …we are in a period of growth and that has allowed our courses to grow and department grow; … affect my performance! I think … is mostly to do with understanding what we're trying to achieve, what people expect of us, both students, the university, the outside world, … extent the staff within the department…
	P1 [35–39]: Recruiting students	…if you have performance indicators such as recruiting students in the partner institution, then that depends …on alot of different people. …Recruitment in the partner institution the way they manage and organise the programme, the NT University promotional programme against with the link with the partner.

Table 6.15 Link to interviews: Dynamism

Feature	Focused – category	Excerpt from the interview
9. Dynamism	P6 [406–413]: [5-9]Specifications for deliverables trigger confidence and due care to quality	So, because the specification in everything is defined, [yeah] what you need is or what people need is there defined; if you do more than that is meaningless. So if you do whatever is necessary or whatever is like promised in term of your research if you sort of getting more knowledge that's better that's is like I have done deliverables and I have done alot of readings in various areas as well; that's sort of self satisfaction so you get more confidence and get more knowledge.
	P2 [256–261]: [1-9]Individual value is questioned, being put into critique	… You do a consultancy or you do a piece of research or you do funded research, or you publish an article – journal, then your value is questioned! ….And you got to be able to get criticisms. ... Ok, there is nowhere to hide.
	P1 [100–103]: [9]Communicate; people's interaction hugely vital	You see, I think one of the things …is about communication really, and information for people, you got knowledge flow but streaming, but actually, interaction, people's interaction becomes hugely important in the way that an organisation operates.
	P8 [434–438]: [5-9, 11]Time frame and performance; was work done with heart	I think, I always reflect if you look at it there is always an element ... this was the time frame... what would have made it an excellent performance could I have made it cheaper, could I have made it quicker you could people jumping around and say wow you have done it. But in another way it can be bad because it can demotivate you in a way, you did it…

Table 6.16 Link to interviews: Departments

Feature	Focused – category	Excerpt from the interview
10. Departments	P10 [461–465]: [1-10]Aligning: merging individual dreams contribute to corporate value	… what is interesting really, how can we come up with a framework that can preserve individual value, and this individual value, okay, the thing is valuable, that can contribute to the corporate, the corporation value as well, you know the organisation value, how can I, your agenda is not like mine. Merging the individual dreams is the challenge!
	P24 [756–762]: [10]Line manager: manage create linkages internally and externally	…a line manager for … academic members of staff;…loosely manage their work(s), specifically manage their inputs to taught courses; and set objectives for their work including research; manage the relationship between the department and the faculty, the dean and associate deans; …do … a work in linking department to professional and external; so managing staff and links between department and the outside world.
	P35 [954–958]: [10]User department involvement to build trust	… We do involve the user department, because we are overseeing contracts for the entire company, but there are different departments. If we are dealing with finance department, say they are borrowing funds from a bank, so we ensure that finance department is involved from negotiation level to implementation…
	P4 [364–368]: [10-12]We organise better through new initiatives	I honestly believe we do things a lot better … the way we organise ourselves … the way we deliver to students, in number of new initiatives … we employ students… from different levels, … provide … valuable experience once they graduate they can take to an employer…

Table 6.17 Link to interviews: Deliverables

Feature	Focused – category	Excerpt from the interview
11. Deliverables	P9 [448–451]: [2-11]Ultimate reward; sincere feedback; accolade to have opinion they trust	…Eventually ...the reward becomes the acclaim of the organisation itself; the ultimate reward round you, is your colleagues thinks well of you; ... but the real reward is that, somebody comes ... you are the person whose opinion they trust, that's your feedback reward…
	P5 [393–394]: [11]Take risk to be competitive	We try to anticipate what is to come next. You got to take some risk. Try to know what is happening before it happens.
	P18 [670–673]: [11]Update and renewing skills	… just looking at the individual components, I think, individuals; you do update and renew your skills and with that in order to build better and improve products, ... I suppose there is actual sense of sort of duty and pride with actual products you build.
	P18 [654–658]: [11]Improve, improve for better products	…I think … you can look back how you did something …and say what was wrong … and you can develop and improve on… it can either be through learning to do things better yourself or it is because technology has got something … an additional feature or whatever that allows you to do it.

Table 6.18 Link to interviews: Recognition

Feature	Focused – category	Excerpt from the interview
12. Recognition	P35 [942–947]: [12]Milestones; contract as a live document	…We are listed under our NASDA stock exchange Global Group within the country we are being regulated by the Tanzania Communication Regulatory Authority, TCRA, … that deals are duly done and ... making the milestones of the contract binding as a live document. I oversee contract management to see it through the workable milestones.
	P6 [417–423]: [5-12,-3] Constant interaction as knowledge sharing leads to innovation	In my understanding …working in a team, communication is most important thing …to be aware of what other people are doing and other people should be aware of what you are doing. So … constant interaction with people… motivates …you discuss things with them like product you share knowledge and basically result in a …product work, it leads to more innovation.
	P2 [305–308]: [12]Strategic, dynamic leadership set organisation tone	A leader who is insightful, dynamic, [organisation] is better known, recognised as having sector leading practices. … the dynamic leadership that is making the difference setting the tone makes change in higher education. The strategic dynamic leadership, this sets the tone
	P1 [114–118]: [12-7]Opportunity to interact, improve; solve problems	…Although you might have short chefs in the organisation, it actually doesn't matter, you know, you people talk about having hierarchical structure whatever, it doesn't really matters, because what matters is how people are given opportunity to interact to improve each other and solve problems what matters is people are given [support].

6.7 Synergistic involvement

The determined acts of creating synergistic involvement in the organisations require moves that allow individuals opportunities to realise their aspirations. Whilst information is rich, synergy which allows different layers of power in the organisation to interact and remove unnecessary power blocks should be fostered. Any act to create flow of vitality, such as information and meaning of intents from top level (the decision-makers) will raise common understanding to different levels. Whilst such action is vital, it might draw individual commitment, with a *spark like energy flow* to bring up vibrancy in workplace environment. Unwavering trust from the top levels should be in synergy and experienced by knowledge workers, for them to be comfortable with the changes and conform to work demands at their workplace with enthusiasm and passion. Such moves may unleash the zeal for creativity and innovation.

With the ongoing information deluge, knowledge workers interact and engage through encouragement by peers, line managers, to make the working environment, a vibrant workplace. If vibrancy and vitality are absent, knowledge workers will change employers in search of better working environment. Creation of value in the organisation requires a vibrant working environment. The current study, in the in–depth interviews, revealed that lack of inspiration when introducing change leave knowledge workers wondering, why? Such a question leads to other anxieties, like seeing mutual trust being

absent and encouragement waning away; creating a ground for suspicion as to what next? Source of such anxiety include policy changes that do not have transparent backing evidence. The focused codes were then placed in the matrix form, where themes formed rows, and the features form the columns. This gives a reality that participants gave perceptions of the existing practices in their workplaces, and sometimes their respective departments. In that way it was possible to get good number of focused codes that relate to particular theme, relating to a feature. For instance, P6 [409-414]: [3-11]*Good deliverables nurture confidence*. This focused code shares *workplace interaction* theme and the *deliverable* feature. This makes the two framework models to merge in matrix form meaning. The focused codes allow the themes and features to link and merge the study into context, giving sense to the framework's legitimacy.

In addition, in order to see the challenges facing knowledge workers in their efforts of creating value at workplaces, the framework offers the two models. This is in support to what the participants acknowledge as a need. For example, participant P39 [1028-1031] calls for [1-12]*Systematic policy to invest and engage researchers.* This will enable practical solutions to occur; offering possibilities of solving problems using existing resources. In this instance, participant P39 [1034-1035] says we need [5-10]*Research to solve problems.* Nevertheless, P38 [997-1000] *Commitment* as a *starting point to initiatives* require boldness, in what P38 [1003-1005] says *Mindset change* is *required*. The framework can be a useful lens to view possible options of creating value.

6.8 Summary

The data analysis was undertaken using, essentially, a grounded theory approach. Focused coding was used throughout as the appropriate approach to draw meaning. The verbal data was transcribed into specific vignettes. This involved listening repeatedly to the video-taped clips of in-depth interviews that were, on average, of 30 to 90 minutes in length. Using the guidance of the interview instrument, it was possible to follow the trend, although most meaningful answers were due to probes, and some extra questioning, which gave opportunity of building rapport between participant and interviewer.

Chapter 6 described the analysis of the qualitative data for case study 2. The critiquing of conceptual framework partly fulfils the study aim and objective (vi). The chapter elaborated on the relevance of the themes for organisations. The analysis gave the focused codes that are supportive of the themes and features of the conceptual models emerged from interview data. The focused codes link themes and features of the conceptual framework to allow a further search for meaning to be attributed to the efforts of existing practices to create value. The separation of the analysis helps to elaborate and enhance clarity of each theme and feature and act as reinforcement due to its quantitative data, analysed for means, standard deviations, correlations and variance to increase degree of certainty and to augment the qualitative analysis. Chapter 7 will explain how quantitative data analysis was carried out for case study 2.

Chapter 7

7 CASE STUDY 2: QUANTITATIVE DATA ANALYSIS

7.1 Introduction

Chapter 7 presents quantitative part of the data analysis of case study 2 to critique the conceptual framework, fulfilling partly aim and objectives (v) and (iv). The quantitative data were gathered with the qualitative data within the interview session for each participant. Before the end of the interview session, a participant was asked to rate the themes and features of the conceptual framework (models). The participants responded from 'strongly agree' to 'strongly disagree' in 'Likert scale' of the two questions; asking the relevance of features and themes of the conceptual framework to value creation. The quantitative part of the critiquing instrument is seen in (Appendix J).

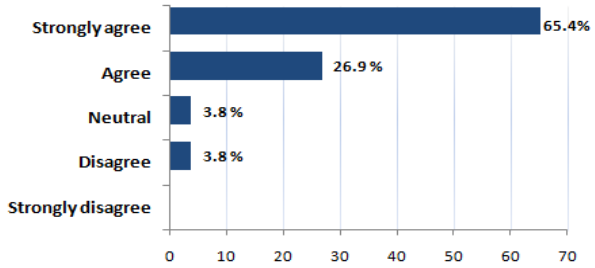
7.2 Background to analysis

Quantitative data analysis for case study 2 was done separately for clarity, validity and reliability. Justification for the mixed methods (MM) design hinges on its strength to give results that solve the problem that prompted the research (Jogulu and Pansiri 2011: 688). The study's aim and objectives have been to develop a framework using the perceptions of knowledge workers. The mini-survey gives synthesis as evidence that underpins validity and reliability for the study due to correlations and covariances from the analysis.

7.3 Descriptive analysis of framework components

7.3.1 Organisational perspective–features. They influence value creation.

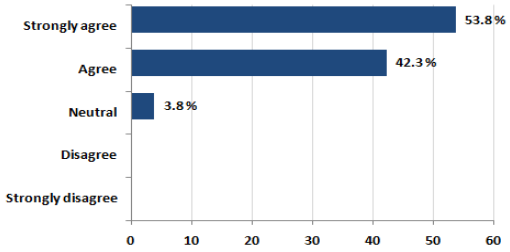
(i) Knowledge flow (n = 52)



With (n = 52) participants, 65.4% strongly agree, 26.9% agree, whilst 3.8% are neutral and yet 3.8% disagree. It means that a change of idea is most likely to occur, either due to participants who could not accept wholly (strongly agree) that the purported notion is true or they have better options. Such disagreement is a way of thinking differently, a likely resource for further dialogues that may divulge innovative options to enhance future value creation process. However, a continuous search for plausible options of using the knowledge flow should be an organisation's priority as a way of allowing new initiatives through research and other collaborative projects that may pave ways to new frontiers of using knowledge for higher competitive landscapes.

Whilst organisations are being subjected into fierce competitions, enabling knowledge workers effective use of 'knowledge flow' will enhance the value creation process through engagement of knowledge workers, so likely to spur zeal and commitment to unleash creativity potentials and further innovation.

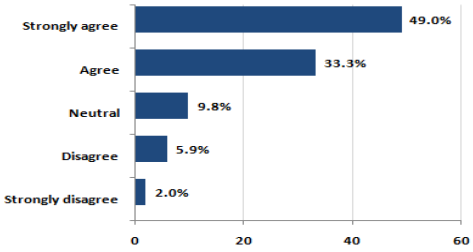
(ii) New entrants 'staff; students' (n = 52)



The (n = 52) participants, 53.8% strongly agree that new entrants either staff, students or (apprentices or trainees) help to create value in the organisation. 42.3% agree, yet there 3.8% who are neutral, they do not see whether it matters. In many cases, the freshness of ideas which are likely to be brought about with new entrants (staff), presumably, should be allowed to act as catalyst for change. The change of perceptions is due to reasons like cognitions unleashed in search of further plausible options of creating value.

Whilst students as new entrants come from different countries with diverse of cultures and backgrounds; pose challenges to the higher learning organisation. The challenge hinges on enabling them achieve successfully their studies; and that should be viewed as catalyst for change, in imparting and transfer knowledge in action. Such number of participants opting for alternatives; are sources of innovative thinking, suitable for academic delivery programmes. Metaphorically, the themes and features are like beacons which points to connectivity and interactions as live links for creativity to flourish in the workplace environment. Individual knowledge workers are the active players.

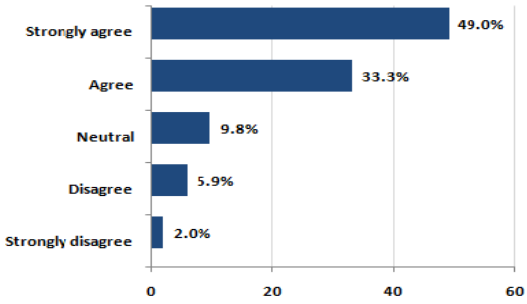
(iii) Departments (n = 51)



Although departments offer spaces for knowledge workers to work in the organisation, results show that only 49.0% strongly agree that departments are essential in creating value in the organisation. However, those who only agree 33.3%; neutral 9.8%; disagree 5.9% and even strongly disagree 2% acclaim a rethinking about better ways of balancing structure of departments which might give knowledge workers comfort zones to accommodate changes. It requires reflective practices that might give the knowledge workers needed spaces to put good ideas into action that are likely to bear fruitful outcomes. Attitude of rigidity only exacerbates stagnation, which might be seen as compliance, but slowly erodes shreds of genuine commitment for individual knowledge workers to engage in creative behaviours that underpin value.

Departments should be organisational spaces for seeking higher creativity. In order for this to happen we need leaders to listen to what best suits a particular environment; inspirational leadership is the most important at all levels to ensure the knowledge workers are enabled to experience their best abilities to draw individual inner drives in enabling individual engage actively.

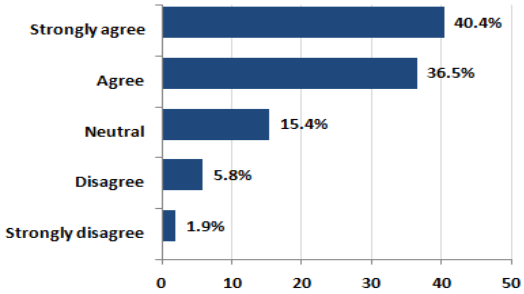
(iv) Deliverables (n = 50)



To a large extent, deliverables define to the outside world how successful the organisation offerings are perceived, either as services or products or graduates; all together as deliverables, they need a quite continuous scrutiny. Nevertheless, with (n = 50) participants, 49.0% strongly agree; 33.3% agree; 9.8% neutral, it is giving a reminder that it is quite possible to innovate and create much better deliverables. This implies that 'value creation process' can be continuously improved to enable deliverables reach higher levels of quality.

The outside organisations are looking forward to absorb the best possible deliverables from the organisation. Whilst knowledge workers are active players and creators of deliverables, they are primarily engaged in the tasks and activities that refine the qualities of the outputs, (deliverables) on daily basis. Nevertheless, the continuous feedback from the knowledge workers dealing with deliverables enables the search for new ways through practice to enhance innovation. Insights from participants underscore the importance of industrial links for validity of deliverables and for professional bodies which set trends and standards of practices that influence academic programmes.

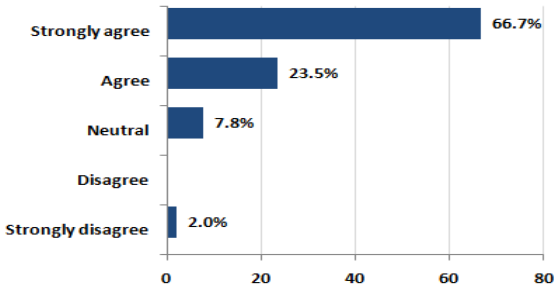
(v) Recognition, 'awards, prizes' (n = 52)



In looking at the component of recognition 'awards, prizes', the scores of strongly agree 40.4 % and the others: agree 36.5% neutral 15.4% disagree 5.8% and strongly disagree 1.9% clearly shows what comes with recognition has nothing much to do with value creation in the organisation, though should not be ignored. It can be seen how the outside organisational bodies view the organisation through awards and various recognition. Recently league tables from international and national bodies have been on the forefront in this category. Though such competition most of the time is viewed as part of marketing aspects of the organisation. Neverthelss, knowledge workers do not view awards and prizes as most crucial elements for value creation; however, they somehow uplift the organisational image; this is the reason of low scores.

Given the extent to which participants perceived recognition as a component of importance in creating value in their organisational context, there is still evidence to suggest that recognition has a role. Such role might be linked to how department perform through individuals.

(vi) Dynamism (n = 51)

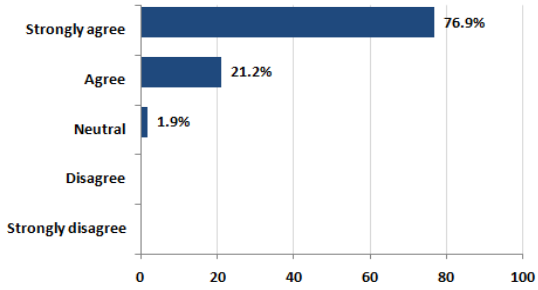


This component of dynamism with (n = 51) participants shows 66.7% strongly agree; 23.5% agree; 7.8% neutral and 2.0% strongly disagree. The component of dynamism depicts interaction involved in the organisations due to web connectivity, which is largely leveraged with increased use of portals (having intranets and extranets facilities). Dynamism is shown in the individual global perspective model driven by the proactive environment theme. The proactive environment, the internet (endless global connectivity) as shown in the framework components orchestrates information availability causing a dynamic environment to be created within the organisation that causes existing and future changes; such changes should be to enhance value creation.

The dynamism in the organisational perspective largely underscores the need for reflectivity practices to allow spaces for bold initiatives to value creation either through knowledge sharing or innovations or through breakthrough research. Hence, participants (n = 51) 66.7% agree that the component is crucial as a driver of value creation in a workplace setting; it brings vibrancy.

7.3.2 Individual global perspective–themes. They influence value creation.

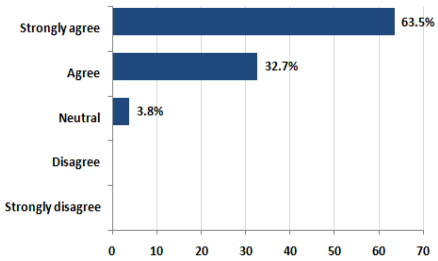
(i) Individual commitment (n = 52)



Individual commitment has the highest score of strongly agree 76.9%; agree 21.2% and neutral 1.9%. The participants view individual commitment as it entails taking individual initiatives to create value in the knowledge-driven organisations. An individual takes one's knowledge into action through a group activity or individual to create value in most of knowledge tasks done.

Individual commitment could be seen in multiple levels. It may be individual knowledge worker, individual research group who are committed in their initiative to develop software; or innovate the way certain work chores are being run. In terms of answering the question, as the profile show, the participants include software developers; managers in the organisations' departments, Professors in the Universities, UK and Tanzania. It can be argued that since the participants of case study 2 were experienced knowledge workers with impact on others in the organisations; then the 76.9% score is an indicator of high priority for initiatives to strengthen value creation process.

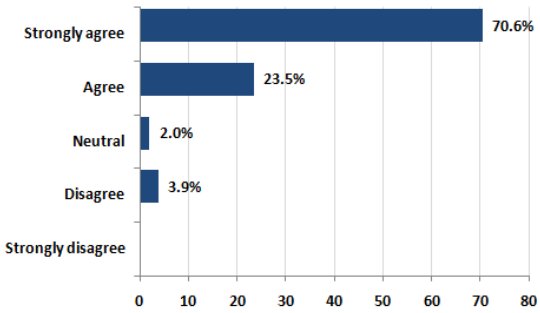
(ii) Emotional capital (n = 52)



Emotional capital scores are strongly agree 63.5%; agree 32.7% and neutral 3.8% with disagree and strongly disagree 0%. It looks as an area where organisation can dwell much attention to see a likelihood of developing strategy to boost emotional intelligence, enhance the value creation process and raise quality of value of deliverables offered by the organisation. This might be a source of innovation either through formulating new regulatory policies that address contemporary business environment. It is an area which is still less developed now. However, the use of emotional intelligence taken as subset of emotional capital is likely to pave ways for organisations to renew themselves. Such evidence points to a need to explore further good managerial styles required to nurture suitable organisational culture that fosters innovation; though culture, trust, even managerial styles are intangibles.

Furthermore, the framework has an 'emotional capital' theme encompassing intrinsic and extrinsic motivations, trust, hope, confidence, policies, regulations and laws that govern the organisation in which knowledge workers are engaged. They are silent emotional devices for people at the workplace.

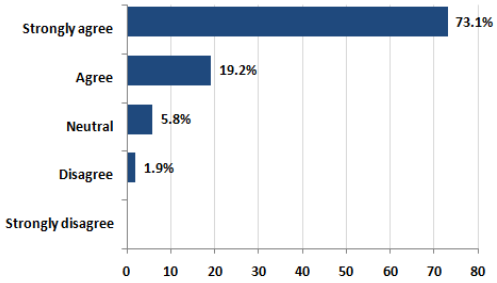
(iii) Proactive environment (n = 51)



Whilst this component has (n = 51) participants with 70% strongly agree; 23.5% agree; 2.0% neutral and 3.9% disagree. Web connectivity through proactive environment is crucial as it associate itself with website of the organisation. Portals with internal and external connectivity in the organisation depend on website designs. Hence, different perspectives have shown a new call for managers and knowledge workers to proactively engage to ensure websites robustly serve customers. There are potentials for creating value through the proactive environment; however, it requires ingenuity and conducive working environment for cognitive abilities to be intuitively active.

The proactive environment, as a technical arm in the organisation requires organisation culture, management style; that makes prudent use of emotional capital. The score is shown as one of a strong theme for use in creating value. Whilst the framework themes show they are interdependent on each; in all, interaction of knowledge workers is what creates value. The theme as a landmark shows to what extent participants view its importance at the workplace considering the fast technological changes caused by the web.

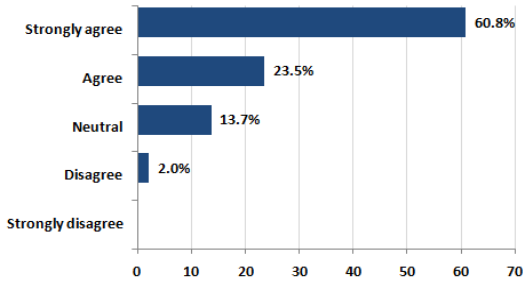
(iv) Workplace interaction (n = 52)



Workplace interaction has scores strongly agree 73.1%; agree 19.2%; neutral 5.8% and disagree 1.9%; apart after individual commitment, workplace interaction is the second high scorer. It shows that in the organisation value creation is largely done through formal and informal meetings. This trend is from traditional organisation yet is being highly used in the higher learning and also gives chances to friends to initiate collaborative projects and share knowledge in the organisation. Largely this is also the formative means organisation like universities or other learning organisations conduct trainings both short and long ones. Workplace interaction is the best explained as the approach that foster change of tacit knowledge into codified knowledge that is being kept in the organisational portals. Knowledge sharing is best done here.

New initiatives, joint collaborations and other future economic ventures largely spring from workplace interaction. Value is created when knowledge is put into action through tasks and activities of the knowledge workers and their managers. Sometimes, the pressure of work at workplace impedes knowledge sharing; which gives the trend for less hours of interaction in practice.

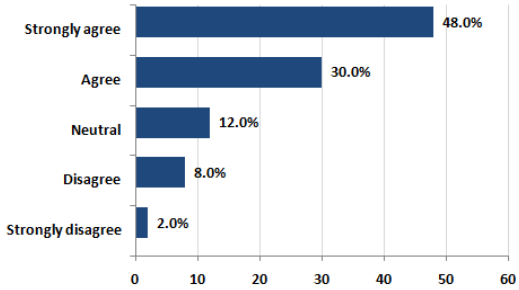
(v) Value creation process (n = 51)



Organisation existence is justified by what it offers to society. It may be sales of goods as source of revenue or offer of services. In this category Higher learning organisations, Universities in particular offer services in terms of offering academic programs though not for profit but mentoring knowledge workers. The strongly agree is 60.8%; whilst agree 23.5%; neutral 13.7% and disagree 2.0%. These can be described as perceptions of knowledge workers.

However, due to the nature of the framework and the contemporary realities, value creation depends so much on the preceding activities that were carried over within the themes proactive environment (the web and the functioning of the internal website and the portals), of course using workplace interaction as formal meetings or consultations are normal in workplaces. Emotional capital which constitutes policies, laws and the ingenuity of connecting issues (use of emotional intelligence) are crucial in the efforts of creating value in the fast changing web-environment. However, the framework offers clarity that with feedbacks it is possible to provide high value creation process. The feedbacks come from external customers around the globe, and knowledge workers as internal customers who adjust offerings according to perceived market needs.

(vi) Endless global connectivity (n = 50)



With the endless global connectivity, the experience of the vital nature of being aware that whatever is done in an organisation, one has to note its effect, speaks volume due to impact it has around the globe. This is true with universities' deliverables because educated people go beyond borders.

As a theme of the framework, endless global connectivity was meant to reveal importance of continuously being linked to online, yet participants look at it as not so significant in terms of value creation. However, such perceptions are countered in the qualitative data, where for instance, we encounter participant P18 [670–673]: urges [11]*Update and renew skills*,' people to be up to date in terms of technology, and renew skills for better performance. Moreover, as perceptions change, increased use of mobile technologies, the scores 'strongly agree 48.0%' and 'agree 30.0%' is a demand to update. Such results increase clarity of the framework themes; since value creation process is connected by dotted arrow entailing that the use of web for the value creation process need to be explored further to tap its maximum potential. Nevertheless, the ongoing technological changes will enhance the use of endless global connectivity.

Table 7.1 Correlations: Pearson Correlation

Theme and feature item	Correlations											
	1	2	3	4	5	6	7	8	9	10	11	12
1. Individual commitment	1											
2. Emotional capital	.484	1										
3. Proactive environment	.395	.327	1									
4. Workplace interaction	.431	.167	.564	1								
5. Value creation process	.339	.523	.536	.354	1							
6. Endless global connectivity	.392	.472	.502	.366	.649	1						
7. Knowledge flow	.434	.472	.365	.539	.424	.414	1					
8. New entrants 'staff; students'	.318	.448	.392	.223	.462	.285	.316	1				
9. Departments	.243	.338	.457	.393	.359	.321	.374	.469	1			
10. Deliverables	.331	.310	.451	.292	.503	.402	.275	.493	.402	1		
11. Recognition 'awards, prizes'	.248	-.118	.293	.158	.032	.259	-.004	.034	.288	.028	1	
12. Dynamism	.608	.567	.465	.606	.410	.367	.496	.395	.255	.369	.121	1
N	51	51	51	51	51	50	51	51	51	50	51	51
	Correlation is significant at the 0.01 level (1-tailed)											

Table 7. 2 Significance and covariance

Theme and feature item		Significance and covariance											
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1. Individual commitment	Sig. (2-tailed)												
	Covariance	.230											
2. Emotional capital	Sig. (2-tailed)	.000											
	Covariance	.132	.324										
3. Proactive environment	Sig. (2-tailed)	.004	.019										
	Covariance	.138	.135	.523									
4. Workplace interaction	Sig. (2-tailed)	.001	.237	.000									
	Covariance	.142	.065	.267	.472								
5. Value creation process	Sig. (2-tailed)	.015	.000	.000	.011								
	Covariance	.132	.241	.313	.187	.650							
6. Endless global connectivity	Sig. (2-tailed)	.005	.001	.000	.009	.000							
	Covariance	.200	.284	.384	.253	.552	1.102						
7. Knowledge flow	Sig. (2-tailed)	.001	.000	.009	.000	.002	.003						
	Covariance	.157	.202	.200	.279	.258	.331	.567					
8. New entrants 'staff; students'	Sig. (2-tailed)	.021	.001	.004	.113	.001	.045	.023					
	Covariance	.088	.147	.164	.088	.216	.173	.137	.333				
9. Departments	Sig. (2-tailed)	.085	.015	.001	.004	.010	.023	.007	.001				
	Covariance	.116	.191	.326	.253	.285	.336	.279	.268	.973			
10. Deliverables	Sig. (2-tailed)	.019	.028	.001	.040	.000	.004	.053	.000	.004			
	Covariance	.107	.121	.211	.129	.277	.287	.142	.193	.271	.459		
11. Recognition 'awards, prizes'	Sig. (2-tailed)	.076	.404	.037	.263	.825	.069	.977	.809	.041	.849		
	Covariance	.118	-.066	.211	.107	.025	.274	-.003	.020	.283	.018	.974	
12. Dynamism	Sig. (2-tailed)	.000	.000	.001	.000	.003	.009	.000	.004	.071	.008	.397	
	Covariance	.238	.262	.272	.320	.267	.313	.304	.185	.204	.203	.098	.654
	N	51	51	51	51	51	50	51	51	51	50	51	51

Table 7.3 Non-parametric test: Chi-square, frequencies

Theme/Feature		Descriptive Statistics									Test	
Item	Statistics (Max=5 each)	N	Mean	Std. deviation	Min	Strongly agree	agree	Neutral	Disagree	Strongly disagree	Chi-Square	df
Individual commitment	**1**	52	4.75	.480	3	40	11	1	-	-	47.346	2
Emotional capital	**2**	52	4.60	.569	3	33	27	2	-	-	27.731	2
Proactive environment	**3**	51	4.61	.723	2	36	12	1	2	-	62.333	3
Workplace interaction	**4**	52	4.63	.687	2	38	10	3	1	-	67.538	3
Value creation process	**5**	51	4.43	.806	2	31	12	7	1	-	39.588	3
Endless global connectivity	**6**	50	4.14	1.050	1	24	15	6	4	1	35.400	4
Knowledge flow	**7**	52	4.54	.753	2	34	14	2	2	-	52.615	3
New entrants 'staff; students'	**8**	52	4.50	.577	3	28	22	2	-	-	21.385	2
Departments	**9**	51	4.22	.986	1	25	17	5	3	1	42.039	4
Deliverables	**10**	50	4.52	.677	2	30	17	2	1	-	45.520	3
Recognition 'awards, prizes'	**11**	52	4.08	.987	1	21	19	8	3	1	32.231	4
Dynamism	**12**	51	4.53	.809	1	34	12	4	-	1	52.294	3

The calculated reliability for the framework components (N of 12 items Cronbach's Alpha 0.857)

7.4 Notable issues on quantitative data analysis

In research, causal effects can be attributed to covariances as risk factors, or disturbing variables (Rubin 2011: 527). With correlations mean 0.286 it is true that framework components correlate as in (Kaplan and Norton 1996: 254).

Table 7.4 Summary: Item Statistics – Organisational perspective

	Mean	Minimum	Maximum	Range	Maximum /Minimum	Variance	N of Items
Item Means	4.410	4.120	4.540	0.420	1.102	0.036	6
Item variance	0.659	0.336	0.991	0.655	2.948	0.066	6
Inter – Item Covariances	0.173	-0.002	0.315	0.317	-128.500	0.011	6
Inter – Item Correlations	0.286	-0.004	0.508	0.512	-155.642	0.029	6

Table 7.5 Summary: Item Statistics – Individual global perspective

	Mean	Minimum	Maximum	Range	Maximum /Minimum	Variance	N of Items
Item Means	4.523	4.140	4.740	0.600	1.145	0.046	6
Item variance	0.548	0.237	1.102	0.865	4.649	0.095	6
Inter – Item Covariances	0.230	0.079	0.552	0.473	7.010	0.014	6
Inter – Item Correlations	0.437	0.208	0.649	0.441	3.116	0.012	6

In Table 7.4 the mean inter-item covariances (0.173) < the mean inter–item correlations (0.286); whilst Table 7.5 the mean inter-item covariance (0.230) < the mean inter–item correlations (0.437). It can be said that the relationships between the variables are higher than the inherent confounding factors. The significance in Table 7.2 is practical evidence that, it is interaction that communicates understanding to create value. Though, Table 7.3 gives in descriptive statistics, the distribution as a summary of the framework; it shows how knowledge workers perceive value creation within the existing practices.

7.4.1 Use of multinomial logistic regression 'a hint'

Apart from correlations and covariance, a consideration of a statistical method that is suitable for the framework use is vital. In this, multinomial logistic regression gives the flexibility in analysing dataset with more than two independent variables factors or covariates (Sentas and Angelis 2006: 407; Long and Cheng 2009: 277; Bayaga 2010: 290). Mathematical expression is:

$$\text{logit}(p) = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + \cdots + b_kX_k \quad \ldots. \qquad \text{(i)}$$

Value p is the probability of the presence of event E, under observation. The logit transformation is defined as the logged odds of presence or absence of E:

$$\text{odds} = \frac{p}{1-p} = \frac{\text{probability of presence of event E}}{\text{probability of absence of event E}} \qquad \ldots \qquad \text{(ii)}$$

$$\text{logit}(p) = \ln\left[\frac{p}{1-p}\right] \qquad \ldots \qquad \text{(iii)}$$

The estimation in logistic regression selects parameters that maximise the likelihood of observing the sample values. It allows odds to be rewritten as:

$$\text{odds} = \frac{p}{1-p} = (e^{b_0})(e^{b_1X_1})(e^{b_2X_2})(e^{b_3X_3}) \ldots (e^{b_kX_k}) \qquad \ldots \qquad \text{(iv)}$$

Moreover, framework components as variables exhibit characteristics which require multiple considerations. Such categorical variables with polytomous characteristics as suggested can use multinomial logistic regression to predict results. Its use has a flexibility free of assumptions and conditions (Sijtsma and Emons 2008: 259–264; Ostini and Nering 2010: 3–10). It is presumed that any future work that involves the framework with a large sample size, the multinomial logistic regression is suggested as appropriate statistical method.

