ADDIS ABABA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

The Pragmatic Relationship between Organizational Culture and Knowledge Management: The Case of UNECA

By

Bewketu Bogale

August, 2014

A.A.U, Ethiopia

The Pragmatic Relationship between Organizational Culture and Knowledge Management: The Case of UNECA

By

Bewketu Bogale

A Thesis submitted to the School of Graduate Studies of Addis Ababa University in partial fulfillment of the requirements for the Degree of Master of Arts in Human Resource and Organizational Development in Education

College of Education and Behavioural Studies

Departments of Educational Planning and Management

Addis Ababa University

School of Graduate Studies

This is to certify that the thesis prepared by Bewketu Bogale titled: The Pragmatic Relationship between Organizational Culture and Knowledge management: The Case of UNECA and submitted in partial fulfillment of the requirements for the Degree of Master of Arts in Human Resources and Organizational Development complies with the regulation of the University and meets the accepted standards with respect to originality and quality.

Signed by the Examining Committee:

External Examiner :Teshome Tulu (PhD) Signature_____Date_____

Internal Examiner : Befekadu Zeleke (PhD) Signature _____Date_____

Advisor: Getnet Tizazu (PhD) Signature_____ Date_____

Chair of Department or Graduate Program Coordinator

Abstract

The overall objective of this study is to examine the practical relationships between organizational culture and knowledge management imperatives in the context of UNECA configuration. Moreover, this research endeavored to examine the predicting impact of organizational culture on knowledge management dimensions. A cross-sectional and descriptive design; and quantitative survey method were employed for this study. Data gathering instruments such as a questionnaire and document analyses were used. An online questionnaire was distributed to 163 knowledge-workers, (working in seven offices of the Commission located across the four corners of Africa); 66 knowledge-generators; 97 knowledge-deliverers. A representative sample size from Professional, National Officer and General Service categories were chosen using a mixed sampling method of stratified, purposive and random-sampling, took part in the study. The data obtained through the questionnaire was analyzed using descriptive and inferential statistical tools such as percentage, frequency, mean scores, standard deviation, standard mean error, t-Test, and correlation and regression coefficient. The data collected and analyzed has revealed that UNECA has an imbalanced organizational culture where one or two attributes of its organizational culture profoundly dominating its common values and behavior of its knowledge-workers. Moreover, UNECA heavily relied on and limited to very few distinct knowledge management processes to deliver knowledge management services. Consequently, its knowledge-culture interface compiled to accommodate a mismatch between organizational culture and knowledge management variables and failed to bring the conceptual knowledge management model. The two categories of knowledge-workers perceived the organizational culture of the Commission differently. The organizational culture not only created a positive and strong relationship with knowledge management dimensions but also had a predicting impact on the latter. These findings summed up to lead to a conclusion that UNECA has no effective knowledge culture that would have been streamlined and aligned to its refocusing theme to help in enhancing its contemporary efforts towards becoming a knowledge-based organization. That in turn would have contributed tremendously to achieve the Commissions primary objective, i.e., to become and remain the premier think thank on Africa's transformative agenda through purpose-oriented knowledge management. In order to bring the required amalgamation between organizational culture and knowledge management, the overall recommendation of the study was that UNECA should revamp and double up the existing efforts to build an effective knowledge-culture by creating, developing and sustaining a strong and balanced organizational culture. UNECA might introduce organization-wide cultural interventions that would not only last long to commence the necessary level of alignment between organizational culture and knowledge management but also to ensure that UNECA knowledge culture interface linkup with a feedback system that would further affirm organizational effectiveness.

Key words - knowledge management and organizational culture

Acknowledgments

I would like to thank my thesis advisor, Dr. Getnet Tizazu, for his guidance, constant encouragement, constructive comments and feedback which were valuable to the research study. I particularly appreciate his professionalism and commitment that added value to the quality of the work. Without his assistance and enthusiastic approach, completion of this study would have been difficult.