The current study was designed to use mixed methods, (MM), with qualitative approach leading and quantitative approach supplementing. The study sample size data was manageable without rigorous statistical methods. Its main purpose was to establish the framework starting with its development in case study 1 and critiquing in case study 2. The mention of the multinomial logistic regression is to clarify the nature of the categorical variables shown in the framework should be treated free of assumptions. The statistical method is given as a hint for the future works using the framework. For instance, it is envisaged that in the future works, the variable values to be generated using the multinomial logistic regression can be useful. These values will form inputs for the proposed equations (ix) and (x) in the next section 7.4.2

7.4.2 Plausibility of the framework

This section looks at how we can produce a formula to illustrate the influence of features and themes of the conceptual framework on the value creation process. Let theme, individual commitment (IC) be viewed as a variable, that increases or decreases over time. IC involves renewing competences, building dynamic capabilities and other flexible skills individual knowledge worker needs, to be effective and upbeat in organisation. IC changes, mathematically:

$$d(IC) \qquad \text{(i)}$$

The emotional capital (EC) can be viewed as a variable. It can increase or decrease due to its many attributable factors, like the emotional intelligence, intrinsic motivation, extrinsic motivation, organisational culture, leadership style, trust levels and others. As EC changes, mathematically can be seen as:

$$d(EC) \qquad \text{(ii)}$$

Workplace interaction (WI) is a variable due to inclusions of meetings that are informal and formal. Group discussions; include joining others online in web forums, social nets and 'face-to-face' meetings, to share ideas. In reality the value changes, as WI is intangible, the ongoing changes can be represented as

$$d(WI) \qquad \text{(iii)}$$

Proactive environment (PE) theme is a variable which keeps changing with time. It is due to technological updates, change of portals, websites, software, hardware and other accessories needed to make ICT a reliable tool for organisational performance and growth. Arguably, PE can be represented as

$$d(PE) \qquad \text{(iv)}$$

The value creation process, VCP, depends to a large extent whether the preceding roles are efficiently undertaken, involving total good and wise usage of available resources with dedication represented as

$$d(VCP) \qquad (v)$$

We can put the components together, with unknown factors Q, constant C. Factors Q and C are contextual, involving the industry Q and country C.

$$VCP = d(IC) + d(EC) + d(WI) + d(PE) + Q + C \qquad (vi)$$

However, time is a crucial factor in all undertakings. From the above it can be seen to involve time dt whereas, the value creation process, VCP, changes as:

$$VCP = d(IC)/dt + d(EC)/dt + d(WI)/dt + d(PE)/dt + d(Q)/dt + C \qquad (vii)$$

This can also be seen to exhibit a pattern that can be simply be viewed as

$$\Delta VCP = \frac{d(IC)}{dt} + \frac{d(EC)}{dt} + \frac{d(WI)}{dt} + \frac{d(PE)}{dt} + \frac{d(Q)}{dt} + C\ldots \qquad (viii)$$

It can be argued that, it helps to enhance understanding considering time t

$$\Delta VCP = \sum_{i=0}^{t=n} IC + \sum_{i=0}^{t=n} EC + \sum_{i=0}^{t=n} WI + \sum_{i=0}^{t=n} PE + \sum_{i=0}^{t=n} Q + \sum_{i=0}^{t=n} C \qquad (ix)$$

Ingenuity of using knowledge helps to create value in organisation. The changes to knowledge k, is dk; but time (- ∞≤ t ≤ +∞) t changes, dt hence $\frac{dk}{dt}$.

$$\int_{i=0}^{t=n} VCP\frac{dk}{dt} = \int_{i=0}^{t=n} IC\frac{dk}{dt} + \int_{i=0}^{t=n} EC\frac{dk}{dt} + \int_{i=0}^{t=n} WI\frac{dk}{dt} + \int_{i=0}^{t=n} PE\frac{dk}{dt} + \int_{i=0}^{t=n} Q\frac{dk}{dt} + C \quad \text{(x)}$$

The attributes like 'top strategic leadership' fits in the framework. Notably, in Q industry; e.g. leadership styles can cause changes that affect organisations.

7.4.3 Incremental changes

The incremental changes are in factors like the industry Q and country C for immediate expectation of value being created. For example, the deliverables, graduates or researches from organisation (university) offer the expertise or knowledge domain that will impact directly the industry Q and country C. It allows policy changes likely due to performance levels, the market niches in which products or services customers require. Such policies, regulations and laws will have impact to emotional capital and individual commitment causing changes to other components. Such incremental changes contribute to other changes like the $\frac{dk}{dt}$; which can be observed due to observed changes in VCP.

However, this part can be developed further in an independent study; where it might be possible to explore further data about the particular industry Q and how their behaviour affect the variable C for a country. This needs larger scale study of a multidisciplinary nature, to draw insights for evaluation of policies.

7.5 Reflection on value perspective

The word value commonly, used in daily life, when a person delves deeper into its real meaning, it becomes more elusive. Much has been written about value, for instance, Omachonu and Ross (2004: 66) ask 'what is value?' Giving a response that it is, what the customer – not the company – says it is.

The authors say that each company has to define its market segment and customer value as expected. The careful identification of customer value ... *reveals...* opportunities for quality differentiation; the way buyers and potential customers perceive value, can be linked to key activities when creating customer value that are higly competitive (Omachonu and Ross 2004: 166).

Goetsch and Davis (2006: 210) pinpoint the importance of organisations to understand how customers define value as sum of customer's perceptions. For instance, they include product or service quality, services provided by the organisation, and overall cost of the product or service. The attributes like quality expected; customer interaction with the organisation, experience and knowledge of the relationship are important (Goetsch and Davis 2006: 211). Similarly, Clegg, Kornberger and Pitsis (2008: 66) look on how organisations prioritise values; involving policies and rules affecting the knowledge worker.

7.6 Summary

Chapter 7 focused on quantitative data analysis of case study 2 results, analysing each theme and feature of the framework for clarity and meaning. The analysis centres on the way the data were gathered. In the interview session of case study 2, participant was asked to finish the critiquing by rating components on Likert scale questions. The number of the participants was not large enough to raise the need of using variety of statistical tests. Nonetheless, correlation and covariance give basic premises on the variables of the framework's authenticity and acceptance, and in integration of the quantitative findings to the qualitative conclusion. Such complementary character of the MM approach gives the basis for required validity and reliability of the study.

The quantitative analysis on the framework themes and features validate them for further future use. The developed framework is to help critically evaluate value creation strategies; with clarity the themes and features worthness might be useful in bigger undertakings. The role of the MM approach on the study has been to underpin issues that are crucial but hard to grasp, still need to be captured by the framework. The study objectives (v) and (vi) are partly fulfilled through making explicit the practical significance of the research. The framework is about drawing insights into practical wisdom to undertake creativity in an understanding to unleash individual potentials for creativity at the workplace. Chapter 8 gives the study, a theoretically informed critique.

Chapter 8

8 CRITICAL REFLECTION ON THE FRAMEWORK

8.1 Introduction

Chapter 8 gives the critical reflection on the framework; exploring further three of the relevant concepts, *creativity, critical social theory,* and *dynamic capabilities* among those discussed in Chapter 2. Aspects of these are used to scrutinise, elucidate links to framework to give insights drawn from their extensive use in the study. The chapter uses the concepts to build theoretical backdrop; an intellectual platform to develop a critique for the study. It signifies interaction, knowledge and the technology that are being used to create value. The chapter fulfils objective (i); and completes the research process that divulged the framework models. It ends with a critical summary that highlights the importance of the study aim, objectives and conclusion.

8.2 Background: Theoretically informed critique

The word critique, in its modern use, underpins a sense of theoretical self–reflection; subjective or objective under self-examination of reason by reason (Finlayson 2010: 632–633). Critique was widely used by philosophers; like Kant in the *Critique of Pure Reason* (1781). Similarly, How (2003: 4–5) justifies critique, as a word that presupposes criteria of use for the present, on situation that accounts of what it seeks, showing the reality of what prevails.

The critique signifies a reflective moment; in retrospection to some basic theories that informed the framework. It makes the theoretical backdrop; for its use of creativity, critical social theory and the dynamic capabilities to draw insights; in an earnest attempt to develop a theoretically informed critique for appraising the framework. Whilst the framework emanates from the practices; theoretical perspectives are prerequisites for a balanced critical reflection that gives clarity to enhance understanding of the challenges involved in practices of creating value. The theories link the notion of commitment to social norms (Peter and Spiekermann 2011: 220); as reasoning flows forward, backward, from experience with anticipation and expectation. It is a calling for prudence (Kahneman and Miller 2002: 348), whilst linking methods and practices. They underpin rationale and significance, merging for the framework authenticity.

8.3 Creativity

Whilst creativity is a common word, implication and actualities surrounding it are not easy to grasp or ignore. Although in the web environment creativity is used by implication, for instance, in creating goods and services within the organisations. It is a concept more complicated to put into practice regardless of the knowledge a person possess. Creativity like a ‘spark’ touches few individuals, who intuitively visualise, find solutions and solve puzzles into breakthroughs. Organisations yearn for it, cannot easily acquire it. However, the framework attempt to offer, as a guide for organisations and their knowledge workers; to use as an endeavour of fostering creativity, to allow

feedbacks as input for the innovation. Framework model (individual global perspective Figure 5.2 page 197) links well to Puccio and Cabra (2010: 147) claim that, creativity is a crucial 'front-end' of the innovation process; for its double pointing arrows, forward, depicts creativity, and backward, the feedback. The framework shows idea origination comes from 'individual knowledge worker' through individual commitment. The departments are the habitats of the knowledge workers; forming the core parts of the organisation structure; and are the physical context where knowledge workers carry out their practices. The framework portrays the art of creating value at workplace; it connotes an intellectual space to rejuvenate and unleash creative potentials.

8.3.1 Creativity for a purpose

The discourse focuses on functional creativity, which oftentimes is being used to create solutions, options and strategies through the synergistic interactions of people (Pentafronimos, Karantjias and Polemi 2012: 107). For the survival in the 21st century requires, individuals, a company or a country to develop 'brain's capacity to create and innovate (Cropley and Cropley 2010: 304). On functional creativity, Cropley and Cropley (2010: 301) distinguish useful creativity that shows a particular purpose among others. In the organisation for example, creativity is often used in synthesising complex information, to develop new systems and adapt to changes; essentially in the creative problem solving activities (Williams and Yang 1999: 377; Nazari *et al.* 2011: 240).

Similarly, Postula (2009: 297) describes creativity as a specific feature of many IT specialisations; a requirement of its presence to help solve IT problems that occur in the system or meeting the challenges of building new systems. Creativity is vital in creative problem solving; for individuals may have ideas, filter and organise the idea elements according to their own unique mental organisation and experience. They may share with other people in the society; as problem solvers in the group (Guastello 2011: 546). Accordingly, creative activity is necessary when producing new products, though a difficult process to manage; it cannot be forced. For, creative people may need some direction but cannot be micromanaged (Teece 2011: 541). It is thus, hard to measure with certainty the output of creative individuals. To Sosa (2009: 180), understanding of creativity is imperative, for instance, in effective innovation management; it can no longer be considered an individual attribute, rather a social activity, especially for its role of social networks in the creative process.

Within the framework, creativity fits into the individual global perspective (Figure 5.2 page 197). For example, the knowledge worker with an idea, starts with ‘individual commitment’, may involve various individuals inside the departments in the organisation perspective (Figure 5.3 page 199) through ‘workplace interaction’ before reaching the ‘value creation process’. In regard to the outsiders, still the knowledge worker starts at the ‘individual commitment’ which links through either ‘web-forums’ or ‘social-nets or both depending on one’s disposition for activities of interaction to create value.

8.3.2 Individual involvement in creativity

According to Nonaka, Toyama and Hirata (2008: 11) creativity plays a role in the relationship between human beings and the world. In the process of organisational knowledge creation, individuals interact with each other to transcend their own boundaries and realise their vision of the future. As a result, they change themselves and others, organisation and the environment. Nevertheless, people differ in their creative abilities either due to personalities they work to create or via their tangible creative outpourings. Some individuals reveal special gifts for transforming things and ideas into novel useful combinations than others (McAdams 2002: 693). Sometimes in creativity, boundaries between the conscious and unconscious are blurred; as a complex phenomenon, it involves divergent thinking skills. Personality traits commonly associated with creative individuals in professions are fostered by an environment that is rich with substantive and interpersonal resources which posse cognitive styles (McAdams 2002: 693; Guastello 2011: 545).

The framework models; individual global perspective (Figure 5.2) and organisational perspective (Figure 5.3) one for the knowledge worker's role and another context, metaphorically act as a lens through which to view initiatives to unleash creativity potentials for the organisation. The framework links well to Winkelen and McKenzie (2011: 136) metaphor of imagining the knowledge as a life-giving fluid around the organisational arteries… to deliver successful results through use of intangible resources in the knowledge flow.

8.3.3 Creativity in the organisation

In practical terms, Nonaka, Toyama and Hirata (2008: 98) describe a need for balancing user needs ('market in' and 'product out'). As emphasis, Nonaka, Toyama and Hirata (2008: 98) distinguish the balance to be acquired through creativity which offers something that captures the flavour of the times, as well as having absolute value and practical use. However, individuals with human capital broadly defined as knowledge, skills, and personality traits, require long-term performance that rests on the organisation's capability to expand its financial, human and social capital through their synergetic interactions in the production process (Yakubovich and Burg 2009: 336).

In some cases, a creative solution or configuration seems to spring forth spontaneously; for it is not easy to fully control the creative urge (McAdams 2002: 693). Such environment calls for motivation, for example, extrinsic incentives and task motivation in combination of a synergistic, additive or complimentary mode (Hennessey 2010: 352). In essence, Winkelen and McKenzie (2011: 95) acknowledge that support and encouragement are essentials to foster individual creativity; whilst a culture of mutual respect and trust offers an environment that is conducive for creativity to flourish. However, encouraging creativity in the organisation is invariably valuable, because of the roles knowledge workers have as agents amid conditions of uncertainty (Spender and Scherer 2007: 17–18). It requires a due care, with sensitivity in the governing policies, rules and laws that guide practices.

8.3.4 Creativity described in the framework

The presence of creativity in the framework is depicted in themes and features (Figure 5.2 page 197), for example, proactive environment links to emotional capital to draw protocols whilst providing creative potentials to the value creation process. The web-forum, an offshoot of the endless global connectivity shows significant needs for ability and use of creativity in the workplace; it makes the individual knowledge worker to start with individual commitment. Software developers, for example, are linked to the 'endless global connectivity' (Google, source of technological index). Workplace interaction links to proactive environment and gives the practices of knowledge sharing and codification of tacit knowledge in proactive environment as a codified organisational knowledge. Workplace interaction allows the knowledge worker to unleash their tacit knowledge and creative potentials into proactive environment to enhance the value creation process.

The framework uses the themes to orchestrate importance of individual knowledge workers interacting with a sense of autonomy. The essence of the framework lies in the practicality of creativity as problem-solving activity in the knowledge flow; feedback which is arguably, a valuable source that drives continuous innovation. The chain of micro-events involves individuals in the 'individual commitment' they occur in departments that micromanage activities to produce deliverables within the organisational perspective. These are practical ways the organisation can harness its capabilities to create value.

8.4 Critical social theory

Klein and Huynh (2004: 162) consider critical social theory as a theory of social behaviour that defines itself in a unique way; with a framework that clarifies conditions, means, contents, constraints and objectives of all organised human behaviour. With its roots in how individual lives are embedded in a web of social practices, critical social theory has evolved over time from the era of Kant's critical writings to Habermas's seminal works (Klein and Huynh 2004: 162–163). The fundamental goal of critical social theory is to critically search and open possible options for society to collectively evaluate and reflectively attain values that make human life worth living in freedom, justice and goodness (Klein and Huynh 2004: 167) because human interaction needs norms, values and standing rules (Stacey 2010: 192).

Finlayson (2010: 630) offers practical aims of critical theory as a particular kind of human activity or critical attitude in an effort to achieve two major aims, diagnostic and remedial. The diagnostic aims are to discover and account for what is wrong with a society and its institutions practices, economic and the society expectations. Whilst the remedial aims include social reforms, improvement (emancipation) and social transformation.

The diagnostic aims require analysis of social 'facts' which are subject to normative and practical constraints or dimensions (Morris 2011: 509). However, the philosophy of social science cannot advance without critical

intellectual and practical progress, and can be realised through articulations; in which critical theory in the sense of Aristotle might be viewed as a political endeavour that should be guided by orientation (Morris 2011: 509). In this regard, normative guidance is required to overcome distortions and manipulations in the dynamics of knowledge acquisition that occur for individuals and the public. Maxwell and Mittapalli (2010: 157–158) consider practices, institutions, rules, roles, or relationships literally depend on what they mean in society and to its members as emotions, beliefs and values that signify reality. For instance, Hornik, Johnson and Wu (2009: 190) explain importance of epistemological beliefs on the design of the virtual learning environment. The system includes environment of a particular learning model that considers users, their specific beliefs and on how learning best occurs.

In consideration of the norms, policies, rules and laws that govern institutions and other parts of society, it helps to turn to legal jurisprudence. For instance, a norm offers epistemic guidance, as the norm agent learns what to do, duties and responsibilities, rights and how to proceed in order to achieve a desired legal results–from the norm (Postema 2002: 611). Usually, normative guidance premises hold that law, by nature and design seeks to guide action as a defining feature (Postema 2002: 610). By contrast, when discussing Bourdieu on agents versus subjects, Hoy (2004: 115) exhorts that, practical mastery should avoid specific rules and norms, for explicit rules are likely to obstruct appropriate actions that lead to an adequate theory of practice.

The basic argument is that imposition of norms and rules are hindrance in an effort of nurturing creative behaviours which have their roots in knowledge workers. Possibly, the premise echoes the reason for community of practices, and networks of practices (Cairns 2011: 78–83). Consequently, a degree of autonomy for knowledge workers, to act independently and autonomous are essential tenets for creative capabilities to flourish. Such conditions provide chances in the form of motivation for experimenting and rejuvenating skills

Whilst considering a mind as part of reality, Maxwell and Mittapalli (2010: 157–158) describe and grasp 'critical realism' which treats both individuals' perspectives and their situations as real phenomena that causally interact with one another. It purports an emphasis a critical theory places as influence that the social, political and economic conditions have on beliefs and ideologies.

The normative guidance premise, imperative as it is, takes no position on the issue of the fundamental tasks or functions of law (Postema 2002: 610). Consequently, the framework underpins role of the knowledge worker's tacit knowledge and possibly creativity and innovative abilities in interacting inextricably within the context of an organisation. However, as an attempt to resolve ambiguity in theories that link practices of managing tacit knowledge, Mingers (2008: 65–66) argues that tacit knowledge is too difficult to manage because it is 'ephemeral'; it dwells in the knower's mind, always unknown to others. In practice, tacit knowledge may be changed into codified knowledge.

Nonetheless, the knowledge, information flow, and the pragmatic usefulness of information systems require the reality of practice in search for truth; with justification sought using appropriate methods. For that, the framework underpins the individual knowledge worker's roles within the context of organisational activities, situated and guided by norms, policies and rules. The framework is an effort to raise understanding required for solutions to challenges related to value creation in knowledge-driven organisations. Metaphorically, decision-makers can use it as a lens to locate nodes within the organisational arteries that nurture the capabilities required to create informed decisions. For example, as a theme, emotional capital offers an option for improvement and empowerment of the knowledge worker because having reasonable, plausible governing laws, policies and rules might influence and lead to organisational cultures that foster zeal for creativity and innovation.

8.4.1 Critical social theory in web environment

Knowledge workers as individuals, carry the human capital which constitutes knowledge, skills and personality traits (Yakubovich and Burg 2009: 336). Rapid change due to the technological breakthroughs has led knowledge workers to form evolving relationships such as social nets and web forums; causing a web presence. The workplace engulfed by such an interactive web presence is attributed success of information technology. Whilst high-tech artefacts ease connectivity, geographical distance, time and resources for communication keep shrinking and may soon be the history of the past

millennium. The workplace web presence links to the networks forming large carriers of social capital with the structure, content and the relationships that are composed of individuals within and across organisational boundaries causing value creation (Möller and Rajala 2007; Yakubovich and Burg 2009: 336–338). Whilst for long–term performance, an organisation's capabilities in terms of financial, human, and social capital have to expand through synergetic interactions in the production process. The changes that are being experienced are partly results of deliberate ideas that are put into practice (Allee 2008). However, ideas need governing norms that reflect social aspirations as safeguards against unhealthy changes that affect organisations. Strategic plans might work in the short-term, but economic and political uncertainties requre flexible capabilities to adjust the long-term constraints. The technological breakthroughs have orchestrated changes that affect society and specifically, the individual knowledge workers. Whilst knowledge keeps evolving, the wider aspects of organisational life requre attention; for instance, economic growth and vulnerabilities, like the cybercrime in the digital environment needs appropriate legal consideration (Williams 2010: 478–486).

How do we account for changes in perceptions due to constant interaction and web presence at the workplace? Decades ago intensity of change was low. The effects rise due to factors such as suave individuals with abilities to digest and analyse information, given the range of technologies, like e-readers, mobile phones. It makes guidance a necessity in the chaos of the information deluge.

The framework models; individual global perspective for role and organisation perspective for context; allow the principal and agency theory to apply. Organisation represents principal, whilst knowledge workers are the human agents with know-how and mandate to act for the organisation. Whilst the agents have unique roles in the organisation as individual knowledge workers; they are active possessors of knowledge, competences and unique skills, (individual global perspective, page 197). The organisation is answerable for her actions to the society. The individuals are answerable to the organisation within their roles through the laws, rules and the policies that are binding.

However, such contention raises the need for Critical social theory. The agent's role, as knowledge worker, is to be intelligent and knowledgeable. How do we assist and guide knowledgeable agents to make informed choices for rational decisions in daily micro decisions at workplaces? Do we need only governing tools for a tight control which stifle creativity and stall innovation? It requires inquiries for solutions. In a simplest summary, the contention can be shown using the mathematical analogue. For instance, consider value as:

$$V=\mathcal{O}(a)+C$$

where V – value; $\mathcal{O}$ – organisation, a – agent (a knowledge worker) and C – as factors, the governing instruments, e.g, policies. It is C that needs to be addressed as emotional capital; which allows the presumption taken in this study that, in practice, the framework's models are mutually reinforcing.

8.4.2 Critical social theory and value creation

Yakubovich and Burg (2009: 344) describe less dense networks as parts which may facilitate idea generation, whereas more dense networks may improve implementation. However, creativity and learning have little value if the ideas generated are not implemented. The implementation phase requires a sense of guidance to govern behaviours and activities in the organisation. In addition, Yakubovich and Burg (2009: 347) argue that instead of simply looking at the organisation as a set of positions to fill, managers might see it as a set of relationships among employees, between them and external stakeholders. The current framework fits with such view because it allows clarity of the internal and external perspectives, to the far horizons; and for this study, this gives the endless global connectivity. What does this mean? It means, for social and economical perspectives, opportunities are abounding, requiring flexible capabilities for creative strategies to unleash intellectual capital that creates value. Yakubovich and Burg (2009: 347) explain that practitioners need to develop and fine-tune network-based strategies and adapt for the benefits from open employment relationships. It requires the common use of Internet-based information technologies, to benefit from the global business environments.

Salas and Glinow (2008: 212) describe individual and group levels of the knowledge generation and knowledge transfer as key factors in turning knowledge application into competitive advantage at organisational level. This creates new knowledge that is tied to the knowledge generation. Such

organisational learning encompasses the knowledge worker or a group in the organisation. Such empowerment of individual is imperative and benefits the society. In the knowledge application, Salas and Glinow (2008: 213) see micro levels, as shown in individual global perspective (Figure 5.2 page 197) a space for micro activities is in the individual commitment theme. It underpins leverage of the individual knowledge worker on a pivot of the emotional capital. The governing policies, organisational cultures, laws, rules, norms and procedures, that 'formulation and crafting of ideas' are undertaken for value creation (Bowman and Ambrosini 2007; Pies, Beckmann and Hielscher 2010).

Within the aim of the study, focusing on the strategies for value creation that can make the organisation competitive, the critical social theory offers the consciousness required to underpin vital tenets that can leverage creative potentials. Development for the organisation requires optimal utilisation of resources and capabilities to create new services and products as deliverables. The art of producing acceptable and needed deliverables is value creation. Such act of creating value requires ordered attitudes that are imperative within social norms as ingrained in the fabric of society in the form of laws and rules. The framework gives the context in which some of the features are departments. In one of the department is that of strategic leadership, which gives the settings and direction of the organisation through policies and organisational culture. Strategic leadership gives direction through vision and mission and sets the performance tone that underpins workers' emotions.

8.4.3 Individual response to social change

Knowledge workers are individually responsible for the need to respond to changes that transpire in the society. Changes are part of daily struggles for success, such as finding opportunities for learning new skills that endow credentials. This gives legitimacy and chances of doing differently, as autonomous individual in the society (Davenport 2007: 138). It is what one does, eventually gives success, if done according to the society norms. The individual response to the society demands; gauges relationship of value that leads to interpersonal ties (Ulaga 2003: 686). Such a practice, coupled with the rapid changes, gives a workplace engulfed in a web environment challenges from diverse corners to deliver services and products that conform to changing tastes. In the advent of technological revolution, various quarters of the organisation were expected to gain and facilitate operations. Despite the enthusiasm of technological triumph, knowledge workers are still caught up in unnecessary pressures to meet deadlines (Menzies and Newson 2007: 87).

Whilst the web presence creates and widens horizons and landscapes with demands for services and products in new web platforms, the quickening pace of change has far wider ramifications with profound changes to culture and values (Pfeffer and Sutton 2006: 185). It is a cause of struggle for success and the market positioning; oftentimes leading to executive energy dissipation and anxiety. As a safeguard, better performance requires the governing laws, policies and rules to be fair and sensitive (Pfeffer and Sutton 2006: 108).

8.4.4 Framework underpins critical social theory

The framework themes and features (Figures 5.2 page 197 and Figure 5.3 page 199) are linked to the society. Emotional capital (through laws, rules policies), workplace interaction, proactive environment and value creation process are linked to the society through the endless global connectivity with its off-shoots which are the social–nets for all people; and web–forums for professionals like designers and developers. For example, P19 [679-687] *Beware of security compromise.* Participant P19 cautions that, 'if you create anything nowadays, … piece of software, or piece of hardware that allow communication and connectivity, you need to consider security. Technology by itself is not bad, but anything can be compromised, and be used by an attacker. You need to put strong education to users … periodically.' The creation, transfer of knowledge and technology hinges on initiatives of knowledge workers in the individual commitment. Similarly on education, Participant P21 [711-714] says *Develop community of learning*. Again, Participant P21 stresses the need to capitalise on the ability of students to learn from each other, themselves and industry … and develop a community of learning … as part of the whole process.

The social-nets, for example, facebook and twitter are platforms that make people in the community share issues and deliverables instantly. The web forums allow professionals to share the latest knowledge and technology. The individual global perspective and the organisational perspective as the context, expose the deliverables to the global. Whilst the features like the knowledge

flow and deliverables underpin in context what the organisation gets from the society and what it delivers. The 'Recognition' a feature from the organisation allows feedback from society, for example, P2 [271-274] argues that [2-12]*Peer pressure more powerful than money in research culture.* In contrast, flaws in deliverables are noticed. The organisation that nurture knowledge workers zeal for creativity needs an environment that fosters growth of competences for competitive deliverables; whilst striving for quality and goodness at workplaces, P4 [364-368] says [3-12]*We organise better through new initiatives.*

The framework shows success of joint efforts to build environments that enable the knowledge worker to succeed whilst the organisation strives for competitiveness in the business cycles. Creativity potentials and innovation abilities are empowerment of people in society to be noticed and developed. For example, P24 [802-805] says *Understanding expectations of outside world and what works internally.* Similarly, Participant P25 [824-826] argues that *Feedbacks unlock potentials.* The framework themes capture such sensitivity.

The framework depicts critical social theory in link to Ber and Branzei (2010: 600–610) describing attempts that deliberately balance social processes and economical interests for organisation resources use to create value. Leonardo (2004) describes critical social theory as a multidisciplinary framework to advance emancipatory function of knowledge. It underpins epistemological challenges like norms of creating value (Pies, Beckmann and Hielscher 2010).

8.5 Dynamic capabilities

According to Prange (2009: 401) dynamic capability is the organisation's ability to integrate, build and reconfigure internal and external competences to address a rapidly changing environment. The dynamic capabilities consist of strategic and organisational processes that create value. The emphasis is on building capabilities that can absorb inside and outside knowledge. Similarly, Bowman and Gleadle (2009: 332) look at dynamic capabilities as abilities of the organisation to continually renew their resource stocks. Arguably, dynamic capabilities create resources that are built on incremental extensions of existing resource capabilities (Helfat *et al.* 2007: 118). For it is not a single organisational process, it involves complex interaction and interchange between explicit, managed systems and embedded routines, values and behaviours that are mutually reinforcing. It creates resources that bring revenue, and therefore creates value (Bowman and Gleadle 2009: 344–345).

However, interaction process is social and societal in nature, leading to a formulated need for learning to learn; creating a structure of value system that is either personal or organisational (Illeris 2011: 35). Whilst acknowledging importance of learning in the workplace, Hecker (2012: 438) describes capabilities as representing continual patterns of collective action, which are independent of individual workers and not affected by incidental turnover, relying heavily on the synchronising participant knowledge sets. For example, the uses of knowledge artefacts like the building type manuals, design

guidelines, process manuals, model contracts, checklists among many others. These all serve the purpose of accumulating experience and carrying knowledge from one capability to another; including socialising new participants in the practice represented by the capability (Hecker 2012: 438).

In order to achieve congruence with changing environment, Ricceri (2008: 3) observes that organisations develop and continuously renew their strategic resources into dynamic capabilities. In similar attempt, on continuous renewal, Iris and Vikas (2011) describe e-learning technologies as crucial factor which orchestrate the growth of dynamic capabilities in the organisation. For instance, the e-learning technologies allow organisation members to quickly learn and adapt to changing environment. One factor which is crucial is the continuous renewal of internal and external competencies of organisational members. The ability to acquire new knowledge and embed it in the organisational competencies (Sawyer and Gammack 2008: 284) allows the core competencies of the organisation to be renewed continuously. Such contention is the essence of dynamic capabilities, and is advocated in the framework. The embedding of incremental knowledge is sometimes due to breakthroughs obtained from interaction within or outside the organisation. The ideas which are represented in the framework themes and features point at the dimension of looking forward at the same time receiving feedback due to knowledge flow, a feature and a pivotal factor that causes the interaction to be

utilised making the proactive environment theme resilient. Nonetheless, tacit knowledge from workplace interaction enable codification, making the codified knowledge to be used and renewed through workplace interaction or value creation process or from the individual commitment via web forums and the emotional capital. It depends on what works for individual, either in groups or other capacity in the organisation. It requires renewal of capabilities through continuous learning for vibrancy and readiness to challenges; to rejuvinate individual competences and use intangibles in workplace innovation (Murray and Greenes 2007; Winkelen and McKenzie 2011: 134–140).

The central issue is that golden virtue, a love of knowledge. The love of knowledge is claimed to be basic to whole intellectual life. It is characterised by a disposition for seeking information, understanding and direct epistemic contact with reality; enjoying intellectual activities, with prospect of learning and engaging in the actions, acquisition, maintenance, transmission and application of knowledge (Roberts and Wood 2007: 73). Such love for learning to acquire new knowledge has been a source new initiatives and great research for years, leading to breakthroughs in technology. The web presence and the orchestrated changing technologies which require updating of one's knowledge base have profoundly increased the intensity of searching for meaning. In regard to lifelong learning, for instance, renewing competences of individuals and sectors have sky rocketed the costs and reduced into short sprints of learning, using mobile technologies and their assorted artefacts.

Learning is bringing technological sophisticatication in ordinary customer to the fore, for instance the increase use of smart phones, tablets and mobile technologies makes the pace for change a breathtaking experience. The upsurge in availability of computers and the softwares development are continuously enhancing the web environment. Whilst the sophistication, web applications and added functionalities; the interactive touch screens and their ubiquitousness help to ease data processing (Regan and Delaney 2011: 435).

8.5.1 Dynamic capabilities in web environment

The web presence, now a common phenomenon in workplaces, makes use of ICT artefacts like the mobile phones, laptops, computers in their varieties. The e-readers, the tablets i-pads, they all allow individuals to strive and become acquainted with cyberroaming. The web environment is fascinating for its richness, instant response from one place to another even amongst continents.

The implications are diverse, including, increased abilities of individuals to discern variety of issues and even being informed while on transit, for instance it helps individuals while travelling. It makes the perceptions of the current generation, especially educated young people, be more sensitive; they are becoming suave, more kinetic in nature and on the need for meaningful change. This makes knowledge worker to be in need of possessing dynamic capabilities that encompass those issues that are crucial tenets for growth such as learning to learn. However, embarking on the trail to develop dynamic

capabilities, the continuous learning is an arduous experience. Organisation needs variety of capabilities in developing, updating software and hardware. It requires resources, joint efforts and the leadership attitude that can inspire knowledge workers (Nonaka, Toyama and Hirata 2008: 206). For instance, the proactive environment offers computing capabilities linking the value creation process and other parts to give deliverables in the organisational perspective.

8.5.2 Dynamic capabilities and value creation

The dynamic capabilities are largely associated with the relentless search for better ways to create value. The proactive environment and the workplace interaction, themes shown in the individual global perspective, (Figure 5.2 page 197) preludes to the value creation process; makes the value creation process efficacious to deliver competitive deliverables. The habitats of knowledge workers, the organisations, are entrusted with specific activities in the operational routines of the organisations within the core competencies the organisation purports to deliver. The trends and what transpire in the professional bodies shape the knowledge and calibre of knowledge workers. The use of knowledge, including the creation of new knowledge and innovation, occur through the deployment of dynamic capabilities; for they encampass individual competences, offer flexible options to individual involved to practice their professions. Such are gaps of theory to practice, on which Clegg (2005: 424) states the need for a more understanding of context, and much clarity of the theorisation of knowledge produced in practice.

8.5.3 Dynamic capabilities in the organisation

Organisations require abilities to grow and rejuvenate. Dynamic capabilities are the means by which organisation can harness the fruits of knowledge. In traversing through the landscapes of brain power organisations members can effectively unleash the hidden their potentials. Lin and Edvinsson (2011: 354) suggest possibility of uncovering each country's intangible assets status as a gateway to intellectual capital liability, and turning its potential into value. Unleashing creative potentials requires tactics to identify, explore and find ways of extracting value into products and services to the markets. The framework offers such links to context, individual and global in collaboration with as basisfor other organisationsto build dynamic capabilities which are used to meet the requirements ofpeople in society.

8.5.4 Framework depicts dynamic capability

The study has explored practices that use intangibles, with concepts like the dynamic capabilities. The framework shows that knowledge of intangibles in an organisation helps the practice of creating value. The nature of dynamic interaction, for instance in the workplace interaction theme; explicit and tacit of the workplace learning offer possibilities of identifying crucial intangibles as capabilities in context that brings competitiveness (Sawchuk 2011: 175). The framework themes and features are loaded with facts taken from the participants in the study. For instance, on 'emotional capital' theme and 'knowledge flow' feature in matrix (Table 6.1), where the research participant

P2 [250-255]: states that [2-7]*research exposes individual capability.* Whilst on 'Proactive environment' theme and 'New entrants' feature, study participant P3 [345-347]: says [4-8] *Real time application raises competences*; that enrich the practices. On 'value creation process' theme within 'Departments' feature, on practices issues, participant P24 [807-811]: watches [5-10]*Trends, research; knowledge of the environment.* Watching trends in a changing environment gives awareness of changes in society and quality of the deliverables. It enriches competences and capabilities in different fronts. It needs managerial capability, resources capabilities, for instance, the financial capability, human resource capabilities and individual capabilities; to match and intergrate into dynamic capabilities, despite other constraints in giving good deliverables.

The 'workplace interaction' theme and the 'deliverables' feature, shown in matrix (Table 6.1 page 218) depict P6 [409-414]: [3-11]*Good deliverables nurture confidence;* inferring that delivering good deliverables requires diverse capabilities. This is found in recognising individuals involved, their intellectual worth, willingness to share knowledge and readiness to give all (Kim and Mauborgne 2005: 182). Whilst the process of creating value shows the web presence; the capabilities involved in dynamic environment depict changes in the real-time systems. The framework models underpin themes and features that help knowledge workers take chances as individuals in dedication and commitment to unleash their innate potentials attributed to activities of knowledge creation and use in the workplace as shown by (Ehin 2000: 104).

Dynamic capabilities involve continuous improvement; the framework echoes such sentiment, for instance, on the 'proactive environment' theme and 'Recognition' feature, participant P18 [654-659] says [4-12]*Improve, improve for better products.* Improvement is needed, for example, in a new product development activity, the changing requirements of lead users, is a demand for users; a source of new ideas for the future (Bowman and Gleadle 2009: 337).

The dynamic capabilities carry the use of knowledge in creativity and innovation. The framework makes use of the dynamic capabilities when it looks for what best to offer to the market as deliverables. Deliverables are accepted if they conform to the tastes of time. Such perspective makes critical social theory to observe norms, addressed by the emotional capital through governing instruments like policies. The proactive environment use computing for web presence, making the workplace interaction, a platform for readiness.
The organisation perspective shown with its features (Figure 5.3 page 199); addresses issues regarding the context, and calls for individual capabilities to be accommodated in order to deliver competitive deliverables. The strategic leadership helps in synchronising knowledgeable activities in the organisation. The synchronisation focuses on attributes of dynamic strategic leadership for delivery of competitive deliverables (Figure 5.4 page 203). The development of organisation usually requires commitment of knowledge workers, which is addressed using the individual global perspective model (Figure 5.2 page 197).

8.6 Critique: The theoretically informed framework

The framework models depend on each other, offering realities in practices of creating value within the environment in the workplace. The organisation perspective gives the context, space in which knowledge workers, autonomous within policies, rules and norms, can offer deliverables through the value creation process, whereas 'individual global perspective' has emotional capital linking the organisational resources with dynamic capabilities influenced by collective human characteristics. The interaction combined with knowledge, changes into knowledge flow, in which intangibles are used to create value in the organisation. It offers insights into the realities of challenges that knowledge workers face whilst creating value for competitive deliverables.

Knowledge of the intangibles, act as ingredient of the dynamic capabilities through creativity, partly on how organisation activities are carried out in response to the demands of people in society. The recent use of social nets and web forums are development of using internet for business, research in technology, social, political and economic inquiries; whilst considering vulnerabilities of the misguided use of this new medium. The framework's attributes exhort the prudent use of available opportunities. The interaction is intense due to web presence engulfing the environment used for organisational competitiveness. The theories of creativity, critical social theory and dynamic capabilities are taken to clarify the use of knowledge and technology in efforts to create value in the new millennium. The framework uses the perceptions of

knowledge workers to underpin intangibles resources that need to be explored in relation to context; whilst being aware of global demands in regard to the flavour of times, cultures, it includes policies and legal instruments attributes.

Furthermore, Morris (2011: 499) regards technology as the practical expression of knowledge, enabling the control of nature. It reflects the interests of enlightenment in the domination of nature and by extension, the domination of human beings. The framework theme, proactive environment, shows the technological dimension in the organisation, whilst linking with others through endless global connectivity. The link is the global hub, the internet, which for the framework accentuates the continuity of connectivity.

The underpinnings of emotional capital theme include the odd practices that can, in extreme cases, be linked to Boddy (2011: 256–257) description of corporate psychopath theory. The theory exposes dysfunctional practices in organisations caused by leaders; for instance, corporate leaders largely caused the global financial crisis (Stacey 2010: 7). Although competent, executives at strategic levels may show single mindedness in pursuit of their own self enrichment, and self-aggrandisement to the exclusion of others, abandoning equality, fairness or the notion of corporate social responsibility. In cognitive capacities; emotional capital, raises emotional intelligence for the organisation to nurture and use individuals' competences (Grant and Hayton 2011: 423).

8.7 Summary

Chapter 8 fulfilled the theoretical part of objectives (i), providing a theoretical backdrop to the framework's practical underpinnings. The chapter attempted to address the challenges of creating value for organisational comptetitiveness using the framework whilst traversing theories of creativity, critical social theory and dynamic capabilities. Such an attempt addresses the aim of the study which includes finding ways for organisation to use their resources to be competitive. The need for knowledge and continous learning has been emphasised; for example, undertaking of lifelong learning that includes the rejuvenation of competences. Among aspects touched on are the impact of web presence on knowledge workers and individuals in a global perspective. The organisational perspective requires human, unique, as intelligent agent to act for it as context. In all, love of knowledge as a crucial aspect of successful life offers a glance of involved epistemology; it forms tenets of the critique.

Chapter 8 used a philosophical view of challenges facing knowledge workers whilst creating value in the knowledge-driven organisations. The framework models that underpin existing practices require a multidisciplinary approach to grasp the insights drawn from practices. As a reflective part of the study, it links theories for framework appraisal, forming a bridge to Chapter 9. This concludes with framework use, study's implications which track its aim and objectives; including the study's contribution to knowledge and future works.

Chapter 9

9 FRAMEWORK USE, IMPLICATIONS AND CONCLUSION

9.1 Introduction

Chapter 9 presents a framework use, the study's implications and conclusion. Foremost is the framework use as a guide; an effort of perceiving value in the environment of web connectivity, with a critical view of the subject area of the study. Knowledge management (KM) and intellectual capital (IC) have been the focused discipline area, a source of intellectual strands for value creation with a need to substantiate the prevailing realities as they stand in knowledge-driven organisations. Whilst Chapter 8 offered critical reflection to enhance understanding, chapter 9 gives the usefulness of the framework in the context of the study, concluding with suggestions of future studies. It underpins issues that allow the fulfilment of the aim and objectives (vi) and (vii) of the study.

9.2 Background to framework use

Whilst the research was undertaken to underpin practices of creating value; creativity and innovation address the context. Interest and curiosity on the changes experienced in the business environment gave study the momentum. Technological breakthroughs, particularly ICT cause unprecedented changes even to the institutions of higher learning; with consequential impact in the workplaces (Costley 2011: 397). Knowledge workers, both academics and

non-academics formed required study participants in the knowledge-driven organisations, with the Higher learning taken as a member of this category (Harman and Harman 2008; Greenwood 2009: 11–15; Hautala 2011: 9–13).

9.2.1 Perceiving value

Knowledge workers, especially lecturers and practitioners as managers, directors and other executives, have life-changing impact on people through their practices in organisations. In order to capture this abundance of experiential knowledge, mixed methods (MM) research design was taken as an appropriate approach to gather data (Creswell and Clark 2007; Hesse-Biber 2010; Jogulu and Pansiri 2011). Moreover, this effort helped to secure empirical evidence that divulged the framework which captures the dynamic nature in relation to knowledge, technology and people; such capture was supported by the findings of case study 2. This was reinforced with 'capturing value' (Teece 1998: 10–15); with a change in thinking to manage knowledge (Snowdon 2002: 102). In web environment, pragmatism helps action research (Kvåle 2005: 515) to underpin the practical application (Nold 2011: 92–93).

Whilst the study focused on developing the framework for critical evaluation of value creation strategies in knowledge-driven organisations, the use of higher learning as a context, gave the conceptual framework. It links the role of imparting basic knowledge and skills repertoire for knowledge creation, an embedded capability for value creation to organisations (Hautala 2011: 11).

The research process evolved into milestones that culminated in the developing the framework. The study used contemporary literature at the beginning; then observation gave initial identification of intangibles in the workplace (Table 4.7 page 145 where *understanding … trust, hope, commitment …*) are used in the value creation process (Lehaney *et al.* 2004: 28–29; Teece 2008:10–11). The identified intangibles, observation, indepth-interviews and mini-survey show how knowledge workers practices contribute to the value creation process (Gao, Li and Clarke 2008: 6–7); that is illustrated by framework's three models (Figures 5.2; 5.3; 5.4 pages 197, 199 and 203).

The research passed through two major phases, case studies 1 and 2. Case study 1 aimed at developing the framework with data collection I and II done in Tanzania; whilst case study 2 was about critiquing the framework in the UK and in Tanzania. This chapter is a sober look as to whether what was intended was well achieved. However, as cross-border research, the study passed through diverse cultures and organisational boundaries, bounded through 'emotional capital' as a theme which contains organisational culture, emotional intelligence and policies. Such a broad range is addressed through the lens of framework construct, with focused coding that underpins meanings (Charmaz 2006: 59; Hesse-Biber and Leavy 2011: 311). In addition, aspects of value creation, using the framework's themes and features as lenses, allow a critical view of perceiving value in knowledge-driven organisations.

9.2.2 Brief reflection on KM and IC

The study of knowledge management (KM) and intellectual capital (IC) is a recent phenomenon which has been in existence for less that three decades (Andriessen 2004; Roos, Pike and Fernström 2005; Spender and Marr 2005; Kujansivu 2009: 303–305). However, KM and IC strategies have allowed plausible explanations that give a clear guide to understand new scenarios, with their impact in organisations and countries globally. For instance, engagement of knowledge workers to awaken their zeal requires prudence and a deep understanding of the strands that underpin individual's aspirations. It requires '*humility and understanding'* P21 in '*preserving individual value'* P10 within the legal frameworks at the workplace, that has the backing of organisational culture and managerial styles (Friedman and Rogers 2008: 258)

However, the framework by capturing perceptions, with legal backing, will help in refurbishing and overhauling ethos for individuals to renew capabilities (Lin 2011: 271). Nevertheless, collaborative research, KM and IC initiatives give plausible reasons for practicalities; such as action research to be carried in the workplaces (Handzic and Lagumdzija 2010: 91; Kothari *et al.* 2011: 207).

9.3 The use of mixed methods

The essence of using mixed methods (MM) in the critiquing stage is underpinned by two major aspects. First and foremost is the clarity of the themes and features from the participants' point of view. To elicit insights

from participants, interviews were selected and used based on informed consent. The notion of informed consent which embraces confidentiality and anonymity allowed participants the freedom to share experiences of practices in their capacities. Factors affecting their individual performance in regard to intellectual achievement and status were part of the interview. To help increase the interview quality; the face-to-face in-depth interviews done in person, allowed gestures and eye contacts (Hesse-Biber and Leavy 2011: 99); in engaging to build rapport and raise interest in the subject with participants.

In the analysis, focused coding (Charmaz 2006: 57–59; Saldaña 2009: 155) helped in reduction and selection of the data in search of meaning that underpins the context in order to match the themes/ features of the framework. The need for a further extension of the work started with the interview session, where each participant had to complete two questions in the critique instrument (Appendix J). The completed mini questionnaires fulfilled two purposes: first the participant exerts influence as a critical reviewer by showing his/her stand on the specific theme/feature in the framework; secondly, the filled mini-questionnaire helps in quantitative data analysis. Moreover, these aspects helped to scrutinize datasets for the legitimacy, validity and reliability of the study construct which gave the framework. However, the framework in addition to being dynamic reflects the realities of web based workplaces; it underpins web forums and social nets which denote rapid changes globally, in networking and instant real time interaction.

The use of research design that deploy either only qualitative or quantitative would have sufficed, but the web presence and fast changing environment calls for whoever attempts to create value to consider other possibilities which require multiple views of things. Although current research could not delve deeper into either of the two approaches; yet the MM approach was approriate study option. Nonetheless, the ex-post researches offer new lines to start further studies that are likely to be either by pure qualitative or quantitative. For example, in further research using the framework, with a study aim of exploring strategic leadership in knowledge-driven organisations and taking chief executives as participants, a qualitative study might allow in-depth interviews which are likely to catch valuable insights into how they perceive challenges within the existing web environment. Moreover, one might like to undertake online study for the same participants using a quantitative approach.

Whatever the case in focus, the strong realistic issues as a person embarks on such research is that the study might tend to be multidisciplinary. For aspects that touch participants' practices, for instance, instances of the organisational efforts undertaken to create value might require multiple ways of viewing involved issues. In addition, the use of case study research helps to enrich the data triangulation and underpins converging evidence (Yin 2009: 116–117). Case studies 1 and 2 managed to have data gathered from multiple sources across levels of the organisations. The phases involved in the research process allowed the triangulation to be effectively adopted and efficiently deployed.

9.4 Framework use

The framework is presumed to be useful in different ways in knowledge-driven organisations. The perceived instances are guidance for action; although this requires prudence to uphold achievements whilst coping with change. Overall, the framework can be used to enhance understanding for both the management and knowledge workers on the drivers for value creation in organisations. Once these drivers are understood various strategies can be developed to gain understanding and commitment to actions that create value.

Knowledge-driven organisations can take this framework and develop training seminars for the staff at all levels around it, explaining the components and their relevance. This will lead to better understanding of drivers and eventually to boost value creation process. Organisations can embed relevant specifics into their rules and procedure, for instance, policies on use of internet and social networking or policies on induction of new staff. The framework ensures that various relevant factors are visible and addressed by management and knowledge worker who adhere to its message and act to create vibrancy.

9.4.1 A guide for action research

The framework can be used as a tool to guide action research in the organisation. Such moves will allow knowledge workers to show their preferences, especially options that work in accordance with the organisational culture and other contextual variables which might be captured through action

research. This claim is supported by participant P1 [114–118]: [12-7]Opportunity to interact, improve; solve problems; – who argues as follows:

> *'having hierarchical structure whatever, it doesn't really matter, … what matters is how people are given opportunity to interact, to improve each other and solve problems … how people are given [support]'.*

Such argument fits well with the desire of 'knowledge sharing' in the organisation; which is also seen as a dotted line connecting *workplace interaction* and the *proactive environment* themes in the individual global perspective. It is envisaged that through action research, knowledge workers in the organisation are able to codify their knowledge and allow organisation to be competitive. Although options to allow individuals to be competitive are plenty (Patton 2011: 280); empowerment to individual knowledge workers with support and room for initiatives is vital for developing fully good ideas.

9.4.2 Product/service innovation

Whilst the framework depicts instantaneous feedbacks, due to the 'to and fro' arrows, it is easier to think and act using the framework as a guidance of where to look for extra support in order to improve a product quality. However, the individual commitment linked to emotional capital, makes the combination to holistic nature constitute a rethink of what works to unleash innate potentials.

People at workplace, P49 [1232-1235] says are '*dedicated to work; sacerdotal*' and P48 [1188-1192] argue that, '*competent people will deliver; but*' require support, P21 [732-736] and '*humility and understanding*' from their leaders, with 'absolute conviction of their ideas and thoughts and … communicate' as encouragement. Encouragement boosts zeal; whilst nurturing commitment to explore and learn possibilities of better ways to innovate products or services.

9.4.3 Strategic evaluative tool

It is assumed that the framework can be used as a tracking tool as a basis of evidence for the strategic leadership about the best available options. Behaviour repertoires can be tracked from members of the organisation using the framework which, if encouraged, can instil vitality at the workplace leading to heightened participation of knowledge workers in various initiatives.

Nonetheless, success starts with commitment where P24 [789-793] sees that *encouragement reinforce commitment* and P13 [568-571] gives advice to use *wisdom and skills for success* whilst P18 [654-659] exhorts, *improve, improve for better products*. The framework is useful in communicate the understanding needed to create value (Figure 5.4 page 203) which can help to ensure that there is presence of focused understanding. It will enhance knowing and create superior value through appropriate value creating strategy of one's choice.

9.4.4 Assess policies, regulations and laws

Whilst aware of the vulnerability of the current business environment of web connectivity, as shown in the framework, there is every possibility that workers may be asked to give their views as part of the feature or theme in context of the organisation. For instance, policies regarding incentives and perks may be scrutinised by workers and their priorities and favourites be deployed within a certain period. Using evidence collected through the models, management may be informed and act upon fact-based decisions (Pfeffer and Sutton 2006: 160).

The repeal of regulations or policies based on evidence collected using the framework is possible; although with people's behaviours, the expectation is to what extent is it possible to encourage commitment and engagement in the workplace? In a reflective challenge, P8 [434-440] says within the *Time frame-performance;* was *work done with the heart*? Is there a policy, regulation or law that can aid the performance to higher levels? Is it possible to do more?

9.4.5 Nurture individual creativity potentials

The framework has web forums as off-shoots of the endless global connectivity; which is the best web toolkit for software developers. The framework offers the best way to think differently allowing the mind to wander from individual perspectives to global levels which can lead to ways to capture scenarios in the organisations and turn them into real web applications. Whilst P11 operating in 'Lean business models' offers 'Clients-based services,' the

framework shows such possibilities as viewing clients in perspective of 'value creation process' theme, where clients are in 'new entrants' feature, whilst department (feature) in business keeps using lean models as a way to deliver.

9.4.6 Sensitivity to quality of value

Using the value creation process theme as a starting point, the 'to and fro' arrows depict a constant questioning nature that is needed. Vigilance regarding the quality of the product/services/ deliverables released depends on eagerness to deliver them as best as possible. A constant stream of feedback will allow enthusiastic teams to think and reflect how to focus on attitude of constant improvement, whenever possible, at the lowest cost. The sensitivity to value can be viewed as the allowance given for people to be sensitive to others; humble in listening to ideas and improve. An idea might be absurd as it starts, by listening and refinement through constructive criticism it may blossom.

9.4.7 Innovative idea development

The advantage of the dynamic nature of the framework is that, for the first time in the history of mankind, organisations have many young people well educated at a age. Globally, social nets like 'Facebook and twitter' carry ideas like sparks all-over the five continents. The hunger for ideas is out there; however shortage of proper tools to guide thinking in steps to amplify, scrutinise, challenge and turn an idea into actionable working reality. The is

acumen rare, required to solve the social, economical, technological and developmental issues that face people at local and global levels.

However, the unwanted threat might be the behaviour of relentlessness which requires so much to be changed so drastically. Whilst the technological revolution is fast, social and economical changes are usually slow to avoid disruptions of social fabrics. For example, in recent times a concern has been on the issues of transparency which 'social–nets' (Facebook and Twitter) advocates, seem to people as 'overstepping the mark' for individual liberties and universal human rights (Wykes 2010: 382–384; Foster 2011: 355–364).

However, the tumultuous changes experienced in the recent times calls for alertness in terms of creating value that underpin knowledge workers aspirations, whilst considering people in society as immediate neighbours. Knowledge-driven organisations have capabilities to act; this time responsibly to allow knowledge workers to unleash their innate potentials at the workplace.

9.5 Noteworthy issues

In order to gain a pattern that work in short term and the long term, it may require a short-term relief as a pathfinder. Nonetheless, feasible decisions based on supportive evidence in form of acceptance from knowledge workers can foster confidence and trust. The issues include finding common ground, with aspects that can enrich the understanding of the framework expectations.

9.5.1 The slippery ground

In trying to embrace disequilibrium, Heifetz, Grashow and Linsky (2009: 66) point out the 'orchestration of the inevitable conflict, chaos and confusion of change so that the disturbance is productive rather than destructive.' However, the framework offers clues as to what is possible in a given time't' (elaborated in the plausibility of the framework, section 7.4.2) through harnessing ideas from knowledge worker(s) in relation to context as one practices the profession. Such sensing-making is fruitful if it is perceived and acted upon timely to create value as an innovation or a solution. The time span for possible gain to equilibrium is almost an illusion; the change can be embraced and tackled through sound value creation strategies. However, according to Hidalgo (2011: 557) value is in the network. The idea is echoed in the study participant P25 [824-826]: says [3-9]Feedback unlock potentials, and that, *if you want to get the best out of people,… the best way is to give feedbacks, regularly, all the time.* Such trends release innovation and creativity potentials.

9.5.2 Working in the web environment

Contemporary workplaces in knowledge-driven organisations are in web connectivity. In a focused code, P18 [654-661]: says '*Improve, improve for better products'*. Through deluge, the streaming of information and change of perceptions, call for guidance to create value and ensure competitiveness. The framework offers, mentally, existing patterns for executives and individual knowledge workers to create and share innovate ideas (Steen 2009: 311–315).

Whilst on policies, regulations, and laws under emotional capital theme, on how to enkindle enthusiasm and arouse vitality in the workplace and unleash energy for value creation, study's participants offered their views. In focused codes P38 [1019-1021] says '*the global exposure; a challenge*' which requires P47 [1155-1161]: '*decisions based on big picture*'; arguing that, in practice P38 [1003-1010]: '*mindset change is required'*, to, '*... spearhead a need for change*'. The framework offers a wakeup call, to search and capture better options for people. P49 [1214-1219]: says, '*work under global watch; stressful*;' and observes that, sensitivity is required, for the online activities are under watchful eyes (Kianto and Waajakoski 2010: 11; Lin 2011: 263–265).

9.5.3 Knowledge worker of 21st Century

Whilst acknowledging knowledge as intangible resource in the rapid changes propelled by continuous technological revolution, the issue of who should be a future knowledge worker is vital. A person possessing expertise and qualities like loyalty to their responsibilities, intuition, open-mindedness, readiness, imagination, trust, empathy, shrewd thinking, steadfast goodness and the like is of interest to many. However, delving deeper on this is beyond the scope of this work, it probably requires validation in an ex-post research (Appendix A).

Nevertheless, trying to identify the repertoire of attributes for future knowledge worker is imperative, to allow the capabilities and competences needed to face current realities. These realities include capabilities required to

underpin inescapable 'vision–current reality tension' (Senge et *al.* 2008: 295) which is vital in inculcating a zeal for creativity, nurturing existing talents from a tender age. The contemporary environment is rife with complexity requiring unique capabilities and competences with new ways of renewing and nurturing them (Boisot 2011: 440). The current study, as an attempt to look at existing practices, is metaphorically, a seed that needs to be sown for future initiatives, growth and success. For creativity can be taught and studied.

The last few decades of the 20th century gave birth to untold breakthroughs of technological know-how. However, the challenges of creating new jobs and opportunities is a pressure that cannot be left to politicians and a few thinkers, large audiences are required that will address this seriously. Metaphorically, a technology of the mind coupled with current technologies, can rise above these hurdles and unravel possibilities (Stacey 2010: 104; Hazy 2011: 526).

The notion gives outlook of opportunities for venture-creation that will make hope flourish. Whilst the internet is the global link to organisations and individuals, it requires ample interaction of individuals to synthesise ideas flouted in the network and turn them into value (Hidalgo 2011: 567). Whilst survival is paramount, yet human dignity as human rights comes through work. If UN millennial goals geared towards eradicating poverty use human capabilities, competences and skills built in the universities, then same institutions can handle initiatives of interdisciplinary works on human capital

to create value for social development (Pies, Beckmann and Hielscher 2010). The internet and communication technologies have profound changes in workplaces. Human capital, the intellectual capital linked with economic ventures, requires skills renewal to create new ventures. However, endeavours, political, economical or business should support ventures that create jobs to match with changing technologies. Nonetheless, vulnerabilities and online threats from criminals are increasingly common; it needs sensivity to global cyber crimes (Ganor 2009; Wall 2010; Furnell 2010; Carrington 2011: 244).

9.5.4 Creating value in the web environment

According to this framework, the effort of trying to craft strategy to create value in the web environment requires a capability of visualising big picture. In the big picture the involvement of the individual is paramount. It involves harnessing an idea, being individually committed, if emotionally boosted by favourable policies, regulation and organisational culture. With the support of others in the workplace interaction, the idea can then be codified; whilst doing the same repetitively to refine, at the same time registering the proposed idea as a safeguard from copyright violation. The quick registration of an idea will avoid the infringement of intellectual property an alert worth noting to avoid threats of future litigation. For example, laws on the ownership of registered designs have challenges. Torremans (2005: 331) whilst explaining intellectual property law argues that, a specific problem might arise when a design is computer-generated. The computer is an instrument and not a person, and

cannot be the owner of the registered design, for there is no human author. The registered design is then attributed to the nearest person involved and who was responsible for the arrangements necessary for the creation of the design.

Nonetheless, for an idea to flow into fruitfulness, see the paths in Figure 9.1 page 318. Starting with an idea, it flows into 1. Individual commitment; 2. Emotional capital; 3. Workplace interaction; 4. Proactive environment; 5. Value creation process; and 6. endless global connectivity; as a market for the product created. The arrows to and fro show the instantaneous nature of the web environment that requires further study to learn the richness of indepth understanding of the knowledge flow, as business platform of the 21st century.

The scope of current research leaves the idea for future work on framework use as an effort to develop a clear guide to harness ideas that leverage value of knowledge into competitive services or products for organisations. It can be linked to Böhm and Land (2009: 483) work on the value of knowledge for competitive marketing access to clients and projects in business development.

Creating value in the web environment

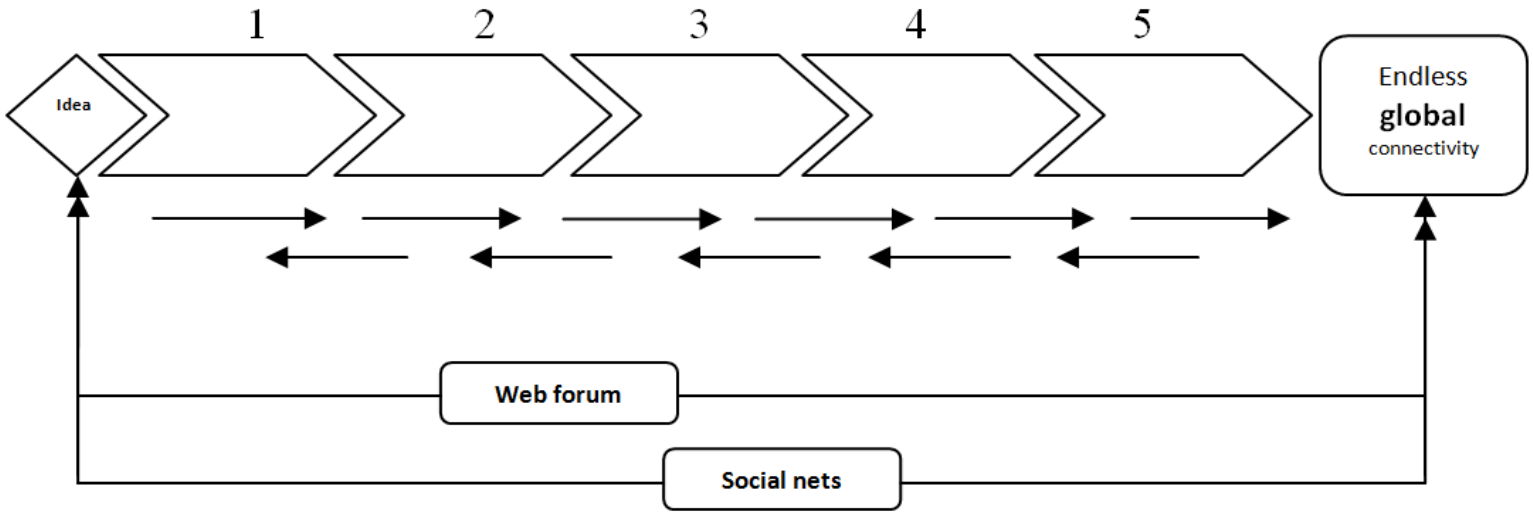


Figure 9.1 Steps to create value in web environment

Use of knowledge flow to assess ideas, developing them into concepts, policies, regulations, and laws is imperative in order to serve people better; through innovation and creativity.

9.6 Study implications

The developed framework offers alternative ways to view emerging challenges. Computing as an enabling capability possesses tools that allow creativity to unleash potentials of the human mind as the true source of change. Knowledge workers as agents of change can offer feasible solutions to problems. The framework models as lenses to view existing practices ensure communication and nurture of inspiration. The unleashing of vitality in the workplace is a fresh approach to search for better options from knowledge workers themselves. For in the organisation, if anything goes wrong the first people to suffer the effects are the knowledge workers. The message offered by the framework is simply that, better options are available, let people engage themselves amicably, and allow the best in the knowledge workers to be unleashed through tapping into their aspirations; an essence of goodness to create value (Nonaka, Toyama and Hirata 2008: 55–65; Hautala 2011: 12–13).

9.6.1 From aim and objectives to framework use

The aim of the study has been to develop the framework, which establishes how organisations can become competitive using existing resources. The aim was realised through study objectives (i) (ii) (iii) (iv) (v) (vi) and (vii). The study report contains nine chapters, each helps to fulfil the aim and specific objectives as follows. Chapter 1 introduces the study, sets aim and objectives, defining problem for the study. It fulfils partly objectives (i) and (ii). Chapter 2 considers the problem context and relevant concepts, thus partially fulfilling

objectives (i) and (ii). It provides further discussion of the 15 concepts introduced in chapter 1. Chapter 3 gave the research methods for the study, partly fulfilling objectives (i) on methods. Chapter 4 describes case study 1 and its results. Based on the results and analysis the development of the conceptual framework is described, fulfilling objectives (ii), (iii) and (iv).

Chapter 5 describes case study 2, the purpose of which was to expose and critique the proposed framework making any necessary adjustments, thus fulfilling objective (v). Linked to Chapter 5 are Chapters 6 and 7 which provide detailed analysis of case study 2 demonstrating usability and usefulness of the framework. Chapters 6 and 7 provide the detailed analysis on the results of case study 2, where usability and usefulness of the framework was considered and thus jointly partly fulfil objective (vi) as well as contributing to the fulfilling objective (v).

Chapter 8 completes objective (i) as it discusses the theoretical underpinnings of the research. A theoretically informed critique for the framework partly fulfils (vii). Chapter 9 completes objectives (vi) and (vii) by discussing the framework use and concludes with suggestion for future research. The chain of activities allowed the research project to unfold as a research process followed a pattern of the research design of mixed methods MM research. Chapters starting from 1 to 9, the last, are built on the research process hinged on fulfilling objectives as shown in the Table 9.1 on page 321.

Table 9.1 How objectives were fulfilled

No.	Study objectives	How was fulfilled
(i)	Map the proposed research to published literature, and establish its domain in terms of theory, methodology and practice.	The mapping started in Chapter 1, continued in Chapter 2 and completed in Chapter 8. In Chapter 1 relevant concepts are introduced. In the literature review (Chapter 2) relevant concepts are expanded and in the theoretical critique (Chapter 8) a subset of the theoretical constructs are further analysed to describe how they underpin the proposed framework
(ii)	Establish existing practices with regard to value creation and associated strategies.	Existing practices are described briefly in Chapter 1, developed further in Chapter 2 and fulfilled in Chapter 4.
(iii)	Ascertain practitioners and academics views as to best practices and ideal practices.	Case Study 1 (chapter 4)
(iv)	Based on the foregoing, create a conceptual framework that captures the main drivers of creating value in line with the aim of this research.	Development of conceptual framework (Chapter 4)
(v)	Expose the conceptual framework to critique and broaden; adjust appropriately according to the new findings.	Case Study 2 – the conceptual framework was exposed and critiqued and some adjustment was made in Chapter 5
(vi)	Demonstrate that the new framework is usable and useful, and that its creation provides a contribution to knowledge.	Case Study 2 provided rich findings about the perceived usability and usefulness of the framework (Chapter 6 – qualitative data analysis, and Chapter 7 – quantitative data analysis)
(vii)	Critically evaluate the completed research and suggest further research.	Three theoretic constructs introduced in Chapter 2 were developed further in Chapter 8 and related to the development of the conceptual framework. The objective was completed through the evaluation presented in Chapter 9.

9.6.2 Implications for knowledge-driven organisation

Knowledge-driven organisations are passing through turbulent times, giving way to innovation amid complexity (Stacey 2010: 172–178; Andriani 2011: 459–465). Consequently, many policies that are in operation need to be revamped to make them feasible. The locus of understanding can be inferred through the use of the framework to invoke informed decisions as a plausible use of scientific tools that are user-friendly guides (Pfeffer and Sutton 2006: 167; Butler, Heavin and O'Donovan 2009: 220; Tsoukas 2010: 380–382).

Nevertheless, decision-makers will have legitimate claims due to confident support from credible evidence; the evidence may offer clear reasons for the causes of actions necessary to accomplish missions (Marr 2010: 202–205; Nutt 2010c: 492–496). Needless to say, the framework offers in metaphor, a lens for both decision-makers knowledge workers to use to see where in the organisation involvement, and support and timely intervention is needed.

According to P38 [*'the global exposure; a challenge'*] in an elaboration, *elders … need to provide … a guide on how people should benefit.* Whilst, challenges are plenty, P21 [731-735] says, leaders need [$^{6\text{-}10}$*humility and understanding*] as crucial elements for the formulation and implementation of good policies. The framework, nevertheless, as a lens offers an opportunity to rethink, use knowledge and technology and act with prudence, to rectify and formulate appropriate policies to guide attitude which foster competitiveness.

9.6.3 Scope and limitations

The scope of the study was due to tasks and activities carried out to accomplish the project aim and set objectives. The study was designed to carry data collection in two venues; Tanzania as case study 1 to develop the conceptual framework, and from the UK and Tanzania in case study 2 to critique the conceptual framework; involving few organisations. Such a limiting factor caused by the timeframe, resource constraints and study design. As a future remedy, development of a web application to support the framework may widen its use. However, the study's strength comes from the profile of the participants comprising knowledge workers with experience holding unique responsibilities in their institutions (Table 5.3 page 193).

9.6.4 Recommendations

Whilst this is a small single study, it has attributes that underpin positively aspects that require immediate attention. This has to include attitude change from decision makers that will allow actionable activities that use the framework in the organisations to deploy intangibles for value creation. For instance, studies conducted by Martin (2008: 399–403), Heron and Reason (2008: 370–376), Friedman and Rogers (2008: 252–258), Coady and Khan (2011) offer relevant insights. The framework offers perspectives that link organisational levels for joint efforts; whilst in levels from individuals and organisation to the global, with reflective actions in creativity and innovation (Conway and Steward 2009: 261; Puccio and Cabra 2010: 155–165).

The expectation is that strands shown are initiatives in:

(i) Exploring opportunities by involving knowledge workers at all levels, because their contribution is at stake in the successful organisation.

(ii) Making opportunities into profitable action that are shared throughout the organisation.

(iii) Involvement to rekindle the zeal for challenging tasks which might lead to initiatives that make breakthroughs in creativity and innovation.

(iv) Framework usefulness, for instance, 'emotional capital' has elements like policies, organisational cultures, management styles, regulations and laws, emotional intelligence. They keep the organisation intact, yet require review, reformulation, and amendment to suit circumstances and challenges of the web environment in enhancing value creation.

(v) The framework offers keen yet a refresh thinking which embraces the use of intangibles in the context of web environment. It offers ways to identify develop and turn them into resources for organisational consumption. Such understanding, if put into action will bring success.

9.7 Unique aspects of the study

Whilst each research project has their distinct aspect that makes it unique, this particular study oriented itself to develop the framework and it is interdisciplinary and cross-border. It is interdisciplinary, due to embracing qualitative and also quantitative, a mixed methods design. The qualitative part used grounded theory in data analysis (Charmaz 2006: 57–59); whilst

quantitative used descriptive analysis for validity and reliability. The study interdisciplinary nature includes the emotional capital theme which draws strands from psychological discipline. Proactive environment, endless global connectivity and its 'off-shoots' of 'web-forum' and 'social-nets' take the study to the digital environment. The study embraced mixed methods that allow plausibility and clarity in the framework construct. The cross-border aspect comes from data collection and face-to-face interviews on participants' in Tanzania (case study 1) and UK (case study 2) and Tanzania again. This allowed the developed framework to be grounded in the reality of the existing practices; with a tone of web presence underpinnings, in the 'endless global connectivity.' The theme signifies importance of the internet connectivity, which allows people and organisations to interact locally and globally.

Data gathering was from multiple sources to form converging evidence, an effort to enhance understanding; a triangulation approach that reveals existing practices, rules, emotions, beliefs, values as social reality (Maxwell and Mitapalli 2010: 156). For instance, when participants, P1 [155-160] says *Avoid blame culture; foster positiveness to problem solving.* Otherwise it impedes proactive initiatives and stalls innovation and creativity. Similarly, P48 [1204-1208] says *in context see what is best; don't lose it.* P48 exhorts an acceptance of change with prudence that upholds and cherish what is best. Such claims underpin epistemology and pragmatism of the study, as a search for truth (Heron and Reason 2008: 376–377; Fielding and Fielding 2008: 560).

9.7.1 Originality

Whilst the originality of study stems from its nature of addressing individual at the global level (Figure 5.2 page 197), the framework calls for the need to address the value creation strategies more broadly. Such a specific notion helps to underpin existing practices and challenges. Whatever form of value creation strategies that are being formulated within the knowledge-driven organisation, they have to look for rights of individual knowledge workers, whilst embracing technological changes. A proactive environment calls for a culture of fostering learning and the renewal of capabilities; learning to develop ideas as intangibles that can be released to the global market.

The theme emotional capital which embraces governing instruments like the policies, rules, regulations, organisational culture and laws acts as booster to the value creation process when it encourages a positive working atmosphere, although a barrier if policies are odd. Endless global connectivity, with its two off-shoots in the form of web-forums and social-nets makes awareness of the ethos found in the organisation in relation to the others in the globe obvious, through, for example, the facebook and twitter. These perceptions bring continuous change and anxiety. The study underscores the need for the organisation to keep recognising that, continuous learning and flexibility to change through knowledge sharing as one of vital aspects to success. Eventually, themes and features of the framework give answers to research questions that meant to underpin intangibles use in practices of creating value.