My special thanks also go to my colleagues at UNECA who willingly and enthusiastically devoted their precious time and provided genuine input to the research work by completing the online questionnaire on time fashion. Particularly to Mr. Fatty and Mr. Rao, who went beyond their limit and reaffirmed their support to my research work.

I would also like to express my thanks to wife, Hewan Ayalew, who was committed to doubling-up her family responsibilities. She provided compassionate and priceless moral support that I will always cherish.

Finally, I would like to extend my heartfelt appreciation to friends, especially Mr. Feleke Yeshitila, other family members and colleagues who provided their unprecedented support.

Table of Content

List of Tables and Figures

List of Abbreviations and Acronyms

COP:	Community of Practice
CVF:	Competing Value Framework
IDEP:	African Institute for Economic Development and Planning
KDs:	Knowledge Deliverers
KGs:	Knowledge Generators
KM:	Knowledge Management
KWs	Knowledge-workers
OC:	Organizational Culture
OCAI:	Organizational Culture Assessment Instrument
SECI:	Socialization, Externalization, Combination and Internalization
SROs:	Sub-Regional Offices
UN:	United Nations
UNECA:	United Nations Economic Commission for Africa

CHAPTER ONE

INTRODUCTION

This section of the research covers primarily the overview of the study where the concepts of organizational culture and knowledge management are described and the relationship between the two variables is explained. Secondly, the logic that initiated the researcher to work on the specified topic is justified by indicating the existing gaps and the expected contribution of the study towards filling these gaps. Moreover, this part of the study clarifies the purpose of the research and specifies basic questions and hypotheses to be tested by the researcher. Finally the target of the study, limitations, operational definitions of terms and organization of the study are included.

1.1 Background of the Study

The concept of organizational culture has been long neglected for long, (Pauleen, 2007), but recently it has drawn the attention of organization as a means of supporting to achieve its goals. Moreover, as stated by Nguyen & Umemoto, 2010), organizational culture is not easy to capture or define; it is an unobservable or intangible, powerful force in any organization (Griffiths & Koukpaki, 2009). Common pattern of shared assumption, beliefs and values as basic elements of organizational culture, are considered as the correct way of thinking and acting towards opportunities and problems an organization has. O'Donnell & Boyle (2008) and Nguyen & Umemoto, (2010), have demonstrated how organizations put efforts both to understand the cultural elements of its employees and tap and link with its business model. The importance of organizational culture to the overall effectiveness was further iterated by Cameron & Quinn (2011) claiming that organizations need to understand the nature and ability of the organizational culture in manipulating performance of the organization. Furthermore, Shahzad (2011) and Locke (2009), reaffirmed that, in order to remain competitive and sustain a winning business strategy, leaders could to be keen to develop the strong organizational culture to improve the overall performance of the employees and organization (Ebrahi, Fazelidinan & Safania, 2013).

Similarly, though it is a recent phenomenon; organizations have realized the importance of knowledge and knowledge management in order to keep their

business effective and also to prolong its effectiveness (Magnier-Watanabe, Benton & Senoo (2011) and O'Sullivan (2008). According to O'Sullivan (2008) and Edna & Ronen (2011), human capital has become critical to gain competitive advantage in a global economy, driven by advances in knowledge and technology. These days, organizations put their efforts and rely on a sound and strategic knowledge management as a means of keeping-up their effectiveness and achieving the strategic goal (O'Sullivan, 2008), Edna & Ronen (2011) and (Argote, McEvily & Reagans (2003). Scholars in the area of knowledge management (Choy & Suk, 2005) and Islam, Mahtab & Ahmad (2007) reached a consensus on the key role of knowledge management to surpass organizational performance.