9.7.2 Contribution to knowledge

The study has attributes that arguably contribute to knowledge, for instance:

(i) As a cross-border research undertaken in Tanzania then critiqued in UK and Tanzania and divulges views that transcend borders.

(ii) It gives a clue to the vital emerging role of the knowledge worker in value creation amid high interaction and global interconnectivity.

(iii) The study underpins where knowledge sharing should be both as tacit and explicit in workplace settings; requiring unshakable trust.

(iv) It portrays the dynamic nature of networking in value creation process.

(v) The study shows clarity of interaction links to value creation processes.

Insights from complexities due to individuals merging roles in participation to 'unleash creativity and commitment' and unfold the vision of the organisation, add value (Senge *et al.* 2008: 324–333). The commitment enmeshed in cultural backgrounds, be psychological, economical or political, create tensions and contradictions are challenges of change in the digital environment. The attributes from the study results and analysis show the validity and reliability as part of the framework which form a contribution to knowledge. The scrutiny for intellectual aspects and skills repertoire which is explained by Bromley, Boran and Myddelton (2007: 133), similar to what Oliver (2004: 22) portrays, a need to be reflective and sense of our surroundings anew. It is an attempt to awaken and view anew, the web

presence whilst creating value; as contribution to knowledge. For instance, participant P38 [1019-1021] says, *You know, the global nature has exposed everything, but that is also a challenge to elders; that you need to provide a sort of a guide on how people should benefit.* The framework offers a practical approach to guide on sharing innovative ideas, synthesising them for value creation process in organisation; a refreshing attempt, on how to create value in this era of web presence. In the web environment individuals as knowledge workers synthesise ideas through workplace learning (Fook and Askeland 2007; Moustaghfir 2009: 348–352; Magnier-Watanabe, Benton and Senoo 2011: 22–27) and codify tacit knowledge into organisational knowledge as shown in the framework 'individual global perspective.' Whilst workplace interaction whilst linked to proactive environment, into practising knowledge sharing, codifying tacit knowledge into explicit knowledge, and storing as organisational knowledge; giving the reason for the portal. The framework offers a pragmatic approach in identifying intangibles by tapping ideas from the knowledge flow and turning them into knowledge that enables knowledge workers to create value.

9.7.3 Future works

Whilst concluding the study, a notion of a closure comes to mind; putting forward an urgent need for action research as future, an ex–post research works. Foremost is to use the framework, ensuring that the ideas expounded in Chapter 9.4 from 9.4.1 to 9.4.7 are taken and depending on the context. The

right choice for action as a project will depend on the availability of support. Knowledge workers of different ages and tastes create new challenges amidst technological capabilities, leading to restlessness, intolerance and anxiety (Rustin 2007: 159). Whilst embarking on ventures that explore options that work better; the framework offers alternatives, by viewing the bigger picture of unfolding global opportunities. Such options raise imagination to a level that inculcates an understanding of the prevailing virtual landscapes; releasing peoples' innate potentials for development; begin possibly, an action research to leverage and create value in the web environment to open opportunities.

The web environment has, to an extent, choked the best minds with unlimited possibilities of ideas. Such contention, for instance, calls for caution in how one reacts and carries out scientific inquiries on value creation strategies. It is very good practice to validate the scientific studies, however, the recent upsurge of intangibles usage, web presence, and instant-timely responses being flouted globally, exert new challenges and awareness of web presence.
The challenges call for an urgency and critical sense to policy and strategy formulation. Though, good strategies can unlock and unleash potentials needed for vitality of value creation in the organisation. The study gave a framework that requires each knowledge worker to be articulate, and realistic. A future research will use the framework to help organisation search for plausible strategies. There is much to learn from the ground; whilst listening to rediscover plausible ways to create value in the web of endless connectivity.

9.8 Summary

This last chapter highlights vital landmarks in the research project, policy implications that need managerial attention, and knowledge workers' awareness of what works and what does not in the given workplace settings. The recommendations from the study are explicitly based on research findings aimed at persons whose open mindedness might help them try to comprehend the new emerging realities. It is all about people, the challenges and solutions based on yesterday's realities that keep on bringing new challenges.

Technological breakthroughs have opened up enormous new avenues of opportunities; whilst opening organisations up to threats that were ignored some decades ago. The framework shows social nets being linked to the individual commitment along with emotional capital, workplace interaction and value creation process. With such trends, the social nets are being used in the web environment to influence peoples' perceptions. Whatever options that seem feasible to address the complexity of knowledge-driven organisation and the surrounding issues; it requires a closer look at the knowledge workers to elicit plausible solutions to challenges. Thus, Chapter 9 concludes the study, fulfilling objectives (vi) and (vii) and suggesting how the framework can be used practically. Through the completion of all the objectives in the course of this study, the research aim is fulfilled. Hopefully, the developed framework will be a useful tool to help organisations develop practices that enhance value creation process in the new context of endless global connectivity.

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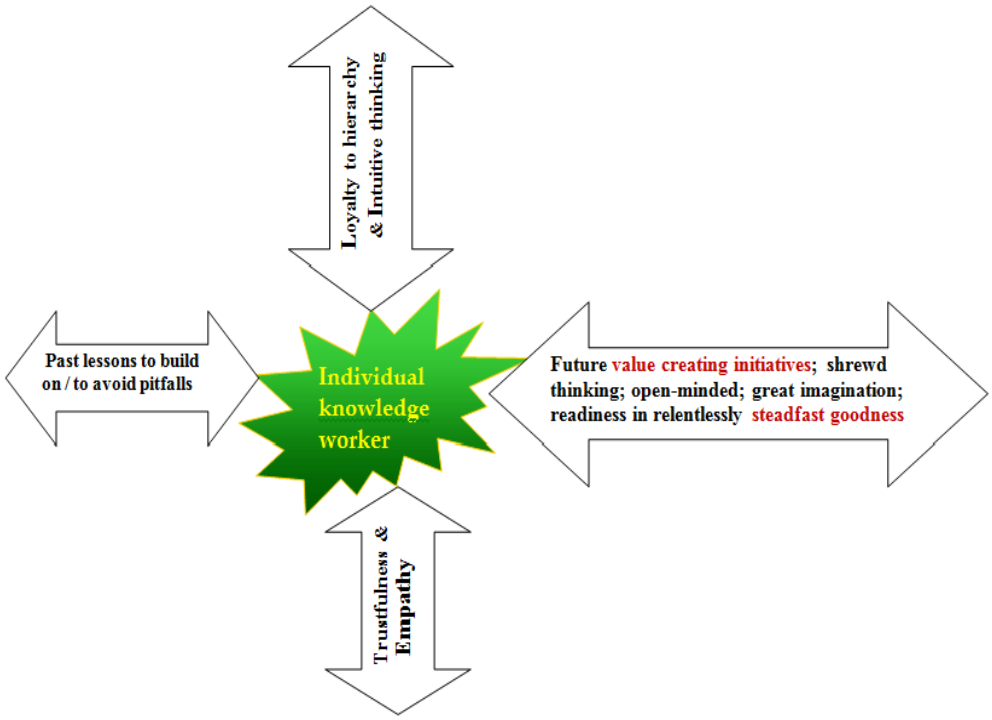
Appendices

Case study 1

Individual knowledge worker Appendix A



Key: Loyalty; intuition; open – mindedness; readness; imagination
Trust; empathy; shrewd thinking; steadfast goodness
IKW___ Individual Knowledge Worker;

Accountability of individual actions to authorities/hierarchies/public

Double sided arrow depicts inescapable 'vision–current reality tension' that one has to overcome

IKW

Explosion symbol; metaphorically denotes individual knowledge worker, 'IKW,' complexities, capabilities, uniqueness & simplicity.

Responsible IKW: Individual knowledge worker

Memos in Case Study 1 Appendix B

The Narrow Wisdom [July 13, 2009]

Interviewee 10 suggests that persons with 'narrow wisdom' if they are in the management tend to cling on power and justify their actions regardless of the consequences. This idea of 'narrow wisdom' sparked a reflection to the existing challenges of working in a more globalised world. Does this idea as said and put forward resemble the same thing as thinking and acting without encompassing the bigger picture of the evolving business environment? Is this the right thinking for this particular era? When trying to speculate to learn more about this narrow wisdom. As a response a further light comes from the same person. He portrays working outside the country for the country for more than 5 years and in different organisations in the country for more than 5 years. Inhere; issues of experience and ways of seeing how other people conduct businesses in larger cities are crucial to underpin understanding.

Change seems to happen on balancing effects of issues that carry business forward. Alternatively, attempt to look at each word separately gives for 'narrow' words from thesaurus like *confine, contract, constrict, get smaller, restrict, limit* …, while the wisdom using online thesaurus one gets; *understanding, knowledge, perception, intelligence, acumen, good judgment, judiciousness, prudence, good sense, etc.* Combining the two words together 'narrow wisdom,' interesting results emerge like '*confined understanding,' 'restricted prudence,' 'limited intelligence,'* with many combination possible

out of such range of words, but all of them show a certain limitation or restrictions. Does it mean that, the narrow wisdom as related to how the organisation is being run? Meaning the lack of encompassing big picture of issues, opportunities and threats internally and externally affecting individuals at the workplace in the organisation? Interviewee 7 gave a response with a clue. He suggests that failure to recognise one's ability and contribution to the organisation deprive ones capabilities and chances of creating value.

The individual commitment one has at the workplace, may be hampered by notion of narrow wisdom that can be attributed to cultural and other traditional ways of running organisation not compatible in this evolving era of web interconnectivity. Interviewee 1 suggests a remedy for such issues to be continuous in-house training on organisation behaviour so as to be abreast with new development elsewhere in the world. Organisation which keeps on learning is able to clear the hurdles of that nature from hampering individual knowledge workers from realising their aspirations, to find the workplace fulfilling and positively rewarding. If the narrow wisdom is replaced with great wisdom, the workplace may always be a place of recharging one's enthusiasm levels towards good knowledgeable activities. It is such a notion that gives good thinking that delivers in abundance the unlocked potentials from knowledge workers for value creation.

Challenges to Leadership in 21st Century [March 20, 2009]

The leadership in the organisation has the challenges of nurturing and has to look for possible pathfinders among the existing knowledge workers. The role of these will be to explore new avenues from which new opportunities lie. The potentials found in the organisations, coupled with ingenuity of the workers can enable the leverage of efforts that are likely to build new services and products in line with goals and objectives of the firm. It may be possible to have variety of qualified and well to do knowledge workers, but to have those who can shoulder the glories of success and blame of failures unflinchingly, is not an easy attribute to spot. It may be seen that apart from charisma and other good traits, this flexible capability is not easily seen. Equally, taking risk is one of attribute that need resilience to possess. It may be said, it comes with years of experience, and partly a relentlessness innate abilities in a person.

Whilst tumultuous waves of change, whirlwind of economical downturns hit organisations, seeing a bigger picture of the organisation future, is a rare leadership gift. For an organisation needs to go and perform well in the market, but how to chat its way in the slippery arena and remain sound and safe, by itself requires a dynamic capability. Nevertheless, the challenges for CEOs and the entire management team lie on how to mobilise and utilise experience, existing knowledge and ingenuity of the knowledge workers as vital creators of value for competitiveness. It requires concerted efforts to win.

Pinpointing pathfinders is not an easy issue. It needs patience and more in-depth views of the organisational future position. With technological revolution, changing market behaviours to various tastes of services and products, higher learning organisations have the ultimate role of further updating of knowledge and awareness in the society. However, it is rather a daunting task to locate the right pathfinders of knowledge creation and innovation. For the constraints ailing individuals and organisations include financial muscles to boost Universities and other higher learning to achieve goals of mentoring glamorous graduates, researchers and to offer deliverables that underpin themes emerging in the contemporary digital economy.

Whilst abound with opportunities and capabilities, integrating recipe of all repertoire of technologies and their novelties in the society with multicultural values and diverse views to fit is a daunting challenge. The aspirations of knowledgeable individuals are the challenges of leaders in the first decades of 21st century. Knowledge workers in the Universities and higher learning institutions have their working practices being project oriented, as Connell (2006: 11) states are in tasks deadlines. Such experience of work and being intertwined with web based type of life, brew new thinking on the level that leadership ethos of last centuries with its rigour and competitiveness do not match well together. These knowledge workers using the web based technologies, especially, the social–nets and web–forums, are capable of harnessing variety of latest information and digest in a fastest way possible.

Innate potentials [October 22, 2008]

Through many thoughts whilst looking at the data collected, the conviction emerging is that, after all the question to ask one–self is simple. How do we assist individuals with endowed gifts of talents of knowledge to open them to be used in the organisation and for the benefit of our society? Knowledge workers have endowed gifts. The gifts are naturally in their minds. As an aged long saying goes that, 'the person is gifted or naturally talented.' These gifts or talents cannot in mechanistic ways be opened. You force them by rules and policy to open, instead they completely hide. There is no easy way for managers to spot and nurture talents of knowledge workers under them. Again, it has been observed that organisational policies some of them are rigid and mechanistic in nature and do not have options and flexibility for voluntary opening or give opportunities for someone to open or unravel ones dreams easily. This is vague but its irony is likely to be an obvious blockage to carrier path that looks obscured from one's dream to rise in future in the occupation.

In worse situation, if there is someone with dreams of future novels plans or issues, if by chance is being spotted, the person may be played down or emotionally harassed. It is said to be one of the reason for knowledge workers major labour turnovers, it is a negative intrinsic motivation. The more a person is skilled and of high learning, one has to be in control to, manage, nurture one's emotional intelligence, (Goleman, 1996; Ariely, 2008; Gladwell, 2008) in challenging situations; take every opportunity to ethically unravel the

innate gifts. The gifts are intangibles that organisations in our days yearn earnestly for them. The innate gifts, we may call them untapped skills, which amount to hidden potentials, alternatively, hidden or masked by one's intentions, to be realised whenever right opportunities and support evolve.

In such stance, one may reflect also the role of cultural capital, as it affects to a greater extent than seen, the individual capability and effectiveness to create value. Some culture enhances advancement on personal levels while fanning the growth in a wider circle. Instances of these can be related with those cultures explored by Hofstede (2001) on PDI (*Power Distance Index*) as rooted to family and clan ties. Such backgrounds create fertile social spaces on which perceptions of persons change individual commitment can be seen to incline with a wider purpose largely incorporated in social communities apart from organisational policies and occupational demands. Critically, the contention stands low in a serious scrutiny due the fast interactions, interconnectivity of the internet and cable television. The instant exchanges of messages and information, which is being experienced globally, have impact on personal perceptions. Whilst information sharing surge in volume, the mindsets change is in actual effect changing. This can be visualised in real terms to produce a profound impact in other areas as real spontaneous effects.

Organisational settings [February 20, 2009]

In recent times, organisational settings have experienced diverse issues that need to be reckoned as bridges and barricades to efforts of positive process of value creation. Political, economical and cultural overtones have high impact on people's mindsets. Instances of these may include organisational politics that sometimes may brew bitter differences and unnecessary in–fights for reigns of power in the organisation. Knowledge workers who are onlookers may grumble but as long as they are not in the chain of power and command, their grumblings may only be a tolling of emotional levels. These emotional levels have high impact on the value creation process as they distort efforts of individuals towards thinking and focus on knowledgeable tasks. In a micro level the emotional disturbances tend to deflect the energy levels of a knowledge worker mindset that is crucial to various roles as per timeframes needed to accomplish various tasks.

In a way, such instances increase pressures and stress to the knowledge workers with which, in their absence tasks with higher qualities could have been realised. It is so as negative emotions are likely to affect confidence, commitment, trust and hopes of individuals. If the leaders who are responsible cannot rectify promptly, slowly quality of services or products may gradually wan unnoticed. Intrinsic motivation which can be directly linked with recognition is vital in value creation process. It has to be reckoned that knowledge workers have feelings and sensitivities to various issues due to

skills and reflective experiences they possess. Ignoring such premise is to underplay the role of expertise many of knowledge workers possess. Due to such issues it is possible for a knowledge worker to be working but at a very low enthusiasm levels to the extent of only fulfilling the official duties. But the same individual when given right support and recognition is likely to act differently with glamorous results. Some current policies that govern human resources issues do not have objective tools to underpin such attitudes to arrest them before much harm is done to the organisational wellbeing.

Shrewd leaders can spot such behaviours and attitudes in their followers and act timely to arrest situations from spilling over to wider circles of the organisation. But it is rather daunting undertaking, for sometimes such leaders may be in the categories that lack enough power and vivid evidences of breach of good practices that can allow them to openly dissent and take a decisive actions to arrest situations. These maladies, when found in the organisation erode creativity and enthusiasms of individual knowledge worker on realising their value creation potentials. It is not easy to fix such maladies for they usually hid behind excuses.When knowledge workers are motivated, they can do wonders. But when workers are de-motivated they are slow to deliver whatever tasks. If seen, it amount to silent protest, but other individuals when they reach this stage they quietly but in protest, quit the organisation in search of other green pastures. Dealing with such issues sometimes need a serious organisational intervention to arrest causes of misgivings that if are not dealt

with urgently, can likely undermine value creation. It is worth noting that organising thoughts need a reflection and a settled mind. While such issues are not easily seen, studies on psychological issues have insights that are rich, and keep informing us that these tendencies are truly part of human nature, which require psychological encounters to alleviate and root out sources that ebb individual potentials off the knowledgeable activities that require innovation and creative mindsets thinking.

Lessons from interviewees nos. 7 and 10 pinpoint crucial impediments that are maladies in the organisation and can be attributed on a lack of 'willingness to change' exhibited by those persons that hold the reigns of power in the organisation. Leaders in the organisation wield enormous power over individuals under them which affect their wellbeing and that of the organisation. It may be surmised that due to political choice from either the government machineries with policies that one way or another affects organisational hierarchies. In a way, those who possess power in the organisation having full knowledge of its ramifications, are likely to use it tactfully to ensure they cling to power in whatsoever ways, come what may! Such tendencies lead these leaders sometimes to care least about the subordinates plights or woes. Despite grumblings and demands from peers, the power mongers may in smart ways lure the sympathy of powerful rulers by objecting the voices and forces of dissenting knowledge workers as mere laziness or jealousy as alibis or infatuations fit to thwart and rebut claims that

are genuine. Such types of power struggles in the organisation are much hidden sometimes, but disastrous to value creation efforts to implement strategic plan in the organisation. It is not easy to break the forces that are binding or behind the unwillingness to change. The forward looking themes and moves can be seen but unless checked with shrewd minds and incisive eyes for the right direction, the tendencies and voices of the powerful can cling to suppress the dissenting voices and be seen as the genuine voices, but at hindsight silently killing aspirations and initiatives that are the future hope to healthy and robust competitive options for the organisation.

The organisation has to take into consideration the rapid changes occurring in the global arena. New innovations, technologies and ways of approaching work is being taking turns and twists that makes everyone to be in the categories of lifelong learning to cope. Instance at global level include the basic windows being used in the desktop in the working place. The changes that have occurred in the recent times are tremendous. In workplace when PCs are still being used with Microsoft Office 2003, suddenly new innovation came around using Microsoft Office 2007. In the meantime the Microsoft plans to release Microsoft 2010 at the beginning of year 2010. This entails the need for the changing workplace learning behaviour in order to cope. Such rapid changes need great wisdom for individual commitment to pay off.

Excerpts of transcribed interviews Case study 1 Appendix C

1, 2, 5, 7 & 10

Interviewee 1:

Firstly… AB, the issue of understanding is for management to understand us as higher learning institute ... comprised of staff and students; you can see the management at AB fail to realise that their instructors have certain potentialities. This is why for an issue which could have been done readily using internal resources at low cost instead management tend to hire outside resources. By using external resources AB incur more cost. This is a problem which can be linked to issues of motivation in the organisation. Understanding – management failure to understand staff as an important resource. Motivation is lacking. Workers resort to do only the assigned responsibilities. Most of the staffs are not motivated but keep staying at AB due to flexible working hours. People perform their work at AB without much care due to low recognition accorded to whatever one is doing.

In terms of capabilities do you think that if there is enough motivation lecturers have the capabilities needed to deliver results? One reason is that people are not involved and thus they do only the minimum to meet the deadlines. Outside, AB's Lecturers deliver up to standard and they are being called back again, but internally they are not much involved only do the main core duties, one remain with his or her ideas. Remedy for many of the

malaises at AB can be possible if there are to be open, openness, prompt internal communication. Management has to consider its working attitude. The subordinates are human beings, the subordinates are potentials, the subordinates are everything to the organization. But if you don't realise their contributions... forget about it! *Okay...okay... Do you ...what can I say ... do they give out even an opinion of how to remedy the situation to come into a normal way.* They...the only solution is the management should be **open** should **communicate** and should **cooperate** ... and should inform everything on time. *When we talk to the management here, AB, what do you say? When it comes to management team, head of departments are not part of them but directors are* ... ; ... first thing according to me it is a management, is a management male driven. … management male driven. According to me....well it is a management … which is not suitable for the current ...todate, how can you have only male as leaders? ... Why don't they want to be challenged? Why they are not keeping any women in there? Or even a single woman in there, why?

Interviewee 2

The delaying of communication brews grievances. The knowledge of the organisation when people join in is vital. When a person joins; … needs to know. **Orientation package.** To make someone know how do one go from a point A to B in the Organisation. Without communication, to fill the void of no communication, then the corridor will be so fertile with rumour mongers

and versions will be there. These in the long run can be infecting the organization with sentiments of doom. *Is it possible to get the best practices out of what is in disoriented now?* **We need to have a charter defining our activities.** We need a time limit for a checklist to enable new recruit to join in and be a part of the place.

Interviewee 5

Cultural background is sometimes a source of low understanding. The loud mouthed people are to be dealt–with. …, Management is not gender sensitive. There is a need to change, since things go unchecked and bring untold problems. To put in place regulations; those which allow people to talk freely as long as they adhere to norms and policies of the organization. There is a need for a sense of belonging to employees.

Interviewee 7

What can we do to have best practices? Systems of networking for us, work environment are not encouraging everybody to come up with the full potentials, to be full real person. People should fully be involved in the working to be involved in the working environment; it is about the linking people together in a more amicably. *What are the impediments:* In my personal view it is not a big deal. ----Organizational culture of AB … there is no system that has a way of fully recognizing individual contribution. Nobody recognizes you as you are somebody. Your existence is not taken as someone

who joins the organization to add value. Outside … AB staffs are adding value. Too much centralization is hampering people from giving out their best. It is a problem which needs to be sorted out.

Interviewee 10

I have observed at AB it is completely different, here may be due to culture. People are rigid, don't want to change, and don't want to understand. Don't' care for the customer satisfaction. The reason is, as they are working under the Government they know nothing is going to shake them; but it is not good where technology is ignored, environment is completely ignored. If you try to convince something, they look at you as a trouble maker. Understanding!...At AB no understanding at all. They don't care about satisfaction of others. They don't care about the faculty members' requirements, students' needs. This is a big barrier; a drawback where there is no willingness to change. *How do we create a platform for sharing change?* Change is not easy; they are not prepared to change. If they have survived so far then they don't ready. May be due to culture of this area; people are not ready to change their attitude. Willingness to accept change if is lacking; it makes a big problem to others. Those who are working at bigger cities are ready always to be flexible for change. Leaders are confined themselves to their 'narrow wisdom' Grumblings will not help due to that the workers have no authority and power. In other Institutions of higher learning, there are a lot of forums to help people air their views that depict their aspirations.

AB Students 'Future knowledge workers' Appendix D

A look at existing practices in the knowledge driven firms

Please you are kindly asked to complete the questionnaire

All ethical issues pertaining to this research have been strictly observed in order to safeguard the respondent

Please, tick what is most appropriate choice to you for each of the statement

No.	**AB Portal Effectiveness in/as**	Very useful	Somewhat useful	Neither useful nor unhelpful	Somewhat unhelpful	Very unhelpful
1.	Enhancing pre-requisite knowledge					
2.	Supplementing textbook readings					
3.	Support understanding of concepts from class					
4.	Confirm understanding of lecture notes					
5.	Makes lecture notes readily available					
6.	Communicate direct to specific course lecturer					
7.	Confirm timetabling and activity scheduling					
8.	Convenient assignments issuance					
9.	Virtual experience in learning					
10.	A remarkable working platform					
11.	Enable stream of knowledge flow					
12.	Enhance computing skills					
	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
13.	Navigation language and links clear					
14.	Information is easy to find					
15.	Website pages are easy to read					
16.	Website continuously updated					
17.	Features are attractive and captivating					

	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
18.	The AB Website has all features for learning					
19.	I need new features on AB Website					
20.	The portal is remarkable					
21.	The portal has all materials I need					
22.	Educative features in the portal are distinct					
23.	The portal is easily accessible					
24.	The virtual learning in the portal is helpful					
25.	I cannot do my study without the portal					
26.	When I used the portal I can readily share notes with my friends					
27.	There is an easy flow of information using the portal					
29.	The updating of learning materials is always done					
30.	I can tell my friends that AB portal is best					
31.	The AB portal contribute new knowledge features					
32.	Using the portal I have networked with others					
33.	The help desk response is adequate					
34.	The use of portal has enhanced my IT skills					
35.	Active working group in the portal is possible					

In the list of statements of practices given below, please assign a number 1, 2, 3..., on the right column according to the rank you place on each in the higher learning environment at present. You may add other practices on the given blank spaces.

1.	Having a formal agenda (*schedule of goals and topics*) for each class session.	
2.	Incorporating group discussion activities as part of each class session.	
3.	Giving students an opportunity to revise assignments before a final grade is given	
4.	Providing examples of 'superior' exam answers, 'excellent' projects and 'A' papers.	
5.	Promptly reviewing homework, exams, assignments, etc	
6.	Asking for and acting upon student suggestions for improving the course	
7.	Carefully explaining course goals, expectations grading and ground rules at the beginning of the course	
8.	Collecting student feedback on a regular basis to determine what was learned, what was confusing, etc.	
9.	Helping students prepare for exams by offering special study sessions	
10.	Giving lectures that are clear and well organised	

I am a student of AB in _____(programme, eg. ADA II or ADIT III)

Male / Female _____

Sponsored by (*please on 1, 2, 3 tick the most appropriate to you)*
1. Loan Board _____ 2. Ministry of Finance_____

3. Private_____ 4. Any other _____

Thank you very much for completing this questionnaire

AB Staff **Appendix E**

A look at existing practices in the knowledge driven firms

Please, you are kindly asked to give assistance in getting the information for a study, through filling this questionnaire

All ethical issues pertaining to this research have been strictly observed in order to safeguard the respondent

A. Please tick the best option of your choice in regard to each given statement

S.No.	**Statement**	Strongly agree	agree	Neutral	Disagree	Strongly disagree
1.	In AB workplace interaction is adequate					
2.	High relationships of togetherness at AB					
3.	AB ICT facilitate knowledge sharing					
4.	Dialogue at AB is encouraged / facilitated					
	Statement 'At AB'	Very Satisfactory	Satisfactory	Neutral	Unsatisfactory	Very Unsatisfactory
5.	Technologies enable learning transfer					
6.	Capabilities are from knowledge based activities, skills, etc					
7.	Knowledge sharing technologies are plenty					
	Statement 'At AB'	Strongly agree	agree	Neutral	Disagree	Strongly disagree
8.	Workers are free to prioritize learning areas					
9.	Formulating strategies and policies is shared					
10.	Organizational core values are clear					
11.	Organization mission statement is clear to all					
12.	Organization Vision is inspiring; well known					
13.	The portal possess a technological updates					
14.	AB website has attractive features and links					
15.	Knowledge sharing enrich firm's dynamic capabilities					

	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
16.	I am proudly working for AB future success					
17.	Willing to work harder for AB to succeed					
18.	I will refuse a higher pay job offer in order to stay at AB					
19.	The type of work I do make me proud					
20.	AB's goals and values are attractive					
21.	I have a high hope of AB successful future					
22.	At AB my works are highly acknowledged					
23.	Intrinsic motivation is abundant at AB					
24.	To me commitment; an AB's intangible asset					
25.	Intellectual trust is an AB's intangible asset					
26.	Voluntary cooperation highly practiced at AB					
27.	Innovation at work is easily done at AB					
28.	I see high sense of responsibility at work					
29.	I need new features on AB Website					
30.	The portal enable knowledge acquisition					
31.	The AB portal is remarkable					
32.	I can put in the portal all materials I need					
33.	Educative features in the portal are distinct					
34.	The portal is easily accessible					

	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
35.	The portal offer virtual learning opportunity					
36.	I cannot do teaching without using the portal					
37.	Using the portal I readily share notes					
38.	Easy knowledge flow is done through the portal					
39.	I can always update all learning materials					
40.	I am proud of AB portal to my comrades					
41.	The AB portal has knowledge features					
42.	The portal makes networking easy					
43.	The help desk response is readily adequate					
44.	The use of portal has enhanced my IT skills					
45.	Active working group in the portal is possible					
46.	I work more hard when using the AB portal					
47.	The AB Website has all features for learning					
48.	Virtual learning is enhanced at AB					
49.	I have enhanced my skills at this workplace					
50.	I have a profound sense of belonging to AB					
51.	Research works very encouraged at AB					
52.	Intellectual indignation at AB is absent					
53.	At AB there is high intellectual recognition					

	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
54.	Personal growth highly encouraged at AB					
55.	Unleashing my best potentials at AB likely					
56.	Initiatives to add value; encouraged at AB					
57.	AB academic life environment exemplary					
58.	Gender balance found in all levels at AB					
59.	Management at AB fan personal growth					
60.	Capturing workers aspirations enhance value					

B. How much are you concerned with the given notion as a driver of change within this workplace in enhancing value? *(Please circle the most related number on each item on a scale from 1 to 10, with 10 being most applicable response);*

Understanding	1	2	3	4	5	6	7	8	9	10
Intrinsic Motivation	1	2	3	4	5	6	7	8	9	10
Extrinsic Motivation	1	2	3	4	5	6	7	8	9	10
Commitment	1	2	3	4	5	6	7	8	9	10
Confidence	1	2	3	4	5	6	7	8	9	10
Hope	1	2	3	4	5	6	7	8	9	10
Affiliation	1	2	3	4	5	6	7	8	9	10
Collaboration	1	2	3	4	5	6	7	8	9	10
Reputation	1	2	3	4	5	6	7	8	9	10
Technological Updates	1	2	3	4	5	6	7	8	9	10
Environment ‘fitness’	1	2	3	4	5	6	7	8	9	10
Organizational resources	1	2	3	4	5	6	7	8	9	10
Knowledge as a resource	1	2	3	4	5	6	7	8	9	10
Intellectual trust; a resource	1	2	3	4	5	6	7	8	9	10

C. Understanding of a Teaching Practice

These are among 'Best Teaching Practices;' In consideration of AB learning environment, please rank them to your choice on the right column provided. You may add what you think as other best practice on a given blank space.

No.	Statements	
1.	Having a formal agenda (*schedule of goals and topics*) for each class session.	
2.	Incorporating group discussion activities as part of each class session.	
3.	Giving students an opportunity to revise assignments before a final grade is given	
4.	Providing examples of 'superior' exam answers, 'excellent' projects and 'A' papers.	
5.	Promptly reviewing and returning homeworks, assignments, exams, etc	
6.	Asking for and acting upon student suggestions for improving the course	
7.	Carefully explaining course goals, expectations grading and ground rules at the beginning of the course	
8.	Collecting student feedback on a regular basis to determine what was learned, what was confusing, etc.	
9.	Helping students prepare for exams by offering special study sessions	
10.	Giving lectures that are clear and well organised for every topic over the semester	

Please, in the given list of questions below answer all according to your choice.

1. The length of service in this organization others of similar _____years
2. Your age range 25 – 35; 36 – 45; 46 – 55; 56 above (please circle the appropriate)
3. Gender male/female _____

Thank you very much for filling this Questionnaire

A look at existing practices in the knowledge driven firms

Please, you are kindly asked to give assistance in supplying information for this study, through filling the questionnaire

All ethical issues pertaining to this research have been strictly observed in order to safeguard the respondent

A. Please tick the best option of your choice in regard to each given statement

S.No.	**Statement**	Strongly agree	agree	Neutral	Disagree	Strongly disagree
61.	In my workplace interaction is adequate					
62.	Firm's ICT facilitate knowledge sharing					
63.	Dialogue at work is encouraged / facilitated					
	Statement 'At Workplace'	Very Satisfactory	Satisfactory	Neutral	Unsatisfactory	Very Unsatisfactory
64.	Technologies enable learning transfer					
65.	Capabilities are from knowledge based activities					
66.	Knowledge sharing technologies are plenty					
	Statement 'At our workplace'	Strongly agree	agree	Neutral	Disagree	Strongly disagree
67.	Workers are free to prioritize their learning areas					
68.	Formulating strategies and policies is shared					
69.	Organizational core values are clear					
70.	Organization mission statement is clear to all					
71.	Organization's Vision inspiring; well known					
72.	Knowledge sharing enrich firm's dynamic capabilities					
73.	I am proudly working for Firm' future success					
74.	My Firm's goals and values are attractive					
75.	Intrinsic motivation is abundant at my Workplace					
	Statement	Strongly agree	agree	Neutral	Disagree	Strongly disagree
76.	To me commitment is					

	our intangible asset					
77.	Intellectual trust is our other intangible asset					
78.	Voluntary cooperation practiced at my Workplace					
79.	The help desk response is readily adequate					
80.	Intellectual indignation at Workplace is absent					
81.	At work there is high intellectual recognition					
82.	Personal growth highly encouraged at work					
83.	Gender balance found in all levels at Workplace					
84.	Management at our workplace fan personal growth					
85.	Capturing workers aspirations enhance value					

B. How far are you concerned with the given notion as a strong driver of change in your workplace for enhancing value? *(Please circle the most related number on each item on a scale from 1 to 10, with 10 being most applicable response);*

Understanding	1	2	3	4	5	6	7	8	9	10
Intrinsic Motivation	1	2	3	4	5	6	7	8	9	10
Extrinsic Motivation	1	2	3	4	5	6	7	8	9	10
Commitment	1	2	3	4	5	6	7	8	9	10
Confidence	1	2	3	4	5	6	7	8	9	10
Hope	1	2	3	4	5	6	7	8	9	10
Affiliation	1	2	3	4	5	6	7	8	9	10
Collaboration	1	2	3	4	5	6	7	8	9	10
Reputation	1	2	3	4	5	6	7	8	9	10
Technological Updates	1	2	3	4	5	6	7	8	9	10
Environment ‘fitness’	1	2	3	4	5	6	7	8	9	10
Organizational resources	1	2	3	4	5	6	7	8	9	10
Knowledge as a resource	1	2	3	4	5	6	7	8	9	10
Intellectual trust; a resource	1	2	3	4	5	6	7	8	9	10

C. Understanding of a Lecturing/Instructing Practice

These are among 'Best Lecturing/Instructing Practices;' In consideration of your workplace learning environment, please rank them to your choice on the given right column. You may add what you think to be another best practice on a blank space.

No.	Statements	
11.	Having a formal agenda (*schedule of goals and topics*) for each class session.	
12.	Incorporating group discussion activities as part of each class session.	
13.	Giving students an opportunity to revise assignments before a final grade is given	
14.	Providing examples of 'superior' exam answers, 'excellent' projects and 'A' papers.	
15.	Promptly reviewing and returning homeworks, assignments, exams, etc	
16.	Asking for and acting upon student suggestions for improving the course	
17.	Carefully explaining course goals, expectations grading and ground rules at the beginning of the course	
18.	Collecting student feedback on a regular basis to determine what was learned, what was confusing, etc.	
19.	Helping students prepare for exams by offering special study sessions	
20.	Giving lectures that are clear and well organised for every topic over the semester	

Please, in the given list of questions below answer all according to your choice.

4. The length of service in this organization others _____years
5. Your age range 25 – 35; 36 – 45; 46 – 55; 56 above (please circle the appropriate)*
6. Gender male/female _____
7. *Professor/Senior Lecturer/ Lecturer/ Assistant Lecturer/ Other _____

Thank you very much for filling this Questionnaire

Case study 2

Case study 2 transcripts Appendix G

Case Study 2: Transcribing interviews 'Verbal data into text'

Participant 1 Transcript

Interviewer: Thank you … the first thing I ask ...*What is your role in the organisation*?

Participant 1: My role, is to really, I manage the overseas programmes, that is the main role, I set up, to establish and look for new programmes and manage them, help staff, help colleagues so they can meet to run them.. and maintain them in quality, assure them. So range of things, Yes.

Overseas quality academic delivery

Interviewer: That is very good, so can you ... do you have any simple example about the... [typical duties] yeah

Participant 1: *Typical duties*? So do I do! Well, I attend 'Exam Board' for example, so I go to the exam board, I review the work of the students and the partner colleges, institutions we are working with, I attend the exam board and make sure that all goes according to the way NT expects it to work, that is the typical, that is one of the thing I do.

Involvement in multiple roles of high trust; evaluation

Interviewer prompt: From the...that perspective should I say that it is just like a franchising sort of?

Participant 1: Yeah, they are not really franchises; we don't run any franchise, [it is not] no they are all validated programmes, [only validated programmes eh!] Yeah, yeah, they run by the partner institutions, they are run by the partner institutions and so they run counter programmes, but the relationship is not franchise relationship, is not direct franchising, franchising will have a different....

Validated programmes not franchises

Interviewer prompt: Okay, I mean, of course I know the academics they won't like to go deeper into the way business people are doing, they want to do it in a more academic way; and do you think that they is a anything according to your role anything which is disturbing one way or another the performance which you are in?

Participant 1: My performance? I mean, that is, it is a very difficult question!

Individual performance difficult question

Interviewer prompt: Well you put it in a literal way, whatever way!

Participant 1: My performance, I mean it is so multifaceted; my performance depends on the partner institutions, the colleagues here, the NT University, the way the NT University actually operates, the framework in which the university operates. So, if you have performance indicators such as recruiting students in the partner institution, then that depends not just me, but on alot of different people. [oh yeah, that is it!] Recruitment in the partner institution the way they manage and organise the programme, the NT University promotional programme against with the link with the partner.

Multifaceted role of knowledge worker

Recruiting students

Interviewer prompt: Ooh, in that case it means, the interaction which is going on there, it is one of the issue which's always the complexity of your work?

Participant 1: I think so, yeah, yeah.

Interviewer prompt: And may differ from time to time, according to... because of a...

Participant 1: Differ all the time, depends on the partner that we are working, [ahh] the different partners, different relationships and different ways to operate. I may give you a practical example, the AB [laughter] which you are familiar with is very new partnership, it is only just started, so the way in which needs to be managed, is quite different from say a partner we have been working with for ten, fifteen years. So the other end of the scale we got partners we worked with for twenty years some we worked with for twelve, ten, twelve years. So they are quite different you know, in what is required of, is quite different I think.

New working partnership, different ways to work

Interviewer prompt: Well, well, in that case do you sometimes think of anything which you think they are giving you eeh to anticipate, may be, for example you have given me an example of AB, you anticipate something, that or that anticipation is not there until you see something?

Participant 1: On part of who, sorry?

Interviewer prompt: For example, the ... you having this new collaboration this new partnership with AB, and something which was not before, is something new, [is something quite new] the anticipation do you think you still foresee it as if is a challenge or just something normal, which you think...?

Participant 1: Yeah it is a big challenge, because it is a new market new partnership. I have been not involved with it from the beginning that is the other issue, so I am left off with what other people have started [Ohh] and I think with any sort of enterprise the way you set off determines the on–going relationship I think. So if you set off in the wrong direction is very difficult to turn it round face another direction. Some of our links are about; some are about us supporting the partners academically, some about supporting them in terms of marketing in terms of promotion of the programme some include all of them, some include quality assurances.

Collaborative Links need support

Interviewer: From, I mean, taking from your experience the partnerships you have been doing, dealing with them for sometime do you think that there is something which could have been more as *a better performance* than what you have achieved so far in relation to what you are doing?

Participant 1: I think that is always true is always possible to do better with a turn–site you hopefully you always think you could done better, if you are looking back, so that there is always truism. There is alot of things we could do better [aah aah] and I think some of it is about the way maybe NT supports, I mean internally is a complex system, internally is not just faculty is the University, with other faculties, so you not just got one faculty it is several faculties you are to deal with.

Internal Complexity and workplace dynamics

Interviewer prompt: So it means, when it comes to internally there is alot of interaction one has to unravel alot of complexities which you can be able to...

Participant 1: So our partnerships we deal with other faculties so you got multiple faculties involved, there is always a central unit we have got a quality enhancement unit as part of the process, they do the approval.

Quality enhancement

Interviewer prompt: I am looking at it suppose it is you are having a new person you are going to recruit into accompany you may be you having the

volume is becoming and then you need some hands, handfuls, a couple of handfuls to help you here and there in mentoring do you think you are going to have a story of complexity, what can you describe in a simple way because I am looking the way you are telling me there is alot of complexity coming in and alot of it is interaction.

Participant 1: Yeah, I mean you must know teaching itself is a complex business in fact being in the classroom is complex business, managing that is complex business

Teaching a complex business

Interviewer prompt: In the organisation right now people

Participant 1: You see, I think one of the things you are missing here is about communication really, and information for people, you got knowledge flow but streaming, but actually, interaction, people's interaction becomes hugely important in the way that an organisation operates.

[9]Communicate; people's interaction hugely vital

Interviewer prompt: That is dynamic … issue … when I put dynamic and then inside here the workplace interaction is where I put communication.

...

Participant 1: Just people being able to communicate ... talk to each other about things knowing what is going on. I mean there all work tracks seminars you haven't actually mentioned things like meetings, formal and informal meetings, have you?

Interaction to increase awareness

Interviewer prompt: In the workplace interaction ... of course **...** I'll add there ... I'll remember to put everything there.

Participant 1: Yeah, yeah I think a lot of what goes on in the organisation is actually in the informal level. Although you might have short chefs in the organization, it actually doesn't matter, you know, you people talk about having hierarchical structure whatever, it doesn't really matters, because what matters is how people are given opportunity to interact to improve each other and solve problems what matters is people are given [necessary support].

[12-7]Opportunity to interact, improve; solve problems

Participant 1: You see; one thing about leadership is enabling other people to achieve isn't it? And I think, quite often, certainly in academia leadership, leaders seem to think they ought to be telling other people what to do rather than listening to what need to be done, and that is ehh...

Leadership in academia; enable people to achieve

Interviewer prompt: You can even see the reason why I put the top leadership in a place where leaders need to get more information from others.

....

Participant 1: Are you actually trying to characterise some sort of learning organisation, you call it a knowledge driven, [Yeah] but it is a learning organisation I mean, learning in that, the concept that a learning organisation is one that progresses through learning from itself from people within it from the way it operates.

Learning organisation progress in learning itself as it operates

Interviewer prompt: Yeah with the outside also, because here there is inside, alot from inside and from outside which is so much also, eeh something which was not there some years back, right now we are having, and it means you have to do alot to make us get the fruits of the success of what the organisation has achieved...

.....

Interviewer's prompt: ... When I put the emotional capital there, sometimes some people are disengaged; you talk to them, they accept, but they are not willing to do what you what them to do.

Participant 1: ... That is right, but also I think this idea you carry on conventional wisdom, so you do one thing, and a lot of people just follow that along... but you know, maybe that is not always the case, may be an organisation has to learn through reviewing all opportunities,

Organization can learn through reviewing all opportunities

Interviewer's explanation: And even to rejuvenate itself that way, that is why I was saying the capabilities have to be rejuvenated; the organisation has to look at individuals because the pattern of individual in relation to the organisation and the global perspective... nowadays people are having a lot information alot of know – how with them, how do you expect them? ... it means you have to be careful with their perceptions... because to underpin that complexity is not so easy... that is why I decided to put it that way...

Participant 1: It seem like a model that might explain something

Interviewer's prompt: Yeah; do you think there is a story I can be able to tell that from here this is our existing way... let's find a best way to practice our things so that we can deliver value; that is my picture which I am trying to say.

Participant 1: You see, yeah, yeah I can see what you are trying to say, I end up disputing some stuffs, proactive environment, you know proactive means, allowing people to get on and do things, [Yeah] this is technological support really, proactive environment will be one way you don't have blame culture so people are actually positive about doing things so if you see an issue need to be resolved, you go and resolve it, knowing that you will get some support from the organisation [that is it, that is it!]. And I think the opposite of that is where people don't do things they say aw not my personal –for me to resolve, and that is usually right because you have a management structure which is based on a blame so if something goes wrong even though you try honestly to resolve the problem because you haven't been told to do it you get blame for it. So proactive, I don't think that is a best description of a proactive environment. [Ohoo] I wouldn't call, I wouldn't use the words proactive environment, I don't know what you mean by that you see..

[4-9]Avoid blame culture; foster positiveness to problem solving

Management structure should be beyond blame

Words 'Proactive environment' not fit for current environment

Interviewer's prompt: Well, I was saying as if something which need to be always nurtured to in order to be, to be active.

Participant 1: Yeah, you know I think there something about management styles, and the other is about I mean, motivation you said that, but see I wouldn't, generally, I don't know about where you come from, your organisation, but generally, recognition which you said earlier on, most people in education are reasonably well paid, so Maslow, you know Maslow hierarchy, [yeah, yeah] you know most of the lower levels are covered you are not looking for food and clothing and whatever, so motivation in education is not about offering people an extra twenty quid here and there, is actually about self esteem I think. [That's true, that's true]. Yeah, and I am not sure, and I

Self-esteem a great motivation to knowledge workers

think that's true to a much knowledge; knowledge organizations exist in societies' which groups where most of the basic needs are met, I think.

Knowledge organization exists in societies where basic needs are met

Interviewer's prompt: That's why in my case, my model I didn't put anything about monetary issue, because of that I was, there's a bell which was ringing in my head – that no no no if you put it you'll bring problems then I was trying to avoid, trying to show that people want to achieve something self–esteem, the way you are saying and that self–esteem is where some...

Participant 1: You have put down in recognition I think, awards and prizes. I mean awards; I don't know whether these are financial awards. Prizes, you see in education people are motivated by being able to attend conferences, by being able to publish papers, by being recognised getting prizes for good teaching or whatever....

Conference attendance and publications motivate knowledge workers

Interviewer's prompt: ...market approach... the existing practices changing into business way it doesn't fit, ...

Participant 1: You have a model. The problem with your model is that you don't have standards against which knowledge

Standards against knowledge

Interviewer's prompt: It is not easy with current complexity...

Participant 1: How do you measure his experience? I don't know whether you have seen Google Model how they operate.

Measure experience! see how Google operates

….

The transcript for Participant 2

Interviewer: Can you give me a simple detail of what you are doing?

Participant 2: … For example, if we take web presence it hasn't changed for some years design of the website, marketing international office extra extras. It was ongoing developing the website, providing the structure for other people to deliver to all these players

Create enabling environment: web presence for people to deliver

Interviewer prompt: If you reflect back what you have done where you could have done better than now, when there is no sense we do not collaboration.

Participant 2: Reality is the higher education in UK. We do collaborate where it make sense. Technology never solves problems, quite often technology is additional costs which never helps.

Collaborate sensibly

Interviewer prompt: ... IBM was not listening and it lost its glamour...dynamism if is going to stop, the momentum will stop, and right now Higher education is in competition, I don't know, your views will help me to get the picture.

Participant 2: The reality is that Higher Education, certainly in UK is in competition with each other, for resources, money and for students. Ok, ah

Collaborate compete where it make sense

now we do collaborate where it makes sense as you know as all businesses collaborate when it make sense, [yeah, yeah] but we probably don't view it as collective as being in competition, but we are. [Laughter] Okay. We want better quality students, we want more of them more than anyone else, because that means our organisation has enough finance to survive, grow and prosper. We are in competition for research works, we are in competition for consultancy works, we are in competition for other forms of funding domains. Aah, again, where it makes sense we collaborate, when there is no collaboration there is the other side which is competition, and it may not be an on and out competition, it might just be, aah you know, for example, my colleagues at AK, you know, they probably don't view as if we are in competition with us because they are quite higher in the league tables, they are well funded 1960s university. Right, but we do collaborate; we got huge low carbon projects... a number of large projects with them. But why they collaborate with us? Well, it is comfortable, for they don't feel threatened by us.

Competition for research works; consultancy and funding

Survival, growth and prosperity vital despite competition

Collaborate where there is no threat

Interviewer prompt: Oh yeah, yeah so it is easier if you saying someone who is administrative you can even work with him.

Participant 2: That's right, they do work with RM we are on the same league as they are. But that tends to be much, it tends to be a different way of another form of collaboration, for example the regional development agency puts in alot of money 50 odd million pounds to try to get them to collaborate together and more, ok; so and of course if you put money in, anything happens. [Yeah, yeah, yeah]. Ahh, so it is always interesting as to how this competition – collaboration works, is never clean, is never clean in a business sense. But it is definitely never clean in University sense, of course, you can have corporate relationships, you know, institution to institution, but clearly alot of universities relationships are much, much lower down can be individual member of staff to individual member of staff and those who exist even if the two them see themselves in direct competition see the two institutions see

Types of partnerships, support academically/ marketing/ promotion /quality assurance

Collaboration – competition in universities; tricky relations

Relationships in universities are mostly on levels of individual members

themselves feel they are in competition it can with each other. But a department to department and those will still exist down to individual level cannot work together

Participant 2: In conducting research ... the reality was they didn't have mental capacity or the capability or the desire to do the research, okay, [okay, okay] or they were frightened to take ...you know because doing the research actually exposes you. [Yeah, if there is any weakness it will be seen]. Is seen is not hidden is not like in the classroom closed doors you can deliver worst lecture in the world, usually students won't complain if is acceptable, and you walk out and can think you have done a good job. You are, you do a consultancy or you do a piece of research or you do funded research, or you publish an article – journal, then your value is questioned! [Yeah that's true, that's true, that's true]. And you got to be able to get criticisms. ... [such as] ... or this has been done fifteen times before or whatever is, this is doesn't make sense! Ok, there is nowhere to hide. [yeah yeah]. Right, you know, you can't prove yourself into believing you have done a good job.

Research exposes individual capability

[1-9]Individual value is questioned, being put into critique

Interviewer's prompt: It has to be a good job or not.... there is something you mentioned even the desire .....it makes me remember someone saying sometimes some other people are not willing; they may talk as if they are willing but in actual sense they are not willing. How do we cultivate that or for example in your experience how do you cultivate people to have desire to do those things and even the willingness to deliver?

Participant 2: Well, some of it has to be about culture, the internal culture so there is an expectation people will do research. Just giving people time to do research doesn't necessarily mean that they will end up doing it. [Or that is true]. Note, it can be research, note, it can be good quality teaching or can be anything, right. Peer pressure in an organization is often much more powerful than any money can did it.

Internal culture vital for research

Peer pressure more powerful than money in research culture

Interviewer's response: Oh really?

Participant 2: Yes, **...** we started applied research... to change, there is alot of cynicisms going on ... alot of doubt whether we can change, ... alot cynicisms has not been one. It is always so difficult [to work effectively] when you find yourself in such sort of complex environment.

Cynicisms create difficult complex working environment

Interviewer's prompt: ... But do you hope that there is a way which we can be able to go about that cynicism?

Participant 2: Well you go with classic managerial theory you work with people who want to do it. ... and you try to take more people on board.

....

Interviewer's prompt: In terms of technology, the lifecycle of these technologies expire so fast... nobody has done anything, do you experience such things?

Participant 2: You know, technology never solves problems really and quite often technology is an additional cost which doesn't return any investment. But sometimes you end up having to do it like the managing learning environment or virtual learning environment ... technology in higher education has never really solved all the problems they were supposed to solve. Simply because it is people's business.

Technology hasn't delivered as per expectation in virtual environment;

Technology in higher education hasn't solve much simply people's business

... ...

Interviewer's prompt for a final thought: Thank you as a final thought, what advice do you give me in regard to my research?

Participant 2: When I first came here, NT University was a sleepy little university, there was a vice chancellor ... he wasn't dynamic, he was very was very conservative individual, he wouldn't take risk, in my mind he didn't want to create publicity. Actually, NT formed around his conservatism; You know, new Vice Chancellor came … is a dynamic [person] ...ambitious, … strategic, … very insightful, completely opposite and want to take university to the next level, whatever next level is; but you know, you can do that and we have done that in the past five years we are completely different University we don't quote publicity. ... A leader who is insightful, dynamic. We are better known,

A momentum: dynamic, strategic, ambitious,

insightful forward looking

recognised as having sector leading practices. You know; having that dynamic leadership that is making the difference setting the tone makes change in higher education. The strategic dynamic leadership, this sets the tone.

[12]Strategic, dynamic leadership set organisation tone

Transcript for Participant 3: Insights from instructor …research supervisor
Interviewer prompt: Can you describe ... an example one of what you are practicing?
Participant 3: Teaching real time programming 'concurrent systems' is quite interesting and difficult subject. So, I try to think of good examples for students, asking student to think of big issues. ...in the class I ask students to think about the applications of real time systems and asking them to describe a system and afterwards do a design implementation of a particular system.

Nurture competences with real time systems

Interviewer: It needs you to do a lot of quick – matching to cope so that you can always keep the interesting things.
Participant 3: Yes
Interviewer prompt: ... Do you think you have anything ... a factor in–there which is sometimes disturbing you in your practice?
Participant 3: For example? Can you give me an example?
Interviewer prompt: ... for example when saying you are teaching, ... supervision not only masters but even PhDs and I know in that way even the undergraduates you are supervising them. Then do you think that there is any factor in there which is sometimes disturbing you in what you are doing or is everything okay? It may be disturbing you by making you do more or disturbing you from doing much?
Participant 3: No, no I think is just applying the knowledge, yeah, I mean we are doing research, I mean, all the time, so teaching is one likely to deliver, to deliver your idea in teaching. Right, so sometimes I mean is a two way communication as well, I mean, students will come with ideas, then afterwards you find it useful... you say alright, okay, why not extend this idea, you know, it can be an approach, it can be a suggestion, you know, because when you are teaching higher level like final years, masters or supervising PhDs students; …I mean students come with interesting ideas. That is very useful, not only from textbooks. I mean, we read books we read articles, but this form of methods of communication I think it is useful. [yeah] What do you think? [yeah] Because student is not there just to wait for answers, or something, I mean, we are, you know we are sharing the knowledge.

Open interaction motivates knowledge sharing

Learn, think real time applications; create mini proactive environment

Interviewer prompt: Just interaction, [yes] continuous interaction
Participant 3: Just that's why I find teaching this type of module is interesting because students have to think about real time applications of their choice and analyse and present the work.

Interesting for free thinking on real time application

Interviewer prompt: So you have mentioned something it is interesting because of being interesting it can at least make you some – kind of inner drive ... it motivates to keep on
Participant 3: Motivation!!

Real time application raises

Interviewer prompt: It motivates you to keep on ... why people are not delivering ... for example I may like myself each year to produce a paper, but I can't, what is the problem while everything is available?

Participant 3: Yeah, yes yeah. ... For me I suppose working in a group you can't to work alone... I recommend the workplace interaction, but at the end of the day it depends on individual. Workplace interaction I strongly recommend. How about interaction with other experts outside the working area?

Workplace interaction motivates individual to deliver

…

Participant 4: Professional

Interviewer prompt: I was reflecting ... involvement, you involve people on whatever you have been doing and then you listen from them and then you learn and from learning you improve.... in your settings... is there somewhere with all sometimes the lows ... things which are not very up to your expectations but ... somewhere ... a best practice we can be able to do it?

Participant 4: Yeah, I think the GN as a Faculty has a lot of best practice that can offer to the rest of University. ... I honestly believe we do things a lot better ... the way we organise ourselves ... the way we deliver to students, in number of new initiatives ... we employ students... from different levels, ... provide ... valuable experience once they graduate they can take to an employer....

We organise better through new initiatives

Interviewer prompt: ...You will let me know whether it is true, the involvement; you involve people and then you learn from them and they learn from you ... kind of interaction going on... improvement ... getting some feedback, this works, this doesn't work, is that the case?

Trust glue workplace actions

Participant 4: Yes it is ... students employment initiative is good example of that, because when was first introduced there was some resistance to employing students ... for whole range of different reasons... people think.. take ... the job away ... academic staffs.... security risks ...on students' record system. ...You have to treat your staff with degree of trust but also have systems in place that if they can't be trusted if they betray that trust then they get penalised. ... completely new perspectives on student experiences... I understand the student problem for I had the same problem last year. Can explain better to the permanent staff the circumstances surrounding the problem. …

Students employment; initiative create interaction and trust

[2-8]Students' employment aid understanding of their problems

…

Interviewer: ... In order to for to make the best of anything it means you have to involve those who are...

Participant 5: You do, feedback from students from what they say, and what their views are ...there is no easy answer. ... it is multidimensional ... it is always changing, it is always evolving….

Students' feedbacks multidimensional

Changing all the time. But as you react to that so you have to change very dynamic and interesting. Everything changes and we will never be stable we are in chaos. [Due to] expectations of the society and employers. Political [value drivers those which are coming from outside ... ...]

Dynamic expectations from society, employers; create chaos

We try to anticipate what is to come next. You got to take some risk. Try to know what is happening before it happens. ..

Take risk to be competitive

....

Interviewer: Do you have any ... high or low to the expectation of what you are doing?

Participant 6: Well, like when you work in a team work ...but if there is sort of visibility of work within team you have to be extra careful because team shouldn't lag ... behind because of you. It is like ... in a team there is sort of peer pressure as well ... on promise what to deliver... We plan our work according to those deliverables milestones.

Team work requires transparency; puts peer-pressure

Interviewer: Can you say that there was a time when you had better performance ... in the range of deliverables?

Participant 6: Well ... because in our deliverables what we have delivered is specifically defined that what you have to do for this time period as well. So because the specification in everything is defined, [yeah] what you need is or what people need is there defined; if you do more than that is meaningless. So if you do whatever is necessary or whatever is like promised in term of your research if you sort of getting more knowledge that's better that's is like I have done deliverables and I have done a lot of readings in various areas as well; that's sort of self satisfaction so you get more confidence and get more knowledge ... in term of delivering them we have to ... deliver we have to take of care of quality, so whatever you deliver is up to quality.

5-9 Specifications for deliverables trigger confidence and due care to

Good deliverables nurture confidence

Interviewer: When you talk about quality now ... you give a research which is a breakthrough ... this is a best practice you are thinking of?

Participant 6: ... In my understanding, if you are working in a team, communication is most important thing so and to be aware of what other people are doing and other people should be aware of what you are doing. So is like, sort of constant interaction with people that sort of motivate you as well and then you discuss things with them is like product you share knowledge and share knowledge basically result in a more sort of product work it leads you to more innovation.

5-12-3 Constant interaction as knowledge sharing leads to innovation

... …

Interviewer prompt: [No video was recorded]

Participant 7: ['Industry' BCD] **...** From the **s**olid pool of analysts e.g marketing analytics pool of executives. You are to ensure that whatever you produce has to add value to the portfolio.

2-11 Produce what add value to portfolio

... ...

Interviewer: Do you have what we can say better performances ... from the better performance ... gear up something to get the best 'performance' even make an ideal of it just like a role model? Can you look on those scenarios see where you can pinpoint better and best performances?

Participant 8: ...I think, I always reflect if you look at it there is always an element ... this was the time frame... what would have made it an excellent performance could I have made it cheaper, could I have made it quicker you could people jumping around and say wow you have done it. But in another

2-9, 11 Time frame performance; was work done with heart.

way it can be bad because it can demotivate you in a way, you did it ... but that it can be it can be a negative or positive. Passion about, challenged is not done with the heart, is exciting me

... ...

Interviewer: ... Your advice as a final part of doing this, your advice!

Participant 9: Get incentives right in the organization and you have cracked it, [oh really!] that's my view. We do that in engineering; after all, control systems, the feedback that the system gets; is what controls it. If you get that feedback wrong it goes wrong. Get that feedback right, it works; ... you reward the right things the organization marches in the right direction, you reward the wrong things ... and eventually, as I have said earlier, the reward becomes the acclaim of the organization itself; the ultimate reward round you, is your colleagues thinks well of you; ... but the real reward is that, somebody comes ... you are the person whose opinion they trust, that's your feedback reward...

Innovative incentives will work wonders

2-11Ultimate reward; sincere feedback; accolade to have opinion they trust

Participant 10 transcripts

Interviewer prompt: What factors affect you most in your roles?

Too much to do

Participant 10: When I see other professors I do How do you do that, to be possible at everything…

Solving research problem an opportunity

Solving the research problem is not a problem, but I see it as an opportunity

Less worry, and can concentrate on work

Participant 10: That is fine, so I think to be honest, value creation process, [It is range of many], To be honest, know it is not easy, but what is interesting really, what is interesting really, how can we come up with a framework that can preserve individual value, and this individual value, okay, the thing is valuable, that can contribute to the corporate, the corporation value as well, you know the organisation value, how can I, your agenda is not like mine. Merging the individual dreams is the challenge!

Preserving individual value!

1-10Aligning: merging individual dreams contribute to corporate value

… …

Participant 11 transcripts

Interviewer: What is your role in the organization?

Participant 11: I work for Co. Known as **LN.net**, a technical Company based in Telford, essentially host servers, and they also offer asp desktop services, my role in that is to build new customer environment.

Interviewer: Can you give me your particular duties? Just, a single part of it?

Participant 11: Configure routers; install networks, build services...

Interviewer prompt: Yeah building services ... How do you go trying to prepare them? Are they giving you the requirements and then you build according to their requirements, or you prepare something and sell to them..?

Participant 11: At the start of the process we do technical review**,** which looks how they currently working, what systems are in play and also how they are working in terms of whether all their services are centralised on their servers or whether they are distributed in individual PCs; so is partly hardware based review and also partly software / services based review so we get good idea about how they are currently working, and from that we then start improvement.

5--6Clients' based services

Interviewer prompt: In terms of you, who are the players who make that things to happen **...** how many... are you in big number in ... department you working in?

Participant 11: No as a company we are only about probably between 30 or 40 people [*Oh really*] but in revenue terms we're over 6 million a year ... which again we find that particular business model seem to assist us because we need few people to support a very high number of people, I think we have something in the region of probably 10,000 users of our products

5-6snLean business models

Interviewer prompt: So it is just like lean model for the lean solutions, you get many customers but you are using few people.

Participant 11: That is it; I think we have around 10,000 people; perhaps little less than 10,000 customers or individual users who use our products for different things may be e-mails may be others entire desktops...we can supply..

5-6web products to many clients

Interviewer prompt: What about these search engines like Google ..., how do you use them in your organization? Do you use them?

Participant 11: Oh Google?

Interviewer prompt: Google and everything because they are normal.

Participant 11: We use that as a technical resource [laughter!]

Interviewer prompt: As technical resource?

Participant 11: Definitely! Yeah, yeah, if our support team, and if they ever come across a new problem in our system, we use Google for that; because Google is an excellent index if you like, of a whole hosts of technical resources; whether ... a number of major technical forums are indexed very well by Google, so you can type in a particular error message and Google will find a forum or a resource which has the answer to that. So Google is made useful ... lot.

[6]Google an excellent technical resource

[6]Technical forums are indexed

Vignette of Participants Transcript 12

Interviewer: What is your role in this organization?

Participant 12: I am a programme manager ...in this institution the programme manager role is the one where knowledge is an important part ... in how the organization runs.

Interviewer prompt: Can you give me a typical duty in one of them?

Participant 12: I ensure that the smooth of the day today running of the University ... making and ensuring the activities I am doing so fulfil the institutional requirements of the University.

Interviewer prompt: What factors help you to underpin all these workings to ensure you having a real performance?

Participant 12: Right, I tend to work by setting goals and producing performance matters for myself ...

Interviewer prompt: Some kind of personal critique eeh?

Participant 12: Yeah, it is a personal operational methodology, which is to know what I have to achieve, make sure that is appropriate by checking with my bosses and then being able then to validate by seeing what actual performance was, so for instance I have to present all of the students marks at the end of the year...that sort of things.

[2-10]Validating oneself for good performance

Interviewer prompt: You have any simple example ... which even you go to sleep you still remember it?

Participant 12: Yes, both things are true, I am very efficient and I use a lot of technology to help me... I'm sort of permanently on Google – mail I have to tasks' list that email me to remind me....

Interviewer prompt: '...can you see or mention few best practices?

Participant 12: 'best practice I believe, I have seen in operation ... is about two way communications up and down the communication line, between management and staff and that decisions made are negotiated to a certain extent, but the outcome of those negotiations are clear set of actions. ... so most conflicts and most poor practice occurs when you have two parties who have different expectations they think they are expecting the same thing they are interpreting the two different things differently; so they are talking about the same words, but they are saying them completely differently when two parties good practice is… gain common understanding about what is the issue.

Good practice communicate common understanding

.....

Interviewer prompt: This is good practice Can you go to the higher level going to the best possible... where you can say there is somewhere where you can say come and learn a best practice from us?

Participant 12: '... I actually I think we have a problem in this Institution of whilst we wish to know about best practices, we are not good at sharing.... which is not good ... two things happen (i) it is my role to report it and I'm pretty busy (ii) the people I would want to report to they are pretty busy (iii) there is no kind of time given or any venue for that to happen; ... so people stay quiet which is sad ... because when you want to know have to go digging ... while we wish about sharing good practice

[4]Everyone is pretty busy no time to share

….

Vignette of Participant 13 transcript

Interviewer prompt: …you are in a constrained environment … how do you manage to have a better performance for yourself and others who depend on you?

Participant 13: …you look for opportunity … try to be proactive … so you need to be able to build rapport, because the work I do is not only depends on me you, it depends on other people also, … [ah, in that way you remind me now that in the organisation the better performance will come through high rapport with your peers and whoever even if they on top or down…] and seniors and juniors, because, you see, **you are as strong as your weakest link**, so even if you have great ideas … someone suppose to execute them, if they do not accept it; it is no longer great … you have to be more pragmatic and practical. …. [On emotional intelligence] So in managing difficult situation; just be nice to somebody, and it will diffuse a lot of things…. In everything you do, you need wisdom; you need to be able to use, you know, all your available skills to ensure that you get what you want to be done.

Build rapport with peers

[4-11]High rapport to all

Use wisdom and skills for success

…It matters how the organisation treats me. … [as human being] you want to be valued and … that your efforts will be rewarded either tangible or intangible. You have to have confidence in your colleagues and in your management.

…

Vignettes of Participants: 14, 15, 16 and 17 interviews

Participant 14: … you need to unpack the bureaucracy within the University … considering decisions are being taken [only few individuals at the top] without consultation, and you being told to do things which you know they cannot work….we need to maintain the mutual respect to each other …to always cultivate the mutual trust.. ….

Unpack bureaucracy

Unless you manage this way, you will not be able to pull out; you will not be able to enhance the momentum… the big thing to me is how an organisation if you like has to manage the match the two models; it needs a lot of more explicit perhaps about the environment and management style… in context if you look at it wholly in the education field I think you get a specific picture because our business is knowledge enhancement … but that makes it quite interesting; what is the realistic efforts to manage knowledge in order to

[5-11]Wholly Educational field

enhance deliverables to the organisation in an organisation whose business is about creating and disseminating knowledge; I think that is a case of its own in a way compared with ordinary business organisation.

…

Participant 15: … if you want to improve my performance … I need to improve my team, but the labour laws are too strongly supporting individuals to the extent of impairing working dynamics… how will you illustrate human frailty in the organisation...

[2-10] Labour laws too strong

…

Participant 16: … the trouble with many organisations is change of mindset of people have to have energy to keep on changing … the individuals everyone … is knowing the people … is looking inwardly …we are losing opportunity of sharing experience … a person who make people love to do things, with ethos in – inspirational bits to help people; be aware of bad apple in a group, and at the same time an inspirational leader at the top strategic leadership; the mindsets change is important [in how to make good natured] people…[matured mentally]

Mindsets change vital

… it is about getting people who realise true value of teamwork where everybody is valued as a member of the team whether they are highly or lowly paid; …. the people who are the driving force behind organising a lot of things… are in fact are the cleaners… but they are the integral part of the team …. and are valued by every member of the team …

Hidden driving force

… my word of wisdom is that never underestimate the power of one individual either for good or bad in the organisation.

…

Participant 17: … it is about how to find a better way to make students learn… it depends on the nature you are doing in the organisation, sometimes you may be doing type of a work which even if you go; the work will keep waiting for you, but whilst for others when they go for holiday someone will take over, .

Work keeps waiting for you

…

Vignette of Participant 18 interview

Interviewer: What is role in the organization which you are in?

Participant 18: Right, my role is, firstly I provide second line technical PC an audio visual system technical support, [... in NHS] and also, I also do application web system development, so that are two [work] aspects of mine.

Interviewer prompt: "In that way**...** how do you think that what you're doing affects your performance one way or another in that organization?

Participant 18: Ahh, How what I do affect my performance?

Interviewer: "yeah, your performance as such ...for example ... putting a system that when others use it can be satisfied with whatever they are doing ... it means there is a change coming all the time, how does it affects your performance?"

Participant 18: Largely is, I have to study **...** how to put these things together but also is largely it sorts influence on what the clients want ... is like a two way process I have to work with them to find out ... and going through once, you know it is iterative once you do it once you learn how things, how you did there and what you can do to improve on the next time ... and gradually you get better at over time, ... that is a theory anyway.

Renewing skills and competence

Interviewer prompt: Because there is a lot of change in IT how does it affect you in the way you are planning and in the way you think you are delivering whatever you're planning?

Participant 18: You do have to keep up with the latest of technologies and how the sorts of trends, the way the systems develop ... what sorts of systems they are available ... and that can influence the product that you can decide to design I mean with sort of the web systems I design, you know, you got multiple technologies for say developing the underlying sort of programming codes you got ... a database services over – there ... that influences the sort of features you can incorporate in your products, when you come round to designing the number of things you can do with it expands.

6-5Initiatives to create web products

650 ....
651 **Interviewer prompt:** In that case then does it mean that sometimes you
652 having a performance which you think is better and sometimes you are
653 surpassing the better performance or you don't have those criteria ... there?
654 **Participant 18:** ahh I think there is always the fact you can look back how
655 you did something there and say what was wrong with it and you can develop
656 and improve on it there is always that it can either be through learning to do
657 things better yourself or it is because technology has got something in it; an
658 additional feature or whatever that allows you to do it; but I mean sometimes
659 if the additional feature is there it actually makes easier on me to do something
660 better rather than looking at and say well how can I, you know, with sort of
661 underlying programme and coming with your own; is having with it and you
662 can improve on it look that it has to do with…

Improve, improve for better products

663 **Interviewer prompt:** It means whatever you are trying to design and deliver
664 is to support the training they are doing there?
665 **Participant 18:** Ultimately yes.
666 **Interviewer prompt:** the deliverables for higher learning will ... sometimes
667 there is emotional capital coming in due to laws and regulations; some of them
668 may be boosting; some of them may act as barricade to you.... if they make
669 sense in any way to you?
670 **Participant 18:** Yes, I mean, just looking at the individual components, I
671 think, yeah, individuals; you do update and renew your skills and with that in
672 order to build better and improve products ... I suppose there is actual sense of
673 sort of duty and pride with actual products you build. …

[11]Update and renewing skills

674 ….
675 **Vignettes of Participants: 19, 20, 21, 22 and 23 interviews**
676 **Interviewer prompt: …**Critical sense of everything which is being done, it
677 means you are not supposed …if you skip [anything in a to e]… that will be a
678 very [big] loop hole, is that what you are trying to tell me?

679 **Participant 19: …** Well, more or less, but… if you create anything nowadays,
680 anything piece of software, or anything piece of hardware or anything that
681 allow your communication and connectivity, you can't create without
682 considering security. That is the mistake which has been made in the past. ..
683 …Technology by itself is not bad, but everything that can be compromised
684 can be used by an attacker.
685 …You need to put in place strong education to users to enable them to be
686 more careful [of protocols for safety and to adhere] and [use available
687 periodically sent precautions]….
688 …
689 **Interviewer prompt:** …you are developing someone to have [his/her] own
690 independent mind, is that what you are putting it?
691 **Participant 20:** That is right, I think so … the English education is trying to
692 get students to do. They assume you get the facts, they are trying to get you
693 interpret. … we need more time; more interchange … makes quite a difference
694 [perspectives with people of different cultures to understand each other].
695 **…**
696 **Interviewer prompt: …** the range is big… how do you carry the whole lot
697 successfully?
698 **Participant 21:** 'There so many answers to such question; I have particular
699 approach to life which is about people working together ... create an
700 environment and framework within which they can operate most effectively;
701 … it is about communication role; it is about trying to put message across …
702 having coherent and logical reasons why we take a particular approach; it
703 about setting an agenda,… it is about debating those things before we cast
704 them into stone,… but there should be certain things we believe in quality of
705 education to our students..
706 **Interviewer: ...** what do you think affect most of your performance so far?
707 **Participant 21:** numbers of hours in the day; not as effectively as necessary
708 communicating with the staff; … to be able to communicate effectively.

Beware of security compromise

Learn to interpret facts

Set agenda cast them into stone

709 The standard practice is pretty poor is out of date; the British education
710 system, higher education system ... is still persisting [in the past practices]…
711 now… what we failed to capitalise on is the ability of students to learn from
712 each other from themselves and from industry … We need to develop a
713 community of learning, ... we just need to recognise that the teacher is the real
714 important element to the whole process, but is not the whole process …

Develop community of learning

715 ….
716 We want them to solve real problems, complex problems from day one, the
717 idea that student arrive without; when they try to solve them they see that they
718 need mathematics and other analytical skills to solve, developing professional
719 skills, ….Giving them [students] reasons for wanting to learn things…

Vital analytical skills

720 …
721 Even in war, if you have an inspirational leader, people will follow, if you
722 have an inspirational thought that can be communicated, people will follow…I
723 don't think in most organisations most people are not inspirational leaders; …
724 they are very rare people, very rare, … they have charisma, they have a feel
725 that make people want to be with them and work with them, sometimes they
726 are very difficult people … I am thinking about in this country Winston
727 Churchill was probably inspirational… sometimes it is difficult to separate
728 myths and reality so I don't know where the picture is; people like that,
729 Nelson Mandela is an inspirational charismatic, natural leader; quite … he
730 doesn't sound like a leader, … but has peace and calm about him which
731 persuade people … to follow him… I think therefore, it is important to people
732 in organisations to accept that probably they are not going to be the great
733 leader they think they want to be, they have to have a bit of humility about it,
734 they have to have a bit of understanding that they can't do everything, they
735 can't persuade people to do everything, but what they can do is have an
736 absolute conviction in their ideas and thoughts and then try to communicate
737 that; if you believe in something, then you can try to communicate it, if you

Inspirational leadership with charisma

Humility and understanding

don't believe in it, then it is never going to work in my view, you can force it you can push it you can threat, but you can never make it a success.

…

Participant 22: (No video recording) … thinking ahead rather than responding to events may give opportunities to points to ways of unlocking the potentials as part of the game. … You have to have a positive outlook with an investment upfront in people in order to harness their knowledge potentials.

Unlock, harness potentials

…

Participant 23: …Not every student is the same; so some of them doesn't really interest are not worried about having the skills … they learn things that can allow them to pass the assessment, … for those students passing the assessment is the driver, they learn so that can pass the assessment.

Beware; Learning only to pass exams!

…

Participant 24 Vignette of the transcript

Interviewer: What is your role in the organization?

Participant 24: Yes, I am head of department, built environment. Do you want more than that?

Interviewer: Of course, as a head of department what are your typical duties?

Participant 24: Sorry, typical duties, I am a line manager for 25 academic members of staff; I loosely manage their work(s), I specifically manage their inputs to our taught courses; and I set them objectives for their work including research; I manage the relationship between the department and the faculty and the dean and associate deans; and I do quite a lot of work in linking department to professional and external as well; so managing staff and managing links between department and the outside world.

[10]Line manager: manage create linkages internally and externally

Interviewer prompt: 'Although the way you put it**...** someone may look at it as if is very simple... when you say loosely managing the staff and specifically, and again linking the outside world as part of your work, I know is very big, can you give me just a simple example for they are many of them?

Participant 24: The reason I say loosely is that, academic staff aren't supervised in their work tightly; there are set objectives and they understand what are got to achieve to progress their carrier and to raise the profile of the department; but I don't manage the work of individual member's of staff at very close level other than their inputs to the course that's completely specified; they are module leader lectures for certain number of modules and their time spent lecturing is managed and balanced so that is managing precisely and the rest of it is about developing the department and the people.

Academic staffs aren't supervised tightly

Time on lecturing is managed

Interviewer: What factors affect your performance in your role?

Participant 24: '... factors relating to our course portfolio ... to answer this question in any context ... it got quite a lot to do with my experience in the profession I suppose, my understanding of managing a department and what academics do and how courses in higher education are organised. [affect my performance?]... I guess the relationship I have with staff and department is very important. ... Okay, how I understand the University's expectations of the department is very important as well... the resources am allowed to carry out my job... number of staff, physical resources, the access to teaching rooms and all that sorts of things that affect my performance ... because the course needs resources to be delivered successfully; my performance in managing the department activities is very closely related to the quality of resources that are made available to me; aahm the ... of course, I am set objectives, so the objectives I am set and the encouragement I am given by the Dean and the Vice Chancellor I suppose; aahm affect my performance! External expectations, for example, for the last few years, courses offered [by our department] have been popular with applicants ... [okay] and that has been a good thing obviously, as we are in a growing market, we don't have to be feeling insecure about students number on the courses; so I think that has quite got to do with it, we are in a period of growth and that has allowed our courses to grow and department grow; … affect my performance! I think it is, I would say is mostly to do with understanding what we're trying to achieve, what

Experience and broader understanding of how courses in Higher Education are organised

Understanding of expectation internally and externally

Performance closely related to quality of resources available

Encouragement reinforce commitment

External expectations: courses popular with applicants—growing market

people expect of us, both students, the university, the outside world, and I suppose to certain extent the staff within the department… — Expectations and resources availability

Interviewer prompt: The way you put as if, you need to understand the bigger picture from the narrow perspectives to the bigger picture and to make it evolve or to make it be actionable, is that what you're trying to tell me?

Participant 24: Yes, yes, and yes, certainly the factors that affect my success in my role are primarily to do with understanding what the outside world wants, what will work effectively, what is an efficient way of managing staff, knowing what is expected and knowing what will be successful. — Understanding expectations of outside world and what works internally

….

… good knowledge of the accreditation requirements, opportunities, the extent which we have the freedom to do things the way we want to; or on the other hands we must constrain things very specifically to suit the requirements of the accreditation; so my understanding of expectations of the accreditation bodies certainly affect my performance. — Trends, research; knowledge of the environment

….

with external expectations resources I am allowed to get quality for **external expectations** for example understanding with what we are trying to achieve; understanding what is expected internally I must understand how are we to develop in terms of research development reasonableness of how to deal with that better knowledge of environment, expectation of higher education trends of the industry on the other side of it .... — Expectation of higher education and trends in the industry

…

I don't think Intellectual capital is well represented here? Well knowledge as understanding and experience is much more important than knowledge as information, must be about ideas, — Intellectual capital! Knowledge as understanding experience, information and ideas

…

Participant 25: … when you work for a person and get lost in a mess is disheartening if you want to get the best out of people, you have to personalise in a way; and the best way is to give feedbacks, regularly, all the time… — [2-9]Feedback unlock potentials

Participant 26: …students thinking in a way that lectures will give you knowledge …whereas we will lead you to the knowledge and then it is up to you to explore the knowledge yourself and teach yourself and learn yourself ...that is the way can be able to make a difference if you can only do that if you can be inspired to [engage].

[1-7]Explore knowledge to engage

…

Participant 27: … sometimes there is a person particularly influential and powerful, he has our eyes behind him makes life difficult; was too powerful and too resistant, that negative culture just moves out…it takes sometimes a lot of works, talents to persuade people to do something; …there is huge thing in persuading,… because there is personal credibility at stake….sometimes…

[1-9]Powerful resistant; negative culture

…

Participant 28: …therefore the is no set of setup standards, I think is fluid … I think innovation is about keeping finding new best practices; new ways of doing things…case studies, necessary examples …can stimulate people thinking and improve. …We are example of good practices in what we are doing in terms of activity based – learning; teaching and learning approaches as practices are ambitious initiatives … that can raise people aspirations …is about open people's communication out–looking mentality, that's to me is an excellence…

[4-9]Stimulate people thinking

[2-11]Raise people aspirations

…

Participant 29: …the focus is on speed by giving people decision quickly, …you got to remove all breaks as possible, … the reality is, we live in a globalised society, we live in information rich society and people are expecting; the level of expectation I think around information is far greater now than it was even five years ago; so people who are used to send in sms messages to each other and getting an answer like that or looking on the internet and getting an answer like that, if they come across University which is taking 4 weeks to answer their queries they will go to other University. … We aim to give such information about the decisions in 48 hours time…..

[6-7]Information rich society

[3-8]Quick on time decisions

Participant 30: …in [Nigeria, Africa for example] in work environment like employment… some organisations who are looking for persons to be recruited only the 'first class'**.** Whatever, they are looking for is first Class, no others. … Well, It is fine, but sometimes those who are first class; [in the end it is just like a myths?] Sometimes it is better to mix people together. … because even those in the first class may be very good in class but may not be able to deliver well for failure of interacting well with others on their deliverables….

[6-11]Highering only first class?

Works in the organisations are being carried in parts; to achieve the objectives of the organisation …. the parts are continuously being innovated to create value for the whole organisation to achieve her mission. You have to know the value you are creating is only a part of the objectives of the organisation…

[5-9]Continuously innovate to create value

…

Participant 31 Vignette of the transcript

Interviewer prompt: ... How do you manage all these dynamics to make sure that you can still be coping with your own things, because I find there is something like a problem starting here you have to fix it, again, there is a problem there you have to fix it?

Participant 31: Yeah, that is one of the basic challenge of administration, and as you know for us in the University, one of the key challenge or problem that people getting into administration face is that not only trying to do this and that and that, and making things move, but we have on the personal part, we have the issue of promotion. Unfortunately until now, promotion is not or administration is not used for promotion from one rank to another. You know, from assistant lecturer, lecturer, senior lecturer, there to associate professor, full professor, something like that. Promotion is based on publication; not even teaching; I mean, teaching is more for the conduct, if you work we assess that you are here behaving well, that not you are not just waiting for your salary but you go to class… but other than that it doesn't get you promotion… So promotion is based on publication, and publication is based on research.

Promotion based on publication

Interviewer prompt: … And research is where the problem comes, if you are pinned down the way you are pinned with a lot of work?

Participant 31: … So when you are pinned down, you find that you cannot do research, because you can't do research then you cannot publish [there is no promotion to you], but the system requires you to publish … and every year … everyone… whoever you are to fill personal confidential forms for assessment. … in that form if you have not published they require you to explain why you didn't publish….

[2-12]You research and publish/ pinned down

… [publication goes with] personal component of promotion is not only status but power [even self esteem is disturb]… all now depends on individual … different ways of time management one, you take annual leave… secondly you are also entitled to administrative leave, … [a lot work of deadlines] …[complications comes with delegation] subordinate are not having full responsibility, but the overseer has full responsibility especially for quality issues and should be [accountable on everything], but …

[5-12]Individual style for time management

Interviewer: How do we underpin the aspirations of individual knowledge workers align them to the organisation's mission and vision to create value?

Participant 31: The issue of commitment, in public service … [it requires honesty (at apex) of the organisation] without a concrete incentives include, promises, even support you give to your staff … the commitment; usually it is the working environment, the social working environment. Usually the controller of the social working environment is the manager of the place. So leadership of the organisation is [crucial as ever in the current environment].

[2-10]Supports to staff increase confidence

…

Participant 32: Dealing with organisational complexity; as a person in charge of 'principal administration' drops in at any time are so many in a way that I find time to concentrate on my work extremely difficult; for urgent works I do them when others have gone home. Sometimes I come on weekends to work to ensure I put everything together. Whoever needs anything, they come straight here, staff even students to see me as a critical problem solver.

Organisation's oiler; trustful, ready to help

Participant 33: … Putting a young researcher … in administration [is killing the creativity] involving the academicians in the administration is sometimes like exploitation to knowledge workers – causing one to react in different ways, to disengage and do other works outside the main core of discipline. Any work which should be properly rewarded as appropriately as possible.

Exploiting knowledge workers!

…

Participant 34: …The best scenario should be for me to know students, to know student interest, but nowadays you are denied the opportunity due to large number of students in higher education. The way you approach the teaching session has to take that into consideration. …

[3-10]Teaching: Denied opportunity

In research, I am not sure whether I can say anything about best practice. What I have noted is that, many of us tend to be fund driven in terms of the areas which we conduct the research; … and unfortunately, some funding ties the funds to certain areas, so one tends to fit himself/herself in that area….

[5-11]Research: Fund driven

Interviewer prompt: So it means you can't be able to embark very much on your own interest; your interest has to align with the interest of those who are doing the funding?

Participant 34: In my opinion, it does not have to, the only problem is that for a country like Tanzania you need software for you to embark on large scale researches; …but for small scale research you may do them without it.

…

Vignette of the transcript for Participant 35

Interviewer: What is your role in the organization?

Participant 35: I am a Legal and regulatory manager; working in the industry is being regulated under the Tanzania Communication Regulatory Authority.

Legal and regulatory manager

Interviewer: Can you give me example of specific role you are engaged in?

Participant 35: We are listed under our NASDA stock exchange Global Group within the country we are being regulated by the Tanzania Communication Regulatory Authority, TCRA, to see that the deals are duly done and ... make the milestones of making the contract binding as a live

document. I oversee contract management to see it through workable milestones. Other functions we are outsourcing, for instance the litigation there is that issue of deep pocket rule. In contract management we are implementing contract management software.

[12]Milestones; contract as a live document

Outsourcing functions, e.g. litigation

Interviewer prompt: '... the parts which are involved in the contract implementation are not only you there are many parts, technical parts and even other parts. How do you manage to make sure that they can accept to become team and make sure that they do something?

Contract review sheet to ensure collective responsibility

Participant 35: Of course we do involve the user department, because we are overseeing contracts for the entire company, but there are different departments. If we are dealing with finance department, say they are borrowing funds from a bank, so we ensure that finance department is involved from negotiation level to implementation.... We involve user department regarding they particular ... contract review sheet...collective responsibility. Video conferencing. … Willingness to do it… Constraints in terms of transmitting signals from one place to another. Available frequencies ... fibre ... 'rights of way' policy constraints.

[10]User department involvement to build trust

Transmitting signals fibre optics 'rights of way' policy constraints

….

Vignette of the transcript for Participant 36

Interviewer prompt: despite of all these issues, do you think that there is somewhere where you can say this is the best practice we are having around..?

Participant 36: Yeah**,** as I conducted some studies, evening classes seem to be best practice for many students who need postgraduate studies [but they can't afford because of their employment eeh], yeah, because many employers do not like to allow students to attend classes [during working hours]…

[2-8]Balance; work – postgraduate studies

Vignette of the transcript for Participant 37

Interviewer prompt: What do you think is hindering this, even the university to start remote access…to allow the members [staff and students] what is hindering you, somehow you are dealing with management at the same time with technical?

Participant 37: There are couple of things which make it not easy… most of the managers are still scared of the technology … they don't need to accept a reality. There are people who are still not ready to take the challenge. … we don't have enough facilities to facilitate those programmes; however, with the wireless facilities we think it can help to ease the problem [somehow]…

Scared of technology? Is it a challenge!

…

Vignette of the transcript for Participant 38

Interviewer prompt: …Do you think that it will be relevant according to the situation here … because you are dealing with policies… does it reflect reality of some kind the way it is?

Participant 38: I will say it is a clear reflection of the environment we are facing here; and it is not only a reflection of the realities of Tanzania, but it is a reflection of the, let me say, with academic environment that you can find anywhere; in other words, I am saying this could fit even in the University I took my PhD studies. … at Jackson State University, USA. …

[3-12]Reflection of reality for academic environment

Interviewer prompt: … For example there is a problem of funding UK…Universities suffering a lot of funding for research, everybody is unhappy sometimes … does this model … reflect you think I there is something you have to be careful in order not to water down the value?

Participant 38: Well, probably that is the reason why I said in order for the policies to work, one has got to appreciate the importance of facing the challenges. Because, ah really, nothing can work if there is no commitment; and commitment will be in terms of the mindset, and in terms of the resources that are available. How do we set our priorities? Like in our case in Tanzania we are spending very little in research. The government is allocating really, I can say a peanut; peanut really, without knowing that research is always a starting point for everything; Even when you set your budget, a budget will depend very much on what kind of information you have. You have wrong information you have a wrong planning. … In our case we need, this will work; but we also need to have the policy makers understand the importance

Commitment a starting point to initiatives

[4-11]Mindset change required

of allocating resources; and at the same time for us to be innovative as members of the organisations, to be innovative to understand how we can solve our problems when we face those handicaps, like resources and issues of that nature. So it is a matter of mindset that will also spearhead a need for change. … [It is a matter of mindset change] …We are part of the global community…. Young men are the same, so what they enjoy in the other parts of the world ... so soon the same kind of situation will be experienced here. But these also stand to be a challenge to the conventional systems, to also observe the need to change. Because you see those changes, is like a signal, you need to find a way to bring them back. But there is nothing that is taking place right now, outside Tanzania that is not going to be felt by young men in our country, the only thing possibly will be the capacity for them to enjoy the same level the range of exposure…[…to react the way others are reacting] …

Challenging conventional systems

You know, **the global nature has exposed everything**, but that is also a challenge to elders; that you need to provide a sort of a guide on how people should benefit…. [current turbulent environment].

The global exposure; a Challenge

…

…

Vignette of the transcript for Participant 39

Interviewer prompt: … is it possible to have research capability [as an organ at national level] in order to have our own capacity to do something?

Participant 39: … people invest in research and when you look at where the country goes; if you are talking about poverty reduction or millennium government goals; you need some of the scientific and engineering information even the sociological and environmental impact assessments to be carried out; and that can only be carried out if there is a systematic policy to invest in our scientists and social scientists; to engage in activities which will contribute to policy building for the government and for our country. …

[1-12]Systematic policy to invest, engage researchers

So, if the government takes the ownership of that, then we can start looking at ways and means of solving our problems utilising our resources and also in

[5-10]Research to solve problems

collaboration with some of our partners and the only way they can do that is really to have an organ which looks into education, which looks into research actually, research at this high level, for higher education institutions and even research for government research laboratories, for example, if you have been to Ministry of Agriculture they used to have a lot of research stations which have gone to waste..... The activities have been hampered because they depend on budget from government … and the money which was left now for researchers to apply was not even enough to fund some meaningful researches for the continuous basis…

Budget deficit stagnate Research

Vignette of the transcript for Participant 40

Interviewer prompt: …as a scholar you are managing those issues for those who are to be scholars … how comfortable are you with all the challenges which are touching you here and there… dynamism…?

Participant 40: …Practitioners … True although not to great extent, we would wish it could have been more, but one of the problem I think we face, especially when you look at the product we are developing, I mean our students, is to have a greater exposure to what is happening, one of the biggest problem is time in terms of constraints due to workloads form their instructors. … in the past we used to have specific days to tour in the [business, factory, media house] … some accepted and gave us permission, others refused …others are full of bureaucracies…. The level of understanding is poor may be due to language [English] as major barrier for learning…

Exposure to workplace environment

…

Vignette of the transcript for Participant 41

Interviewer prompt: … how is your performance in terms of workplace dynamics….the value of the outcome …. because anybody in the organisation one way or another is part and parcel of adding value?

Participant 41: … well, the changes now in that sense they are affecting number of areas, one, if for example, you look at the way we are delivering knowledge to students, it has been affected by **the number of students** that

Delivering knowledge to students

we have, **the technology** that we are using, and **the resources** at our disposal; and while other things, for example are positive, for example in terms of technology, it is possible to prepare faster than before and is also possible to secure materials for teaching easily than before, then it is contributing positively towards the process of delivering knowledge to the end product. But, when it comes to the number of students, then somehow the big number of students is making it difficult for you to deliver in a manner that would have ensured that all students are getting a fair share of your time. So that is something we may say it is on a negative side. But you also have other things that are coming in terms of the resources. When you look at what was happening may be 20 or 25 years ago in terms of the resources allocated to a student, all kinds of resources and what is happening now, you will appreciate that, it is much lower than what was there before. So again, that is negative. And then, we are also constrained in terms of handling different roles, for example for me as a head of department, I have my role as a head of department, which is now more demanding, because of the large number of students, because they have to manage many programmes and so on. So when it comes to delivery I won't have a lot of time as I would have, if I was not head of department, but because of resource constraints, we don't have a lot of teaching staff that will ensure the head of department is not going to have heavy teaching load. … in terms of resources, we don't have supporting staff of calibre that is going to relieve some of the teaching staff activities so that they can concentrate on teaching. So you can see those are some of the dynamics that are impacting both positive and negative in the learning process.

Big classes obstacle to fair share of student -Lecturer's time

3-10 Managing with heavy teaching

3-11 Quality of academic support

Participant 42: …[actually], reaching the best is a challenge, but, I mean, I can't say we are doing the best, but at least you reach somewhere you strike a balance on whatever you do, you think it is at least at the level of okay [tolerable level]…

5-12 Reaching the best, a challenge

Participant 43: …infancy infrastructure difficult to be given financial support eg agriculture in Tanzania…it needs to publish clear data, to make for

5-7 Clear published data

example farmers become bankable. Good example currently is SACCOs from financial perspectives, as new initiative that will likely change people mindset. The organisation has to define culture, [put it succinctly…] ... set clear what are the value; you make them true to the organisation … make it consistent across the organisation. Take the example of DHL, FEDEX, UPS they define culture specifically allowing each individual to work within prescribed as an employee you play within the very narrow rules to accomplish the work. You need to shape the behaviour of individuals in the organisation…. …

[1-11]Define culture with clarity

Participant 44: The problem is the connectivity…. With internet connectivity there will be more interaction; the practice will open new business opportunities within and outside the country …. [the trust too low, understanding low] …that's why we need education; cross education it has to start from the base, … the primary education, secondary education, people they have to know how the World is moving now, using the electronically communication, create, give them awareness of the way the World is going; then should be much more comfortable using electronic system for transactions more than the way they are using now. …

[6-9]Get connectivity for interaction

[4-7]Awareness of today's communication

… On value creation, speaking for the internet, I may say very straight that the internet is being utilised much not on value creation, people they are using internet for e–mails … e–business is not actually practiced in Tanzania. ... there is [very low internet speed, connectivity] is an issue …people are paying for those who buying bandwidth from internet providers, for e – mails, for downloading music, you cannot use instantly…

[4-12]E –business not practised in Tanzania

…

Participant 45: … the ABCL has been given a mandate to manage the National ICT backbone. Why, because [ABCL] has expertise and infrastructure already; and ABCL is Government oriented … owned by Government of Tanzania 65%; … this will enable data picture and … means a fibre network which is connecting all major cities, currently at regional centres later to districts. … while the future plan is to go up to the village level. Which

[3-7]Ensuring connectivity in Tanzania

will enable to transmit data, picture and voice … [call 3G] … from point to point; the national backbone will only play as a bridge to transmit the service. Therefore there is a need an exchange or equipment or gadget which will offer the service, it is here the ABCL comes in. The National ICT will connect with the International gateway; nowadays we are no longer using a satellite microwave, space satellite. … [Fibre optics will enhance quality] …

[4-8]A bridge to connectivity service

The gateway change, [from Satellite to Optic fibre cable] will allow a decrease of price and increase bandwidth and offer high quality of connectivity….this will allow future video conferencing, for example, even the International Criminal Court for Rwanda Genocide can even utilise the service fully…

[6-11]Gateway change, high quality of internet access

…the University Computing Centre can utilise the Video Conferencing for studies to enhance their learning [and making cultural change to occur] ..….

[6-8]Studies with video conferencing

Participant 46: … the problem is that we don't have teamwork spirit. People work in a fear, if you ask people their views they won't give you real picture…it is so difficult to practice the framework in AB organisation due to politics in the workplace which currently do not favour transparency and [individual independence in creating vibrant working aspirations]…

[1-10]Fear at workplace

Vignette of the transcript for Participant 47

Interviewer prompt: Yeah, thank you, as a final advice, although I got very few minutes with you because of the constraint of time, but what do you tell me, ... your advice as someone with experience.

Participant 47: Yeah, I believe that, it takes a lot of commitment [OK] to; you see, we are, I am heading a section of 112 people, [oh] not always easy, so and being a lady also [laughter] tends to complicate matters, so I believe that anything we do, we have to put God first, [oh thank you, thank you very much] and because He keeps us going, we have to put Him first and then we have to be at peace with our conscience when we take decisions [thank you very much]. Because you can take a very unpopular decision, you take it for the good of the organization, for the good of the service; people do not always understand that because they are thinking of their own vested interests,

[2-7]God first in all we do at workplace

sometimes you can take a very harsh decision as a chief; and you should be prepared to take that; because you are looking at big picture, you are not looking at individual or your friend, or you know, when it comes to work all these things should not matter. You should see where am I taking this organization, where am I going to get best results; you should look at the climate, the atmosphere in the organization. If I take this decision am I not going to create so many other problems because I have tried to please one individual. You should always look at the big picture so that your organization or a section like mine should real be productive and you know the output should be maximised. It is not always easy but we are trying….

4-10 Decisions based on big picture

If you look at corridor you see mostly men, you I open this very early I set particular circumstances' you live by examples ... because a human being how far as everybody I will tell you this…

1-10 You live by example

Vignette of the transcript for Participant 48

Interviewer prompt: …As professional dealing with …. knowledge workers… do you see anywhere where you can say this is the best practice?

Participant 48: Well, my experience has been that practicability is the best option you have; when I say practicability, I mean you to use what is at your disposal. I will take for, as an example, you may want something to be done, you send an e–mail, the e–mail is not all of it; what I have noticed is that, an e–mail is not enough; you have to follow with a phone call; you have to wait may be say okay this person may be busy, you give … one or two days and follow up. So to me it boils down to communication; communication in the sense that you inform somebody about it, … you give the person time to digest, so you give them some time to respond…and then you guys come and talk about it … so if you don't tell me what it is you want me to do, I won't know, so you have to be in constant in communication with people to be able to work. … In my experience, everybody have their drawbacks, you have yours, I have mine, but everybody is prone to get annoyed, but for me my philosophy is what do you do after you get annoyed? … simple example,…

5-11 Practicability the best option

3-11 e-mails not enough

5-9 Constant Communication

person with bonafide, … it is not anger per se…it is what you do after… because if you sit on it, then there is no communication and everything breaks down; not forgetting that, when you put up a vacancies announcement; you have certain competences, certain degrees of knowledge, and you take people who are competent to do the job. When you take people who are competent to do the job the assumption is that these people will deliver. But sometimes why don't these people deliver? They don't deliver just because you know either the communication is not good or there is a problem …. so that is the assumption when you have people in who can do the job, then the job has to get done; if the job is not getting forward then you have to review your practical workings, how job is being distributed,… how communication works in the organisation, how teamwork works, how can you motivate your people, those are the things, is not knowledge per se…at the end of the day it is the practical things like teamwork, motivation, a communication, those are the things that make a work come together….

[1-8]Competent people will deliver; but!

[6-10]Review practical workings

You have to look at you own individual environment, what is there? What are the concepts that we have, to make these concepts of hope, trust, to boost them also so that people should begin to understand what it real means, … we have to incorporate the context in which we are working … [of course, to allow individuals they way they are, to be real them] … they won't work, that's why we having problems. [in context, you have to see what is best, don't lose it]. … Don't lose it… whatever people are going to build, whatever, you have to take these people who are in here … what do we have? [have confidence]….

[1-12]Individual environment vital for hope & trust

[5-11]In context see what is best; don't lose it

Vignette of the transcript for Participant 49

Interviewer prompt: …in all the challenges and uncertainties … can you see somewhere where … always you are proud as working on it as the best?

Participant 49: …you can say so, you know, even to continue working here for 5, 7, 10, 12 years, it means that, although you are under stress, you are trying to perform [the duties required] of your job, if not you cannot continue working here; because anything you do, goes to New York, with your

[6-12]Work under Global watch stressful

signature showing that the work has been under you…. it means you have to be extra careful … even when you are on leave you have to check that everything is going [smoothly]… Every time you under stress, in French we say *sacerdos* … meaning that you give all your life to the work, [as if you get marry yourself to your work] that you do….

Give all your life to work

If your superior appreciate your work and give you feedback timely and encourage you in your endeavours. You have to make decisions to keep on improving your performance, making the work better, and upgrading your skills, competences and to be humble in the daily basis, to work and then you can see the outcome of the dedicated efforts, the results will always be good…you have to create a good relationship in your teamwork spirit for the high quality performance … [maintaining the sense of urgency] ... if one fails, it means all of us have fail… for the past four years we accepted to receive the e–files, the defence lawyers the prosecutors can send their motions; the judges can send the decisions electronic way; so the internet is backbone of our work.

[1-7]Keep improving performance

[6-11]Internet a backbone at workplace

Dynamism to me is like the oil for the engine in the organisation [to build togetherness] as part of the dynamism. On emotional capital, I would say if you don't involve yourself in what you doing won't be good, you need it as *sacerdotal* to my work life. …I need to do well what I am doing, everything are part of the cement to build the organisation… [Sometimes the work describe who you are] … sometimes I go to my boss and tell him I face this kind of difficult but I can't go back ….[exceeding the expectation] ……

[2-9]Dedicated to work; *sacerdotal*

Participant 50: … best practices in the first place is the number (quantity) … competent professional legal officers (quality) and the working conditions (proper tools) The number of people, well qualified people; you want people to be comfortable where they are working, and in proper circumstances, [people who are well paid, the worry will be taken away]….all those things have to be in place to ensure that everybody is working in comfortable conditions…to allow…criteria for selection, no nepotism (qualified personnel

[2-11]Quality quantity and proper tools vital

– quality)… working conditions, if their needs are met most people take pride in their work….

Participant 51: … our customers, for example the tourists want internet with fast speed as what they are getting abroad, but the challenge we are getting is that our network is not yet adequate in terms of speed. …Our network is not that much adequate, since we have not covered much of the area. With the wireless it is fine but the bandwidth which is being offered need to be improved. … The problem is that ABCL as organisation was privatised in 2001, they are lot of issues, some are political, some economical. Since privatisation we have not injected any capital in the company, only changing management, coming foreigners, year in year out… but no investing; the challenge is the capital to ensure that our capability is enough for us to serve our customers with highest level of service technically as competitive company; … still the problem is there with our network limitation….. coverage; is only within towns….

[6-12]People want endless connectivity

[2-11]Woos of privatisation

Participant 52: … to ensure that there is harmony and productivity in the organisation; specifically to deal with trade union, to ensure that there harmony in the workplace the cordial linkage between the management and the other workers…. In this case, knowledge workers are allowed a room for interactions … resolving tensions between the management and the workers… challenges include resolving issues of biasness [and nepotism] and organisational culture; leadership style which contradict, for example positive organisational dynamics; the zeal and enthusiasm for work, giving feedback and gratitude to spark commitment.. …

[3-9]Knowledge workers room for interaction

[2-11]Awake the zeal and enthusiasm

Participants 53 transcripts

Participant 53: … another initiative we have to study… which is better Telecom solutions to our customers, thereby we employed this technology … the broadband … that offer high speed connections… but the challenge we met is the investment; we need big investment to have capability; a flexibility to compete with other telecommunications companies …

[6-5]Broadband, capability; flexibility to compete

Informed consent Appendix H

Participant Information Sheet

&

Consent statement

Critical Evaluation of Strategies for Value Creation

Participant Information Sheet

You are requested to take part in a study that aims to develop a framework which will provide greater understanding of factors that affect performance of knowledge workers. The study consists of two parts: (1) the development of a conceptual framework and (2) the critique of the conceptual framework. You will be participating in part (2), the critique of the conceptual framework. The conceptual framework has been developed, thus far, as a result of a study carried out from 2006 – 2008 in Higher Education in Tanzania.

All information you provide will be anonymised and destroyed at the end of the study.

Participation is on voluntary basis, and you may withdraw from the study at anytime. We would like to make a video and audio recording of the interview in which you participate, but this is entirely at your discretion. If you prefer that an electronic recording is not made, the interviewer will make notes which will be destroyed at the end of the study.

In undertaking this research process, a due diligence to underpin ethical issues pertaining to this study is being observed. This includes the use of informed consent, maintaining confidentiality and ensuring a fair anonymity throughout.

Consent statement

Participation into the critiquing of the conceptual framework

I have read and fully understand the attached participant information sheet and by signing below I consent to participate in this study.

I understand that I have right to withdraw from the study participation without giving reason at any time during the study period.

I also understand that due to the interactive nature in which the data will be stored, analysed and feedback given, all will be strictly in anonymous form.

Signed by participant.....

Print Name.....

Date.....

Signed by interviewer.....

Print Name.....

Date.....

Interview schedule Appendix I

A look at existing practices in the knowledge driven organisations

A quest for information to critique a conceptual framework

In undertaking this research process, a due diligence to underpin ethical issues pertaining to this study is being observed. This includes the use of informed consent, maintaining confidentiality and ensuring a fair anonymity throughout.

The Development of a Framework to Critically Evaluate Strategies for Value Creation within Knowledge–Driven Organisations

This research aims to develop a framework that will help to critically evaluate strategies for value creation within knowledge–driven organisations. The study objectives include: to establish existing practices with regard to value creation; and to ascertain practitioners' academic views as to best practices and ideal practices. An initial study has been undertaken in Higher Education, HE, Tanzania, the project objective of which was to produce a first draft conceptual framework to improve managerial awareness of staff motivation. A conceptual framework is important as when fully developed it will help managers and staff understand interaction and motivation. Such understanding will in turn give rise to policies that will improve organisations' performance.

An interview schedule

Part I: A quest for information to help critique a conceptual framework

1. What is your role in the organisation?

   Participant response:

2. Can you describe some typical duties of?

   Participant response:

3. What factors do you think affect your performance in your role as...?

   Participant response:

4. Can you give some examples that have led you to think this?

   Participant response:

5. Do you see any way of having a better performance than that which you have now?

   Participant response:

6. Can you give some examples to what you see as best practice in your workplace settings?

   Participant response:

Critiquing instrument Appendix J

A look at existing practices in the knowledge driven organisations

A quest for information to critique a conceptual framework

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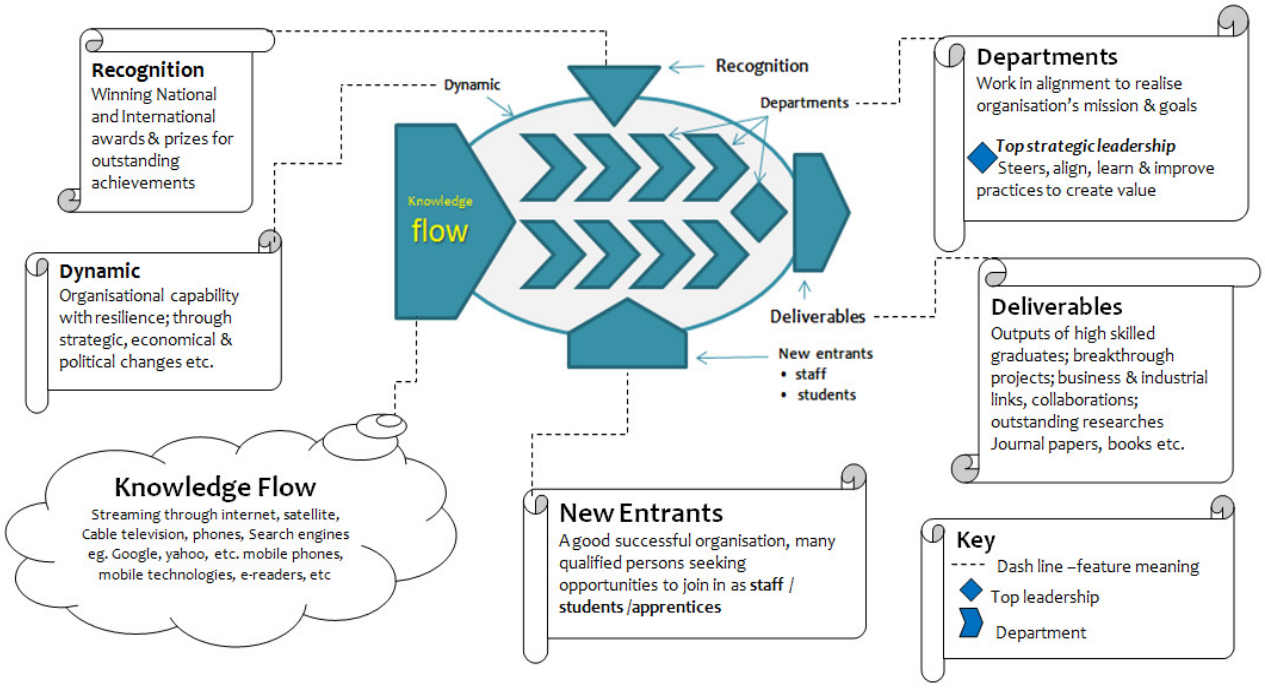
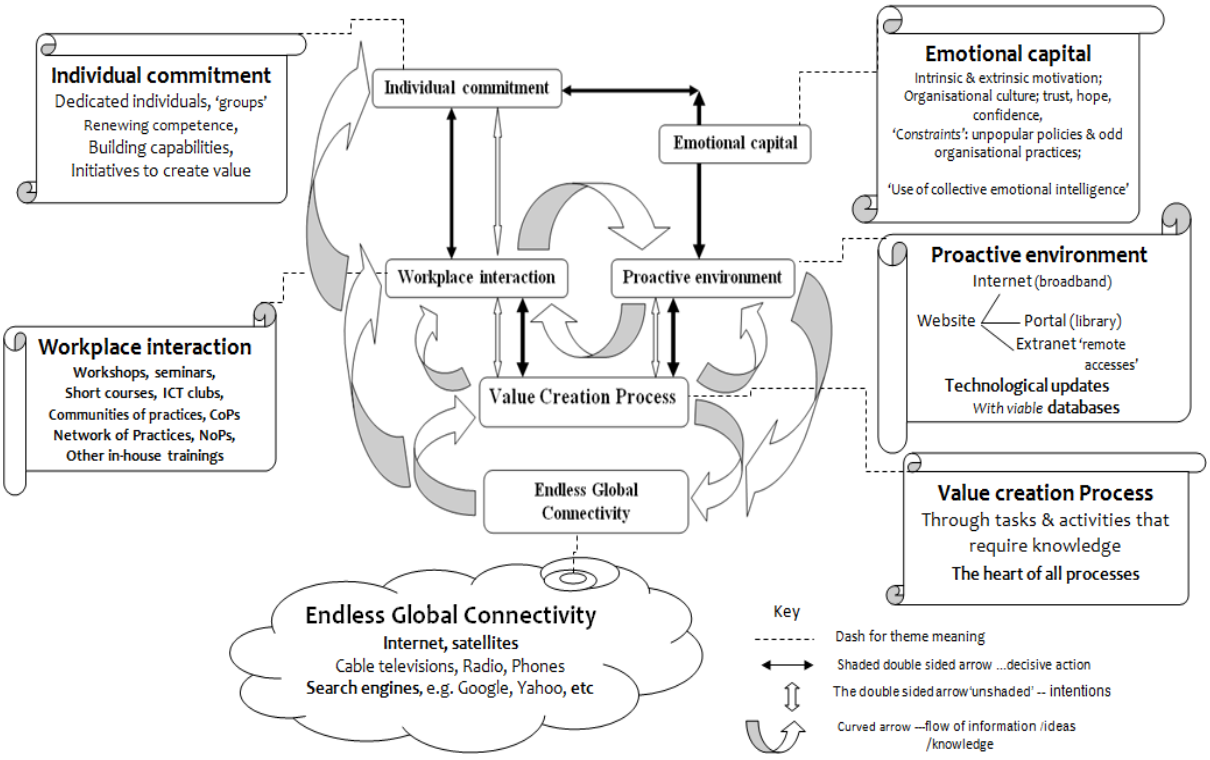
A conceptual framework is important as when fully developed it will help managers and staff understand interaction and motivation. Such understanding will in turn give rise to policies that will improve organizations' performance.

Interaction to create value, Part A: Organisational Perspective



Interaction to create value, Part B: Individual–Global Perspective



1. Do you agree that the features in the conceptual framework part A are influential components for value creation in an organization?

	Features	Strongly agree	agree	neutral	disagree	Strongly disagree
1.	**Knowledge flow**					
2.	**New entrants** *'staff; students'*					
3.	**Departments**					
4.	**Deliverables**					
5.	**Recognition** *'awards, prizes'*					
6.	**Dynamism**					

2. Do you agree that themes in the conceptual framework part B signify interaction in knowledge flow for value creation in an organisation?

	Themes	Strongly agree	agree	neutral	disagree	Strongly disagree
1.	**Individual commitment**					
2.	**Emotional capital**					
3.	**Proactive environment**					
4.	**Workplace interaction**					
5.	**Value creation process**					
6.	**Endless global connectivity**					

Please, kindly add your remarks about the conceptual framework here below.

Continue overleaf if necessary. Thank you very much for your participation.

Appendix K

Publications

Knowledge Management Research & Practice (2008) 6, 360–361

www.palgrave-journals.com/kmrp

BOOK REVIEW

Perspectives on intellectual capital: multidisciplinary insights into management, measurement, and reporting

Bernard Marr (Ed)
Published by Elsevier Butterworth Heinemann, Amsterdam, 2005, 235 + xviii pp.
ISBN: 0-7506-7799-6, price £40.84.

Reviewed by:
Pascal A.J. Massawe

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Knowledge Management Research & Practice (2008) **6,** 360–361.
doi:10.1057/kmrp.2008.23

This edited work contains insights from authors across various disciplines around the globe, and it considers intellectual capital (IC) as a construct for change. This is reflected in the following statement, made towards the end of the book (p. 224).

> Maybe instead of a field, as often referred to by... practitioners, it might be better to talk about the intellectual capital theme or even a lens that allows us to gain new insights in different disciplines and fields. The challenge... is to learn from other's insights and develop a greater understanding of intellectual capital without reinventing the wheel ... this book provides ... .a richer insight into the multidimensional nature of intellectual capital as an important construct in today's business context.

The book makes an intellectual journey across multidisciplinary and interdisciplinary boundaries and territories, with the purpose of providing insights that point to new ways to achieve competitiveness in business organisations. The Introduction has two main parts, starting with an explanation of the subject and ending with an overview of chapters. The book is then split into three parts, the first being *Disciplinary Views*. This has 10 chapters and constitutes the main body of the text, with authors from 10 different disciplines providing views of IC. The second part, *Interdisciplinary Views*, has four chapters, and the third part, *Discussion and Final Thoughts*, is the concluding chapter, written by the editor.

Chapter 1 of Part I gives economic perspectives on IC, citing earlier works, ranging from the first organised research laboratory in the U.S.A. (Thomas Edison in 1876) to recent works on the economics of IC. Economic growth based on intangible assets, and how these assets have helped sustainable competitive advantage, are discussed. The views are from organisational-level developments, the economics of knowledge, and stock market valuations. Chapter 2 discusses strategy, arguing that organisations perform better in creating value when they implement strategies that respond to market opportunities, using internal resources and capabilities. In strategy formulation and implementation, it is imperative to consider market and resource-based paradigms, pinpointing value implications. In all, the vital role of IC is on the dynamics of value creation for a clear vision, to seize market opportunities, using the right capabilities from all existing organisational resources.

The other chapters provide some intellectual and empirical insights. Chapter 3 (accounting) provides reasons as to why intangible assets have traditionally not been recognised in balance sheets, including the

uncertainty of future economic flows emanating from such assets. The argument is that lack of full control, and the difficulties in measuring and valuing intangibles with acceptable credibility, have contributed to the hesitation of 'accounting regulators to adopt more liberal measures' (p. 52). Chapter 4 (finance) outlines the challenges in managing, measuring and valuing IC in relation to the other components of a firm's capital, such as physical and monetary capital. It is argued that intangibles contribute much to the firms' value creation and act as a catalyst for growth and opportunities for initial investments to develop intellectual assets.

Chapter 5 (reporting) depicts efforts taken in Europe to address the dynamic nature of intangible assets, that go beyond the static reporting of separable assets such as patents or research and development investments, in balance sheets. It points to current formats of IC statements as ways to address the complexities of commercial reality. These tools are expected, if used properly, to improve and help identify best practices, but only if there is convergence among the many attempted approaches. This leads us to Chapter 6 (marketing) that reveals the frustrations of marketing practitioners, who frequently express their dissatisfaction with the importance attached to their efforts as not taken seriously by top management mainly due to 'lack of appropriate ways of measuring the outcome' (p. 82). The chapter notes methodologies developed within the IC field for the measurement and management of intangible resources and how they may be applied to relationship marketing. The chapter exhorts those involved to integrate marketing thinking with IC, as this is vital in developing resources for future success.

Chapter 7 (human resources) highlights the meaning attached to human capital, linking people and their activities to strategic objectives to enable the understanding of how value is created. Chapter 8 (information systems) discusses the Konrad group in Sweden, in which the efforts of Sveiby gave rise to modern IC and contributed to the emergence of knowledge management as an organisational practice in the 1990s. The chapter ends with a call to build IT capability that will help transform human capital into structural capital. Chapter 9 (legal perspectives) outlines the legal management of IC, the formal and informal instruments available, and their uses. Chapter 10 (intellectual property – IP) discusses theoretical and practical issues and provides what are claimed by its author to be the four best practices on IP business value activities.

Part 2 (Interdisciplinary Views) has four chapters. Chapter 11 (inter-firm issues) addresses clusters of firms and knowledge, with a discussion about the potential for the 'development of operative tools to measure and report the intellectual capital within clusters of firms' (p. 165). Chapter 12 (public policy) argues that IC is a critical resource for cities, regions and countries in the knowledge economy. Chapter 13 (knowledge based perspective) reveals insights on enhancing understanding of how to use knowledge as an important factor for organisations and strategic advantage. Chapter 14 (epistemology) argues that in organisations peoples' epistemologies have a substantial impact on the effectiveness of the firm's value creation. The chapter discusses aligning IC resources with firms' resource underpinnings for competitiveness. The chapter ends by asserting that 'effectiveness in managing organisations can be substantially improved by aligning the strategic logic of the organisation, the IC resources that form the basis for the organisation's competitive advantage, and the epistemological outlook of the people in the organisation' (p. 208).

Chapter 15 (Part 3) concludes the book. This discusses efforts by academics and practitioners in the evolution of IC through decades, with milestones emerging into a theme. The chapter ends by pointing to gaps in terminology, definitions, interdisciplinary research, methodological implications, levels of analysis and expectations for the future of IC.

Overall the book links well to other literature on IC that shows valuation of virtual companies relying on knowledge assets achieve much higher acclaim of value over the usual physical base (Lehaney *et al.*, 2004, p. 28). It also supports the view that individuals who feel recognised for their intellectual worth, who feel emotionally well treated, tend to link better to organisational strategy (Kim & Mauborgne, 2005, p. 182).

The excellent presentation of contractual relationships could have been enriched with examples of appropriate cases. Understanding might have been aided with extended conclusions and more references for Chapters 9 and 10. The brevity of some of the paragraphs, including explanations on *The IP Paradigm*, *Value to Owner* and *Value to Buyer* (pp. 138, 150) was almost predictable given the number of authors and discipline lenses and the necessity to pack it all in to one book.

Finally, this book underscores the urge echoed by Marr & Chatzkel (2004, p. 227) when they posed a challenge for academics to research and publish outside their disciplinary areas.

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The Accountancy and Business Review

The Journal of the Institute of Accountancy Arusha

ISSN 0856–7263

Massawe, P. A. J. (2006) 'The Rise, Importance and Complexities of Knowledge Management.' *The Accountancy and Business Review* 3(1), 40 – 60

THE RISE, IMPORTANCE AND COMPLEXITIES OF KNOWLEDGE MANAGEMENT

BY PASCAL A. J. MASSAWE

Abstract

This paper is about Knowledge Management, (KM), its rise, meaning, importance and why it is so complex. The explanation shows in brief why the rise of KM as a major concept is sweeping organisations around the World in a whirlwind. Narrations from various researchers across the globe give a vivid picture of why this concept is worth the efforts and thoughts of so many exemplary scholars, researchers, practitioners and thinkers. The search through various reliable current literatures for the rise of the KM, with its popular meaning conveyed by scholars and researchers from various corners of the globe divulge interesting results. KM importance as a concept is seen where appropriately adopted; organisations position themselves better in the market. The knowledge-based industries that produce knowledge intensive products are breaking new grounds for future organisations that are dynamic, robust and capable of internal and external oriented rapid changes. Several options are available as shown in the depicted Domains for Knowledge Management.

Despite complexities associated with KM, efforts undertaken to resolve problems either through communities of practice (CoPs) or other means give new hopes of achieving breakthroughs. These are among the possible choices carried out through CoPs found in KM practiced places. So as to ease complexities of KM, new approaches of sharing knowledge, technologies, fostering expertises and skills nurturing have been exhibited while information and communication technology, ICT, is an enabler. KM concept touches afresh the social-technical fabric of organizations more than any across the globe. The future success of many organisations now hinges on KM practices. Thus KM as a concept is holistic, important, complex with challenges of instituting communities of practice, possibly ripping the benefits and build up dynamic capabilities for future firms.

1. Introduction

In the mid 1980s researchers, practitioners and business executives started practicing what they were thinking as the ways of creating knowledge within their organisations. It was at this time across Europe particularly in Sweden, where one person, Karl Sveiby, started keenly to research on Knowledge Management. Across the globe, in Japan for instance, there was concern on how to conduct innovation, while in USA efforts were on how to use artificial intelligence in managing knowledge (Sveiby 2001). This was a movement in which the creation of a new concept of "Knowledge

Management", (KM), came into being. As a concept, KM developed as a result of organisations trying to find new ways to survive amid fast changing business environment (Palmer and Hartley 2006:503). Within this time, nature of western economies changed drastically as from early 1990s from manufacturing to services (Lehaney *et al* 2004) due to high adaptation of Information and Communication Technology, ICT, increased usage of e-commerce changed completely the perception of many executives of these organisations. This led to organisations possessing superior knowledge being also capable of winning the race towards bigger market power, positioning and high growth, (Korot and Tovstiga, *2001).*

With regional integration, far wider span and faster pace of doing business "knowledge is the most valuable resource today and that the traditional economic factors of production (land, labour, capital, technology) have become Secondary, and these can only be obtained and utilised through" (Lehaney et al 2004:14). The rise of Knowledge Management in various parts of the World especially in Europe, USA and Japan was characterised with efforts of many organisational leaders shifting towards high knowledge based industries producing high knowledge intensity products (packaged software) and the like, (Takeuchi 1998). Writers, researchers and practitioners of KM are almost agreeing in the concept of knowledge sharing, technology transfer and increasing usage of IT in the various organisational activities. In the past this was an issue almost next to impossible for in some countries it was described as industrial espionage, a high treason affair, (Nauth 1999).

Again, the rise of Knowledge Management came into active practice after the collapse of Communism and with it the cold war which to some extent stopped the stock–pilling of arsenals by the big superpowers, USA and the NATO arming against the Soviet Union. The late 1980s and early 1990s saw a lot of political changes happening in the Soviet Union and the Eastern Europe. The collapse of the Communist Regime gave new ways in which those technologies which were used previously by the armies of both countries especially for communication were now turned for other business use more beneficial to the entire development of the mankind (Nauth 1999). These helped scientists, scholars and researchers from Europe and USA to research on how to use these new technologies first in improving communication at the level of business and later to improve how the organisations can do business better in a faster pace, (Fradette and Michaud 1998).

2. The Rise of Knowledge Management

The KM pioneer Sveiby, started research and went on to write a book on knowledge in 1986. Initially Sveiby had a thought of how "to create better businesses by improving our use of knowledge," (Sveiby 2003). This was a big challenge, the way organisation were formed, the structure and how they

were run could in no way give a direct access to the actual knowledge which was available. It was a search of what more ways this knowledge could be, created, recognised, stored, enhanced, shared and be more beneficial in increasing the organisation competitiveness in the market. When looking at the origin of KM, there are lots of differing views as to what is new so far. Some critics argue that knowledge started during the Viking era (Sveiby 2000); others attribute the origin and much debate about knowledge to the ancient Greek times (Loermans and Fink 2005). They say what Sveiby tried to do is to give the concept a new look, taking into account the prevailing business environment. Prusak (2001) gives an account of how organisations, which learn by doing, can achieve much in development.

The recent euphoria on KM has much to do with the prevailing dynamic business environment, in that various organisations found themselves at cul-de-sac avenues on their strategic road–maps to success, (Palmer and Hartley 2006:506). When Sveiby and other pioneers started their research efforts on KM, many curious onlookers joined in with excitement at seeing it as the panacea, the gold at their own organisations' doorsteps, shifting them into knowledge based firms. This enthusiastic rise on KM has been brought about, due to rapid expansion of many organisations making the demands of the market-place to change even faster than it used to be, (Al-Hawamdeh, 2002). These changes are characterised by shifting to knowledge based industries. " ..., that have moved into the centre of the economy,…, as their business the production and distribution of knowledge and information, rather than the production and distribution of things" (Takeuchi 1998).

Likewise, Loermans and Fink (2005:125) noted that,

> *"…Knowledge has become more embedded in organisational practices in recent times. This change appears to have been driven by ever-increasing demand for organisations to adapt more quickly to the rapidly changing market-place and global economy. In this context, knowledge has emerged as a major means of attaining sustaining competitive and a primary source of wealth creation."*

While efforts are being taken to help organisations adapt to the new ways of doing things, Information Technology, IT, with other new technologies like the broadband has increased the need for many organisations to learn faster and utilise whatever knowledge option available as a platform for future success. Knowledge management is taking a vital role since it has activated these organisations to benefit in so many ways continentally and globally. The realisation of this rise as worded by Lehaney *et al* (2004:14) is that, "Organisations must now recognise that technology-based competitive advantage are transient and the only sustainable advantage are employees and

that the locus of success in the new economy is not in the technology, but in the human mind and organisational memory." This realisation basically insist on taking care of not only the up–coming technologies, but the people in the organisations, to nurture a conducive environment that enable – the unleashing of the hidden potentials from the minds of the knowledge workers, coupled with how to store in memories of the organisations the valuable precedents, experiences within the portals, in the databases, for future success of the firm, (Gratton 2000, Gamble and Blackwell 2001, Alee 2003).

In this context, most vital is the knowledge residing in the mind of the people within these organisations. As long as this is acknowledged, then activities within KM, the knowledge sharing, knowledge mapping and the like may emerge. When knowledge sharing, knowledge mapping, intellectual capital, knowledge transfer and others within the realm of knowledge management are considered then, a need for appropriate technologies for suitable use is a very crucial issue. It is for this and others that, IT is an enabler of KM. Hence the tremendous speed of IT build –up, the internet in general ICT, fuelled high enthusiasm on KM worldwide. As said by Inkpen and Ramaswamy (2006:111), "knowledge management involves processes such as sharing individual knowledge and its evolution to a collective state, embedding new knowledge in products and services, and transferring knowledge across boundaries" It is at this juncture fair to pose and ask oneself what real is this "Knowledge Management"?

3. What is Knowledge Management?

Nowadays, scholars, researchers and practitioners from various corners of the world are writing about Knowledge Management, but when it comes to defining it or to explain succinctly what knowledge management is, no unanimous consensus is reached. Wilson (2002) mused that, the growth of 'knowledge management' as a strategy… is one of a series of such strategies dating from Taylor's in 1911 as a 'scientific management' of the early part of the last century", while there are now series of such as theory X and theory Y, management by objectives, the scorecard and many others culminating into the last one the 'knowledge management' (see Figure 1 for details).

Figure 1: Management Strategies

'the repertory grid'	'management by objectives'
'theory X and theory Y'	'T-groups'
'the matrix organization'	'Planning Programming Budgeting System'
'zero-based budgeting'	'organization development'
'total quality management'	'downsizing'
'organizational learning'	'systems thinking'
'team-building'	'cultural change'
'strategic information systems'	'benchmarking'
'ISO9000 certification'	'the balanced scorecard'
'core competencies'	'business process re-engineering'
'enterprise resource planning'	'customer relationship management'
and now	
'knowledge management'	

Source: Wilson, T. D. (2002)

This scholar wrote about the Knowledge Management viewing it as any other management strategies. But by virtue of this paper, the deeper articulation of this issue is a subject of further research for more hidden insights on KM. Portrayed here is the meaning of the KM as a concept and why it is now taken as a panacea to many organisational misgivings regardless of all the brilliant management strategies prior to it.

A good meaning of knowledge management concept needs some explanation so as to arrive at a legitimate, plausible conclusive statement. In order to shed more light on that, it is imperative to look at historical facts that have trailed for so many years in the milestone of civilisation to mankind. The development we enjoy for granted nowadays is the outcome of different cultures which evolved through passage of time from age-to-age on various continents. These civilisations as they kept on evolving, all went hand in hand

with technological changes. If one looks back in history no civilisation managed to survive without putting man at the centre. In a summarised form this idea is as follows:

> *"What is generally recognised in all these developments is that technology is only a small part of the equation, the true value being in the skill and knowledge of the people and the ability of organisations to harness and deploy these capabilities, whether it is the stonemason building a pyramid or a scientist designing the next space vehicle," (Hawkins 2005:3)*

The idea of passage of time with different cultures and development to mankind has kept on improving. During the Stone Age, man had primitive tools to help him create meaningful value compared to our modern times. It went on like that to Iron Age, Agricultural Age, Industrial Age, Technological Age up to the present Knowledge Age in which we have all experienced astounding ways on value creation (Hawkins 2005). It is at this juncture that is reasonable to introduce the contemporary meanings attached to Knowledge Management as a concept. Scholars like Lehaney *et al* (2004:17-18) has that, "Whilst the concepts of knowledge and management are old, only quite recently have been put together in this way". In an attempt to portray more insights they said that, "Even the task of managing people (human resource management) has experienced difficulties in gaining recognition. Thus despite its obvious importance for many industries, the roles of the various types of knowledge have seldom been specifically addressed in management theory and practice. Accountants normally cover it under terms such as intangibles and goodwill".

Zhu (2004:67) defines broadly knowledge management "as a loose set of ideas, tools and practices centring on the creation, communication and utilization of knowledge in organisations." Adding that; Knowledge Management may become "the most universal management concept in history". This concept has for sometime now rouse a lot of controversy as depicted by authors like (Wilson 2002, Galup *et al* 2003, Zhou and Fink 2003). What causes the controversy include the meaning of the word 'Knowledge' on its ordinary usage. At the same time the word 'Management' has its own limitations since knowledge as such cannot be managed, for it is intangible resource most of it residing in the knower's mind. The argument goes like this, which "Stacey (2001) quoted in Zhou and Fink (2003) challenges the mainstream thinking of knowledge as an object and …that knowledge is not a thing or a system, but ephemeral, active process of relating. Knowledge cannot be stored". These authors are of the view that "knowledge is created and transmitted through active processes of interaction between people".

Knowledge Management is also defined as "the process by which an organization creates, captures, acquires, and uses knowledge to support and improve the performance of the organization (Hurley and Green 2005). When trying to avoid the controversy of consensus in defining the "Knowledge Management" as a concept, the UN as Global organ wrote that, "Many definitions exist on knowledge management. The UNSSC bases its work on the following definition":

> *"Knowledge Management is an integrated, systematic to identifying, managing and sharing an organization's knowledge and enabling groups of people to create new knowledge collectively in order to achieve the objectives of the organization" (UNSSC. 2000).*

This is further explained that, "the knowledge of an organization includes databases, documents, project reports, policies and procedures, as well as previously unarticulated expertise and experience held by individuals. Fundamentally, it is about making the collective knowledge of and experience of an organization available to the individual knowledge worker who uses it wisely and replenishes the stock. This ongoing cycle encourages learning at work, stimulates collaboration, and empowers people to continually enhance their performance," (UNSSC. 2000). In these definitions what emerge as real and clear issues are that, the Knowledge Management encompass the **people** and their experiences, the **process** (inhere enablers are needed …most important is the information technology), and the **resources** in the organization on which the people can create value through using their knowledge in the processes involved. With this explanation while still many researches on KM are being conducted worldwide let it suffice to adapt this UNSS version of a definition for this paper.

Widely debatable although accepted by many, are the issues of classifying knowledge into two main categories or rather dimensions. These are tacit and explicit knowledge. According Polanyi, as shown in (Infed website), "tacit knowledge comprises a range of conceptual and sensory information and images that can bring to bear in an attempt to make sense of something". As Polanyi (1967:4) in his book 'The ***Tacit Dimension'***, wrote that, "we can know more than we can tell" and that exploratory acts involve "informed guesses, hunches and imaginings"; these are motivated by what he described as 'passions'. This leads us to the recent talk by Graton (2006) on "Power of Good Conversation", given in 'Gurteen Knowledge' website. Graton in this lesson is urging executives of organizations to value good conversation so as to tape the tacit knowledge residing in peoples mind within the organization. Beside this tacit the other dimension of knowledge, is that codified type. As such, "explicit knowledge tends to be about hard facts, quantifiable information, policies and procedures, whereas tacit knowledge is the

experience and wisdom developed as a result of using and applying hard information, whilst absorbing the internal and external environment and culture of the organization and its industry" (Lehaney *et al* 2004:20). Is this not a real meaning of 'KM' concept in shortest form? It is possible to agree with this explanation.

Furthermore, "there are two dimensions to tacit knowledge; the first is the **'technical' dimension,** which encompasses the kind of informal and hard to pin down skills or crafts often captured in the "know-how" …a wealth of expertise at their fingertips after years of experience in work. Often it is difficult to articulate the scientific principles behind what they know. These are highly subjective, personal insights, intuitions, hunches and inspirations derived from bodily experience all are in this dimension"; while the second is **cognitive dimension** that consists of beliefs, perceptions, ideals, values, emotions and mental models so ingrained in us that we take for granted, one that shape the way we perceive" things, (Takeuchi 1998). These dimensions are real and need to be observed.

4. The Importance of Knowledge Management

The importance of KM is now beyond normal imagination. Many research studies are conducted by various organizations public and private alike. Universities in Europe, USA, Canada and Asia some of them have started to offer programmes and courses which lead to awards of Masters and Doctoral degrees. A good example is that of, Coventry University, University of Warwick and others are currently conducting various knowledge management programmes. These are only few instances mentioned, but the Internet is full of Websites of various organizations that advocate the culture of sharing materials, knowledge and even calling research papers for publishing to enhance knowledge management. As a concept it is very important for its nature of embracing every detail of environment of work, depicting clearly whatever flaws and strong features of our organizations. Information Technology being an enabler make Knowledge management to carry with it enthusiasm almost a passion in trying to stretch one's mind to think about more insights which some years ago were impossible. A sincere touch of elegance propelled by the sophisticated technologies of today like the "Broadband Technology," makes Knowledge Management a concept enjoyable and exciting to explore, (Gurteen Knowledge, shown as Gratton 2006, Sveiby 2006).

In his research Wilson (2002), showed in graphical format how KM has grown in importance over a period of time. Given in Figure 2 is a copy of the graph.

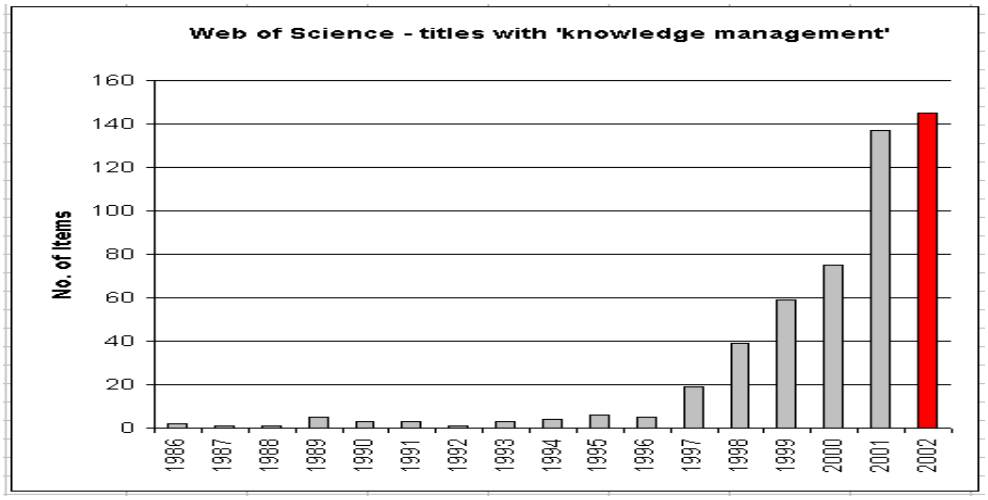


Figure 2: Growing Importance of Knowledge Management
Source: Wilson, T. D. (2002)

The above graph shows that, as years go by, as from 1986 to 2002 the number of times the researcher managed to find issues on the web related to Knowledge Management were increasing with time, (Wilson 2002). Nowadays there are a lot of international conferences on Knowledge management issues, all of these are helping organisations to cope with the increasing change caused mainly by Globalization. Inkpen and Ramaswamy (2006:111) gave an example of the Dell Computer Corporation searching for "business practices that can be applied consistently across the globe. Managers are expected to cooperate in establishing operational processes that can become repeatable and reliable. For this to happen, Dell devotes significant resources to develop a culture that supports knowledge partnering and knowledge management". This is but only one instance of a firm embracing KM for organizational success. Mahadik (2005) writing on Knowledge Management highlights companies that are investing heavily in knowledge management activities. They know intuitively that, in the long run that type of investment will give back huge returns. These companies are undertaking high risk because to-date there no accounting rules that can measure directly any return on investment in intangible resources such as knowledge. This is a belief that is in the mind of the executives of these companies that they are right in taking such risks of investing heavily on KM. It is pure decisions by intuition a real application of tacit knowledge, one of the major dimensions of KM. As the time fly–by matured fruits of these efforts are likely to be realized.

At Global level, in the UN, Knowledge Management is of high importance as shown in (UNSS:2000) when it posed and answered, the following question as to: "Why Knowledge Management?" UN gave out the reasons, that,

"Organizations report … when they better utilize knowledge", they advantageously "make decisions faster and closer to the point of action", at the same time, "overcoming internal and external barriers". These "provide more opportunities to innovate", whilst "reducing time taken for accomplishing projects" and thereby "enhancing stakeholder relationships through more involvement." These are the positive attributes that have led organizations worldwide to adopt KM practice. It is costly to adapt these changes, but eventually the benefits overweigh the costs involved as the organizational workforce become more innovative and productive.

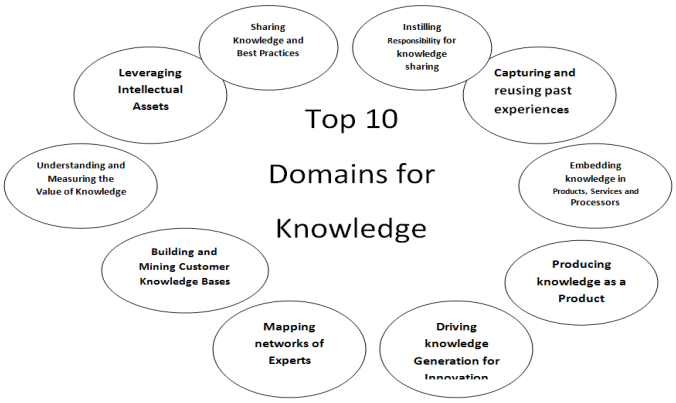
This also answers the question about why knowledge management is a very crucial component in the dynamic business environment. As such "Knowledge, then, is evidenced by its association with actions and its source can be found in a combination of information, social interaction and contextual situations which affect the knowledge accumulation process at an individual level," (Palmer and Hartley 2006:477). Much knowledge is needed to leverage many business ventures into more customer oriented perspectives. It has been asserted that "knowledge work is custom work. Like many services, it tends to be created when and where it is sold. Even manufacturers of basic products; have steadily transformed themselves from an economics of mass production to one of customization" (Stewart 1999:115). Who can dispute the high articulations and enrichment of features found in mobile handsets? If you look at the best latest mobile phone handset, you are likely to find so many refined features, all handy, enabling the one best option of the Knowledge Management, sharing of information either in the form of text messages or phone calls or voice mail. Sure a best tool for KM. This may lead us to think of the satellites, what about those who designed and made them? The mere experience of seeing a televised launching of a satellite gives message to onlookers that this is real brilliant high-tech application. Then, engineers who are involved in such works are applying high and complex knowledge valuable for sharing, for with time these people age and retire. It is worth noting that Europe leads at measuring knowledge while USA companies in managing knowledge are the best (Takeuchi 1998).

5. The Complexities of Knowledge Management

As a new concept Knowledge Management is getting resistance here and there. In some corners it is deliberate while in other places it is due to lack of broad awareness. This resistance to change is not a new issue it is the way people are from time immemorial. But the good news is that there are plenty of scholars, researchers and practitioners who are devoting their enormous resources to pursue the KM.

Consider the types of initiatives given below from CIO.com library. There are a lot to learn and share from various organizations scattered worldwide.

Figure 3: Types of Knowledge Initiatives



Source: CIO.com

These domains shown in the above diagram give a range of activities involved in the endeavor to promote Knowledge Management. In the ISCE Events, for instance, there is a list of activities involving workshops, conferences and seminars to be attended by academicians, researchers and practitioners from around the Globe. These activities are necessary to help solve the complexities of the KM.

However, it is logical for a person to ask a question such as, 'why are complexities being associated with knowledge management?' A likely answer for that is the information given by Richardson and Tait (2006) when they talk about complexity and knowledge management in a way that, "A shared language based on the insights of complexity can have an important role in a management context. The use of complexity metaphors can change the way managers think about the problem they face. For example, instead of competing in a game or a war, managers of a complexity – thinking enterprise are trying to find their safe way on an ever changing, turbulent landscape. Such a conception of their organizations' basic task can, in turn, change the day–to–day decisions made by management". Likewise the root causes for KM to be a complex undertaking are many inclusive are as said here that:

> *"One of the main reasons that knowledge management efforts are often divorced from day-to-day activities is that the managers, consulting firms, and information technologists who design and build the systems for collecting, storing, and retrieving knowledge have limited, often inaccurate, views of how people actually use knowledge in their jobs" (Wit and Meyer 2004:517).*

These authors suggest an approach of tackling such a problem with this articulation in:

> *"'Dumping technology on a problem is rarely an effective solution'. When Knowledge is transferred by stories and gossip instead of solely through formal data systems, it comes along with information about the process that was used to develop that knowledge. When just reading reports or seeing presentations, people don't learn about the subtle nuances of work methods – the failures, the tasks that were boring, the people who were helpful and the people who undermined the work"(Wit and Meyer 2004:517).*

In all these novel ideas, yet there is a worrying factor, 'the organization'. The modern organizations need flexibility and agility in decision-making especially in strategic issues. Knowledge management when adapted will ease the inabilities of the accounting systems to account for all organizational resources and give them value as they are due. Big headache is always with the intangible assets valuation. Therefore, knowledge management researchers and scholars are researching how to come up with organizations with dynamic systems. Studies on self-organizing systems like that of trying to study organization anew, for more insight, are real leads to breakthroughs of the future, (Ashyby 2000). Moreover, Choo (2006) in his writings examines system design and knowledge management by treating the corporation as an information-seeking, creating, and using communication. This has direct relevance to scholars of communication in the corporate context. This researcher and writer came up with 'Hypothetical Corporation' which can act as an organized intelligent seeker, creator, and user of information and knowledge for the construction of meaning in decision-making.

In his writing Choo (2006) has incorporated "Karl Weick's theory of sensemaking in the sharing of meanings and the use of rules and routines to reduce complexity and uncertainty". While all these are going on, yet it is still not clear how to make the fruits of knowledge management be shared easily by many so as to make poverty history to many parts of the world especially Africa. Knowledge Management is complex in that it involves a lot of issues that are so challenging to tackle including the formal definition. To-date there is no plausible consensus among the stakeholders (scholars, researchers and practitioners) on definition, which has been reached. Among those hard issues involved in KM, intellectual capital is one of them. Coakes and Bradburn (2005) observed that, it is "slippery as an eel …The existence of intellectual capital is frequently only inferable rather than demonstrable so that it becomes almost an article of faith to believe in its existence". Even the knowledge sharing idea is somehow discouraged in that, "the sharing of personal knowledge and the development structural approaches as a mechanism to

transfer learning throughout the firm may on the other hand sap creativity and impede learning" (Teece 2000:10). All these justify the researches, seminars, workshops and conferences and other endeavors in trying to ease out these complexities surrounding 'Knowledge Management'. With the ongoing view in mind it is true that,

> *KM performance evaluation is getting more important. The articles that have been published in latter five years is double amount from former five years. It shows the research topics have changed from KM creation, transformation, and implementation to evaluate KM performance (Chen, An-Pin and Mu-Yen Chen, 2005:9).*

Another notion that compel many from knowledge sharing include the fact that people from diverse cultures have traditionally accepted that knowledge is power, sharing it with others is to sap ones personal power. This "axiom knowledge is power is evident when skills and knowledge are in short supply as are certain types of IT skills currently," (Holbeche 2004:426). Generally, the hoarding of information, lack of proper incentive schemes, narrow focus on the jobs for some members of the organization, and other cultural and political norms, foil many positive KM moves. Among important approaches an organization can take include expanding the concept of knowledge management, in that, "core knowledge management initiatives usually focus on processes and tools to enable a company to identify the organization's tacit and explicit knowledge. Companies need to leverage knowledge to enable those with the knowledge to link with those with a need," (Brown 2003:620). Thus, the complexities of knowledge management include all these issues that need to be addressed for the smooth take off of the KM strategy. In addressing all these, firms need leadership that fosters the organizational culture that nurture trust, build empowerment so as to sustainable development. These all call for more researches, seminars, workshops, conferences, more networking and other endeavors in trying to resolve these complexities surrounding 'Knowledge Management'.

The complexities associated with KM, in many organizations are nowadays resolved through active communities of practice, (CoPs) that are created mostly informally as forum, sounding board where group of people with the same interest join together to: speak, share, practice various knowledge and technologies and whatever skills they possess easily, (Gamble and Blackwell 2001, Allee 2003, Lehaney *et al* 2004, Choo 2006). In this the hard part is how to start and form an active forum – the communities of practice. These communities of practice "differ from traditional team–working approaches in that they are most likely to be cross–functional and multi–skilled. They therefore align themselves closely to the sociotechnical ideals of inclusivity and fluid boundaries," (Lehaney *et al* 2004: 49). With the use of face – to –

face methods, e-mails and other virtual means of communication CoPs have flourished in big organizations as well as smaller organizations. As such, "the 'glue' that holds these 'CoPs' together is the passion, commitment and identity with group's expertise, while for a team it's goals and project milestones," (Ward and Peppard 2004:510). The resource support needed for these CoPs depends to a larger extent how innovative they are in conducting their affairs as the instance below, where to a larger extent management of the firm plays an active role.

> *Organizations provide significant support resources to communities in the form of content managers and systems, community coordinators, and information technology applications. Models for support and funding vary, as does the amount and nature of support resources required by each community type. All depend on some central resources, especially at the beginning for consulting, training, and content management (APQC 2001:9)*

These informal communities, CoPs are in many global networked companies such as the Siemens Medical Systems, BP Amoco, World Bank Group, Xerox, etc., (APQC 2001). Increasingly seen as very valuable where they are these CoPs get support from parent companies. "Knowledge management can produce outstanding gains. For instance, Ford's Best Practice Replication process is built around communities of practice, which include people in each plant or facility who help identify, share, and transfer practices," (APQC 2004:8). In other organizations, "Communities of practice primarily build capacity. They attract individuals who are willing to share their expertise in exchange for gaining expertise from others. The principal driver is the desire to strengthen their own skills for their own objectives, more than a desire to work together on common objectives," (Creech and Willard 2001:11).

However, in Africa there are number of notable endeavors found in Burkina Faso, Mali, Ghana, Uganda, Tanzania and Zambia, (Hulsebosch *et al* 2006). In Tanzania SWOPNet, a website connects various interested people to share knowledge and experience. It is hoped that many of these CoPs will be created to foster KM in working places and thereby renewing our organizations vitality. As briefly shown these communities are feasible for as "a community of practice (CoP) is a group of people trusting each other and sharing a common interest in a specific area of knowledge or competence. The members of such groups come together voluntarily to share and develop their knowledge, solve common problems and support each other in finding answers," (Glueck *et al* 2006:12). With such networks and CoPs that, those KM complexities can be resolved and thereby facilitating people to find new ways of doing business and other activities found in their organizations while actively unleashing the workers tacit potentials abundantly.

6. Conclusion

With the dynamic nature of today's economies, the knowledge driven-economy be it an illusive concept or not, Knowledge management stands out as major reliable concept to lean on and build up anew these old-fashioned organizations. The new versatile, robust and yet big organizations that use new technologies of ICT such as broadband are needed to take on the turbulent currents and shock waves found nowadays in the stock-markets and stock-exchanges. The new breakthroughs in IT and internet related activities have aroused a rethinking on how organizations of today should be. The networking, the Communities of practice will eventually pave new ways of building trustful relationships that can foster growth and meaningful innovation for development. It is true that many things are changing even the learning programmes in schools, colleges and universities are to be changed continuously to cater for the change of the new business environment.

Despite the challenges facing the researchers, academicians and all practitioners concerning either to embrace 'Knowledge Management' or not, yet the efforts and outcomes of these struggle are looming large as distant powerful lights. Only what is required is to hope that, the involved KM active researchers, scholars, practitioners and other parties are not to be victims of the hesitant minds. It is only the bold, curious mind of the few thinkers that can rescue the gone twenty century model of organizations. This KM as a concept is holistic naturally, which may propel the sharp thinkers to come up with best models of organizations that can takeover from traditional systems that insist on static Keynesianism thinking!

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ICKM 2010

Hong Kong November 11-12, 2010

'Critical Evaluation of Strategies for Value Creation in Knowledge Driven Organisations'

by

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(appears in pages 293–301 of the proceedings)

Published in the Proceedings of the 7th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning

**Hong Kong Polytechnic University,
Hong Kong, China 11-12 November 2010**

Edited by Eric Tsui

Critical Evaluation of Strategies for Value Creation in Knowledge Driven Organisations

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Abstract: Increased adoption of information and communication technologies and e-commerce has led to knowledge management being a crucial element for competitiveness of organisations. Furthermore, the creation and measurement of intellectual capital are major issues within the knowledge management field. However, there is a lack of dynamic strategic frameworks to address this area. This paper provides results of an investigation into strategies for value creation in knowledge driven organisations with particular emphasis on intellectual capital and how to nurture this. The study was carried out amongst higher education and other knowledge organisations in Tanzania and the UK. The research was carried out as two phases. The first phase consisted of a study in Tanzania and produced a conceptual framework to aid understanding of intellectual capital in an environment of constantly increasing technological change., The second phase of the study consisted of a validation of the framework developed in phase 1 and was carried out in both Tanzania and the UK. It is thought that the final model produced as a result of phase 2 is applicable across many countries and types of organisation. The framework that has so far been developed captures the various components that affect value creation through intellectual capital in knowledge driven organisations. The framework is useful for leaders and managers in knowledge driven organisations to aid better understanding and to motivate knowledge workers towards higher success. The most importantmost important factors emerging are individual commitment, a proactive environment and workplace interaction. Other factors such as dynamism, knowledge flow and emotional capital are also emerging as important. The framework produced will help knowledge managers and workers develop and commit to strategies that embrace such factors

Keywords: value creation, intellectual capital, knowledge driven organisations, interaction

Paper relevance:
A framework has been developed that captures the various components that affect value creation through intellectual capital in knowledge driven organisations. The framework was developed after a detailed investigation and has been evaluated. Participants should be interested in the results which could be helpful to managers of knowledge driven firms.

1. Introduction

In the ever changing business environment, there is a need to understand the value creation process as it is associated with knowledge and shared understanding found among the people in the organization, (Palmer and Hartley, 2006; Sandberg and Targama, 2007). The notion of how efficiently and effectively the resources are being used with ingenuity in achieving organizational goals requires

further clarification. However the concept of value creation keeps changing with the increase use of ICT in knowledge management strategy initiatives, (Qureshi, Briggs and Hlupic, 2006). In contrast, as the geographical boundaries are rapidly phasing out due to use of Internet, organizational models that encompass flow of information and knowledge are needed to enhance understanding of the evolving changes. Nevertheless, Buckman (2004) and Sense (2007) denote that, interaction of knowledge workers in their practices whilst in the flow of knowledge is a vital actionable thing that creates value in the workplaces of web connectivity.

In addition, the issue of value creation extends around many organizations across the globe and is much associated with the ongoing change. In this, Ehin (2000) reaffirms importance of being comfortable with perpetual change, uncertainty and complexity surrounding our workplaces. It is such solace that requires in–depth understanding of our evolved human qualities and dynamic capabilities to embrace the rapid technological advancement. Though in organizational settings, strategy is seen as a focal point of the management system, it is imperative then to envisage formulation of dynamic strategic plans that can encompass the perpetual change, (Corley and Giola, 2005; Senge *et al.*, 2005; Sarabia and Sarabia, 2007). In contrast, creating synergy and alignment as an explicit part of the management process carried under executive leadership has crucial role in strategy execution to encompass knowledge management and intellectual capital in building up dynamic capabilities to enhance value creation, (Birchall and Tovstiga, 2005; Kaplan and Norton 2006; Helfat *et al.*, 2007). Such novelty, if put into practice, has a possibility to inspire hope, trust and high involvement for effective use of organizational resources.

2. Towards virtual organisations

The internet has made it possible for people to be members of distantly located organizations, though ever present in virtualisation. In recent times, organizations have tried to make their presence in the cyberspace using website technologies. Thus some virtual organizations have arisen. What is a virtual organization? But why should there be a virtual organization? Responding to these questions requires a historical overview of the past century. Large companies managed mass production that required workers to be in geographical locations for better organizational activities. Nevertheless, the increased use of information technology through mobile technologies, made workforce in organizations to form knowledge clusters in various localities that enhances coordination to ensure a needed competitiveness, (Warner and Witzel, 2004; Cavanagh, 2007; Huggins, 2008).

It is normal to buy online or for sales people to interact with their distant colleagues to accomplish their tasks online. Others isolate themselves in their homes or in places of their choice that provide undivided attention to complete tasks while connected with their workplace through electronic means. Still others work using their laptops as they travel. Such changes brought flattening and decentralization of organizations, whilst raising completely new challenges for organizing in virtual settings. In addressing such issues, new type of organizations kept coming into existence leading to modern virtual organizations with many features and even works and tasks that are performed and mostly facilitated by use of ICT and emerging technologies. Warner and Witzel (2004) describe these

virtual organizations as collection of geographically distributed, functionally and culturally diverse entities linked in electronic forms. Though they are knowledge intensive, they share lateral, quick and dynamic relationships for coordination which rely on intangibles as prime source of value creation.

In spite of its diffuse nature, there is a common identity that holds the organization together in the minds of members, customers, or other constituents. In addition, Buckman (2004: 191) looks at virtual teams in organizations that use communications technology to enable work to be aligned around purpose, people and practices chosen within a technical platform chosen. As work is completed bycompleted by people dispersed and decentralised, the organization becomes more flexible and fuzzy in nature. However, pure virtual organizations are almost non–existent, for they need bases as headquarters where people architect, plan and coordinate activities, (Warner and Witzel 2004). Nonetheless, due to the ever-changing environment, the concept of virtual organizations is growing in importance. Organisations are rapidly changing in acquiring autonomy, to enable the new virtual environment to supply ranges of product lines and services. Warner and Witzel (2004: 148) further looks at "conventional" organizations as possessing a virtual dimension, where long distance communication takes place, whether by telegraph, telephone, e–mail, or satellite. Such thoughts of virtual organizations play a role of widening the mind horizons, to awaken and spark thinking which will lead to new ideas. This study looked for information for insights to develop a framework that show how organizations can successfully conduct a valuea value creation process in the new environment where communication possibilities are ever increasing. The developed framework that is being sought essentially encompasses the networked externalities around the organization that are deeply situated in the knowledge flow, in that the value creation process is realised in the interaction of the dynamic business environment, (Spender 2008).

3. Adapting to a changing environment

Lehaney *et al.,* (2004), relate the rise of knowledge management (KM) to rise of services in western economies, as a result of increased ICT adaptation and proliferation of e–commerce. This gave rise to interest in intellectual capital with organisations possessing superior knowledge, and better ways of managing, being seen as capable of winning bigger market power, better positioning and improved growth, (Korot and Tovstiga 2001; Allee 2003: 105; Bouwman *et al.,* 2005). The smart, dynamic use of knowledge and technologies, gave firms winning bids. Nonetheless, organisations have to identify their core capabilities, develop and manage business models that enable their essential knowledge to be created and used. To a large extent this realization had effect, largely through visions and missions of organizations towards high value creation, (Bouwman *et al.,* 2005).

The given context presupposes a need for knowledge–driven organisations to unleash the potential of their workforce in order to increase competitiveness. Organisational resources of such firms are in a dynamic environment, which is constantly being developed and managed for competitive positioning. The core competencies, practices and intellectual capital of these firms are kept continuously fit, sustainable and sustainable and in synergy to the fast changing business environment, (Birchall and

Tovstiga 2005; Kaplan and Norton 2006). Complexities arise due to evolving networking and web interaction. As the new organizational paradigms emerge, information and knowledge are raw materials to the activities in the workplaces requiring organisational cultures to keep on changing. These changes hinge on communication, collaboration and co-ordination with ICT investments representing stores of codified knowledge. It is value mapping that harnesses knowledgeable insights to inform and report evolving value creation for the organization. Evidenced are efforts for strategies of value creation in organizations that strive to fit into the dynamic environment, as seen through business nets, (Qureshi 2006, Briggs and Hlupic, 2006; Möller and Rajala 2007) which continue to grow as part of pervasive networking.

The notion of value creation is not new; but due to the contemporary changes of organizational paradigms, it is an emerging thought, (Allee 2003). In strategic perspectives, there is concern about knowledge management, (KM). Researchers, academics, practitioners and business executives, mostly view KM as embracing the value creation process in organizations, (Allee, 2003; Buckman, 2004). Similarly, in these organisations, intellectual capital (IC), is seen to as a linchpin to KM and the firm's strategy. The dynamic business environment of global interconnectivity proliferates knowledge flow A challenge for intellectuals and researchers is to develop knowledge intensive initiatives that allow knowledge workers to deploy understanding of such intangibles as vital resources to raise competitiveness in the fast interlinked workplaces, (Sandberg and Targama 2007; Cavanagh 2007).

4. Research design,

The main focus of the research study is on how strategic resources of the organization, particularly the intangibles can be identified and properly used in the existing practice to build, a capability for best practices. The resources targeted are those that are strategic, specialized and not easy to be copied. Examples of these include tacit knowledge and workers' experience as vital intangibles (Gourlay, 2006). Interviews were used to search for insights into intellectual capital in a quest for information that enabled investigation of issues surrounding intellectual capital and interrelated links that exist in the organisation. It formed a quest for hidden links that divulge potentials not well used in an organization.

This research was conducted in two phases. The first phase consisted of a case study. The case study took place in Tanzania and involved questionnaires, observation and interviews with knowledge workers in a number of organisations. From this study a conceptual framework was developed. The conceptual framework was then evaluated in phase two of the research. The validation consisted of a number of face-to-face interviews with knowledge workers in Tanzania and the UK. The varieties of research instruments used facilitated an accumulation of insights that could ease information collection and lead to a developed framework. Thus, the mixed methods approach adopted in this study was designed with a keen eye on the ease at implementation stage to undertake the research process. The research design for this study included the triangulation approach which formed vital linkage to enhance understanding from different sources and converge into evidence (Yin, 2009).

4.1 Phase 1 Developing the Conceptual Framework

Location	Observation	Interviews	Questionnaires filled	Response %
AB	58 weeks	20	n=42	84
IN			n=21	52.50
QN			n=8	66.67
TL			n=39	78

Table 1: Data collection

As shown in Table 1, observation was carried out for 58 weeks, accompanied with 20 in-depth interviews and 330 filled questionnaires. This was case study data that encompassed immediate boundary dimensions. All organisations involved were based in Tanzania and were mainly higher education organisations. During the observation period, data gathered included documents from meetings and other settings.

Questionnaires distribution and collection formed part of the planned quantitative approach. This helped to increase response rate and elicit data which are attitudinal in nature (Trochim and Donnelly, 2007). The mixed methods approach facilitated collection of data from multiple sources within the organization. This allowed data triangulation to be used as a two–tier methodology; in addition, it increased the dataset richness (Chen *et al.*, 2006; Yin, 2009).

Documents and unstructured interviews of recorded dialogues were captured while maintaining ethical sensitivity (Trochim and Donnelly, 2007). The study results and approaches, revealed insights on existing practices and are similar to works of Owen (2001) and Chapleo (2007) which highlights existing practices in organizational contexts.

4.2 Phase 2: Critiquing the framework

The critiquing of the conceptual framework shown in Figures 1 and 2 formed phase 2 of the research. This part of the research was carried out in the both UK and Tanzania. The organisations asked to critique the framework included the organisations involved in phase 1 of the research. They also included a number of new and different types of organisation. The reason for critiquing the framework in both Tanzania and the UK was to establish an indication of the sensitivity of the framework to culture. Similarly different types of organisation were included in phase 2 to find out to what extent the framework was generally applicable. Phase 2 consisted of 57 in-depth interviews each lasting about an hour. Interviewees were initially asked about their work in an open ended way. But with some set structured questions. From their answers themes were identified which later would be tested against the components of the conceptual framework to see how well the framework reflected the knowledge worker viewpoint. In the later part of the interview the participants were shown the conceptual framework and asked to comment directly on it. The interview was constructed in this way so that initially views could be captured which were not influenced by sight of the conceptual framework developed from phase 1.

Phase 2 started immediately after initial completion and presentation of results of phase 1. The first approach was to prepare an instrument to capture the needed information as evidence of phase 2. The instrument was prepared and a pilot study was conducted to check its suitability. Through the pilot study it was possible to avoid methodological error. In the field, questions posed were those that allow a participant to give independent views of work practices, and thus it was an opportunity to compare and contrast the work done. Furthermore, the questions allowed participants to see the model in light of their work practices. Such a chance sparked reflection on both participants and the researcher. Ethical requirement of informed consent were adhered to throughout.

A conceptual framework that evolved from phase 1, possessed duo dimensions, one being the organisational perspective, comprising of six major features, whilst the second is the individual global perspective with six themes emerging from analysed data, explained and shown in Figures 1 and 2. Each model in the conceptual framework works to complement the other. In addition, the organisational perspective underlies the dynamics of knowledge flow, whilst the individual global perspective signifies individual knowledge worker commitment and involvement in the workplace.

5. Results

5.1. Results from Phase 1 of the research

This study has incorporated qualitative data taken through 20 in–depth interviews of which, 15 were video–taped (ranging from 20–60 minutes), transcribed and analysed. Initially, analysis was done through line by line coding with further analysis of focused coding to condense the data. In this process of coding, Charmaz (2006) views focused coding as a tool to move across interviews and observations, compare people's experiences, actions, interpretations, and through emerging codes condense data. Moreover, focused coding provides a handle, allowing emergent process to spur deep insights and divulge themes. Such a tool in this study was enhanced through writing memos as a reflection of interview experience. In practice, Pidgeon and Henwood (2009) look at memo as a subsequent tool that can be used to discuss the emerging analysis. Likewise, Lempert (2010) regards memos as flexible narrative tools, viable in developing ideas, adaptive; elaborative in unravelling complex social worlds through research.

The mini-survey had (n=42) filled questionnaires served to the AB organisation and (n=68) in other higher learning institutions (OHLI) which specifically looked at intangibles in the organisation. The question focused on range of drivers for enhancing value as follows: *understanding, intrinsic motivation, extrinsic motivation, commitment, confidence, hope, affiliation, collaboration, reputation, technological updates, organisational resources and knowledge as a resource*. In all these, the most outstanding were seen to be commitment and technological updates and confidence in the practice.

The analysis of data, as given from quantitative data had commitment (n=40) with 32.5% as the decisive score followed by technological updates (n=40) with 27.5%. In addition, the observation and

qualitative data analysis show insights of vital roles of individuals in shaping dynamic nature of the organizational environment. Although the carried analysis of data from mini–survey on one hand had, OHIL having confidence, (n=67) with 38.8% ranking 1st and Commitment, (n=67) with 37.3% ranking 2nd, whilst at AB, results were that, commitment, (n=40) with 32.5% rank 1st and Technological updates, (n=40) with 27.5% rank 2nd. Ultimately, a decisive score taken was 'commitment' due to strong back–up evidence from observation and recorded interviews. However, it is the transcribed and analysed interviews, initially in line by line coding and later focused coding that allowed meaningful themes to emerge. In the subsequent stages of the research process, the features that were observed as most important were named as: *Knowledge flow, New entrants, Departments, Deliverables, Recognition and Dynamism* as features in the organisation. Whilst themes that emerged were: *Individual commitment, Emotional capital, Workplace interaction, Proactive environment, Value creation process* and the *Endless global connectivity*. These were synthesised into two separate models, the first one outlining features is about organizational perspective shown as Figure 1 and the second one which outlined themes is shown as Figure 2. Together they form the conceptual framework emerging from phase 1 of the research.

It is the merging of evidence, further enriched with analysis of qualitative data which led to the construct, a conceptual framework. This was case study 1, which gave results that allowed insights which gave this conceptual construct that help one to look at how to enhance value. This is seen through reinforcing competencies of knowledge workers in the organization, while at the same time building dynamic capabilities through interaction, whilst using emotional capital as a booster of knowledge workers efforts to utilise appropriately knowledge and technology to create value that can be acceptable both at local and global level. Moreover, much can be seen in Figures 1 and 2.

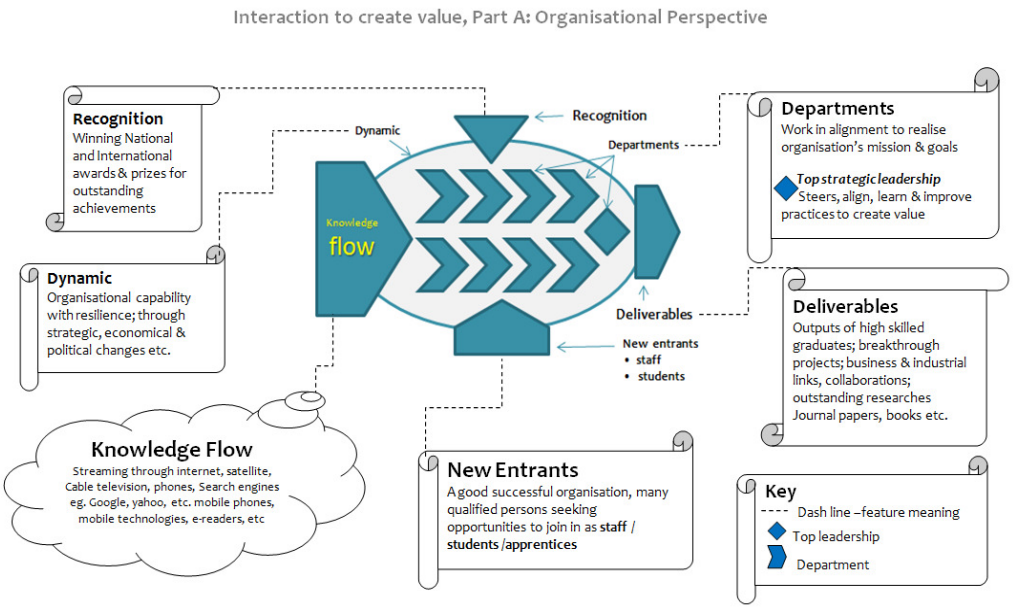

Figure 1: Organizational perspective

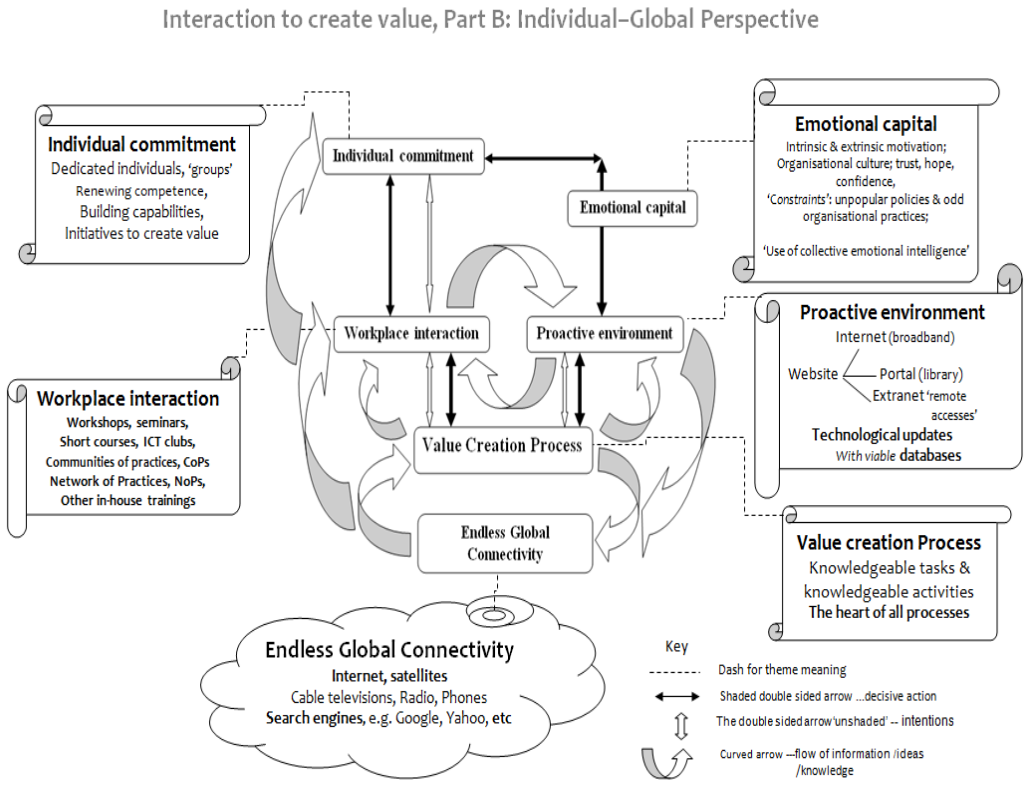

Figure 2: Individual global perspective

5.2 Results from Phase 2 of the research

During phase 2, a total of 57 in-depth interviews (each interview range between 30 to 90 minutes) were conducted. Out of these, 34 were done in UK and 23 in Tanzania. Targeted participants included knowledge workers, some in higher education and other in different types of organisation. The levels ranged from operational knowledge workers to senior management levels. Practitioners who volunteered for interviews range from software engineers, senior executives to directors and managers, lecturers and professors across total of 3 Universities, 1 in UK and 2 in Tanzania and 5 other types of organisation including 2 telecommunication companies in Tanzania and health, banking and engineering organisations in the UK. These research tasks took seven months, from December 2009 to June 2010. Prior to the in-depth interviews, there were 56 weeks of observation. As the data collection part of phase 2 of the research has only just been completed, full analysis has not yet been completed but some preliminary emerging results can be revealed now. We can see already which components of the framework are considered to be most influential in value creation. We also have some ideas on issues on understandability of the framework.

In Table 2, the perceptions of knowledge workers who critiqued the conceptual framework are revealed showing the highest scores of frequencies, and how much they view the components as influential in the process of value creation in their organisations. It can be seen that individual commitment (76.9%), workplace interaction (73.1%) and proactive environment (70.6%); are emerging as the factors considered to be most influential in creating value and nurturing intellectual capital. Other factors seen as important are dynamism (66.7%), knowledge flow (65.4%) and emotional capital (63.5%). The value creation process (60.8%) and deliverables (60.0%) come next in the ranking of influential factors. Managers of knowledge workers should pay attention to these aspects when developing strategy.

The influential components for value creation

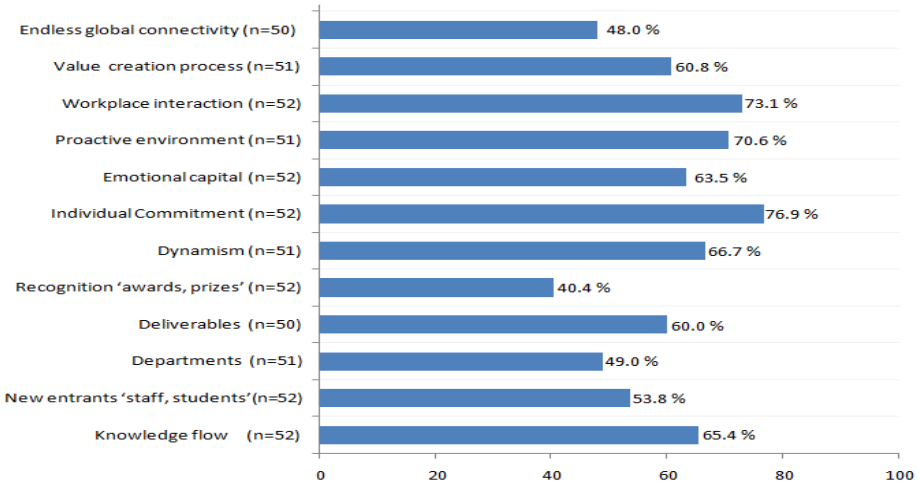

Table 2: Outcome of phase 2

In contextualising the framework, an issue which was raised by participants of phase 2 was to enhance clarity of the conceptual framework to allow themes to be presented in a linear format to ensure a clear understanding of both models. A revised model was therefore produced and this is shown in Figure 3. Two upcoming offshoots (web forums and social nets) of the endless global connectivity were also added to the model as a result of the phase 2 outcome. Though the offshoots are recent phenomenon, for instance the facebook and twitter, they all explain the contemporary trends of how people in organisations interact with others outside. Such trends allow one to see importance of web forums common to members of various scientific communities from web designers to software developers.

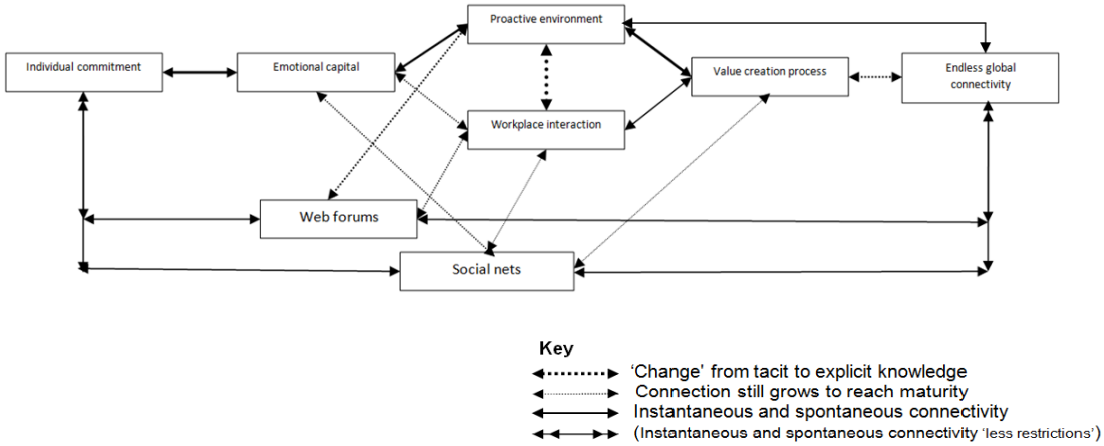

Figure 3: Individual global perspective (modified)

Figure 3 depicts how an individual knowledge worker participates and offers valuable contribution to enrich the organisation in relation to global 'presence' as a way of creating value. Figure 3 has the following notable features:

(a) Proactive environment as a theme (technological updates as an item) maintain connection of various important components in the models. A continuous search for plausible and better fit modalities that work in a particular context is a vital to ease smooth functioning of each part from the model. This entails the need for contextualising the model for it to be useful in various places.

(b) Components with themes *individual commitment, emotional capital, proactive environment, workplace interaction and value creation process* are found in the organisation. In addition, *endless global connectivity* together with the *web forums* and *social nets* (offshoots of endless global connectivity) are components in the cyberspace, so vital for communication, coordination and exchanging of ideas, services and other products around the world spontaneously.

(c) The connecting arrows with to and fro indications show the instantaneous and spontaneous nature depicting a 'real presence' of the web connectivity. The dotted lines show desired needs of making these connections reach full maturity.

(d) Figure 3 depicts how an individual knowledge worker participates and offer valuable contribution to enrich the organisation in relation to global 'presence' as a way of creating value.

(e) The dotted line between proactive environment (websites, intranets and extranet using the portals) and workplace interaction (meetings formal and informal) shows possibility of changing tacit knowledge to explicit knowledge to be codified, either through sharing or otherwise through activities done within the organisation and beyond to the far reachable frontiers.

(f) The organizational perspective model shown in Figure 1 helps to depict the outer shell with essential features in the organisation, such as departments within which the individual knowledge workers operate using the model shown in Figure 3 with interaction in web connectivity at workplace.

6. Discussion and Implications

The role of knowledge workers in creating value in the organization is more crucial in this era of web connectivity than ever before. Individual commitment when nurtured in a proactive environment that is technologically up-to-date with good facilities for workplace interaction should create added value for an organisation. In contrast, other circumstances may cause emotional capital to be a barrier to good practices in an organisation. It is important that knowledge workers have confidence, understanding, hope and trust in the environment in which they work. These components can be seen as emotional capital which is an important influencer of value creation which is not always recognised in organisations. Successful organisations embrace emotional capital in the organisational culture through core values that are taken seriously into practice to help shape how organisations react in various circumstances, (Goleman, 1996; Pfeffer and Sutton, 2000). Within the area of emotional capital, trust, emotional intelligence and leadership style are important in shaping behaviours and attitude of knowledge workers, (Martı and Enache, 2008). Organisational policies if well formulated at workplaces are likely to trigger efficient utilisation of available resources. Finally, the message that Figure 3 gives, is an indication of how to strengthen relationships between environmental components to increase value creation. Nonetheless, initial results show that the framework is generalisable across the cultures and domains studied. However it is recognised that in some circumstances adaptions may be needed to suit particular contexts. This is an area of possible future work.

7. Conclusion

The study has produced a framework that shows important components that affect role of knowledge workers in relation to value creation in the organisation. The role that can be attached to intellectual capital needs also to be associated with other factors like the emotional capital, which underlie human issues such as challenges of web connectivity in organisations. The study attempted also to look at how knowledge workers can maintain the zeal needed to create value. Such an attempt gave rise to a theme of individual commitment, and within it the importance of continuous nurturing competencies in order to build dynamic capabilities. The challenges are continuous as the knowledge workers share their perceptions so openly in far wider areas, in cyberspace, than ever before in the history of mankind.

The framework which is being developed is a tool that can allow decision makers to formulate policies and strategies that encompass the most important factors shown in the framework. It can be used as a tool that will allow managers to rethink how they can involve knowledge workers in the stages involved in formulating and implementing important policies in the organisation. Those policies that may act as stumbling blocks to high value creation process may easily be seen in light of the framework. However, contextualising the model to underpin important cultural, economic and political issues are important issues that underlie value creation. Our work is continuing with a more detailed analysis of the data collected during phase 2 of the research.

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"He set the book of nature before me and I saw that all the flowers He has created are lovely. The splendour of the rose and the whiteness of the lily do not rob the little violet of its scent nor the daisy of its simple charm. I realised that if every tiny flower wanted to be a rose, spring would lose its loveliness there would be no wild flowers to make the meadows gay[2]."

[2]The Autobiography of St Therese of Lisieux The Story of a Soul pg 2