As other organizational resources/capabilities such as finance, are dwindling and are becoming uncertain, organizations are paying more attention to managing thier invaluable asset (Al-Alawi, Al-Marzooqi & Mohammed 2007), i.e. the human capital as it is now considered major resource to boosting the organizational performance. The purpose of a well-defined knowledge management initiative is to support and assist the attainment of an organization's vision and mission (Argote, McEvily & Reagans, 2003) and (Bergeron, 2003). According to Al-Alawi, Al-Marzooqi & Mohammed (2007) and Islam, Mahtab & Ahmad (2007) the aim of knowledge management for business is to become more competitive through the capacities of their people in the form of tacit and explicit knowledge.

In order to take advantage of knowledge management to boost organizational performance, knowledge-base organizations need to go beyond in the position to recognize its importance and harness the intangible and invaluable resources (Lee & Choi, 2000). This can be attained, as stated by Jennex (2008) by ensuring that major organizational imperatives including organizational structure, organizational culture and technology that are helpful to create a seamlessly integration and set-up an environment that facilitates of knowledge management process. In particular, organizational culture is found to be significant in predicting the knowledge management processes (Lee & Chio 2000). The relationship between organizational culture elements and knowledge management process is further affirmed by Jennex (2008) by explaining that successful knowledge management implementation is mainly linked with 'soft' issues such as organizational culture and people. The two-fold role of organizational culture, both as the main obstacle and also as the

empowering factor in knowledge management activities, doubles the importance of this factor in the efficient managing of knowledge management processes (Allameh, Zamani, & Davoodi, 2011).

Based on previous empirical researches, for example Lin, Hui-Yi & Lu (2014), it was clear that the two key elements of an organization (organizational culture and knowledge management) have a pragmatic implication on the success of organizational achievements. Additional researches in both areas of organizational culture and knowledge management have investigated the relationship between these organizational imperatives. To realize organizational effectiveness, both organizational culture and knowledge management are required to be streamlined with the business strategy of the organization (Lin, Hui-Yi & Lu, 2014) and (Allameh, Zamani, & Davoodi, 2011).

Researches by Shaw & Mason (2003), Leidner (2006), Donate & Guadamillas (2010) and Chmielewska-Muciek & Sitko-Lutek (2013) conducted to investigate the impact of organizational culture. These studies indicated that organizational culture is a key element to the successful implementation of knowledge management initiatives. The most common recommendation drawn from these empirical studies is that organizations need to identify the strong culture, nurture it and aligning the culture to its knowledge management initiatives and help to facilitate knowledge process.

What is common between the two elements (i.e. culture and knowledge) both are soft and intangible resources (Griffiths & Koukpaki, 2009). But, Shaw & Mason (2003), these attributes mislead organizations to overlook organizational culture and knowledge management and neglected these powerful and indispensable resources for organizational effectiveness. As a result managers, as concluded by Donate & Guadamillas (2010), failed to tap these resources and harness them to the benefit of their organizations. On the other hand, attributes of organizational culture influence the effectiveness and efficiency of knowledge management (Jennex, 2008) and (Donate & Guadamillas, 2010).

According to Shaw & Mason (2003) and Jennex (2008), organizational culture and knowledge management play a pivotal role in today's competitive advantage. Hence, it is no longer a choice but a requirement to incorporate strong organizational culture and effective knowledge management in the business model

of firms at national and international level. Furthermore, organizations need to pay attention to the invaluable resources i.e. knowledge and culture that resides at an individual, group and organizational level (Donate & Guadamillas, 2010) and (Chmielewska-Muciek & Sitko-Lutek, 2013).

Previous research, such as (Griffiths & Koukpaki, 2009) and (Lin, Hui-Yi & Lu, 2014) explicitly indicated that the relationship between organizational culture and knowledge management where the former appeared to inflect its influence on how later is effective. In that relation, knowledge management initiatives of multinational and knowledge-base organizations, such as United Nations Economic Commission for Africa (UNECA), are not exempted from the positive or negative influences from common assumption, values and beliefs of its employees i.e. organizational culture.

Since 2000, UN Agencies (including UNECA) have considered knowledge management as a means of enhancing organizational effectiveness. Recently (in mid-2013), as part of a re-profiling exercise, UNECA put rigorous efforts to strengthen its knowledge management initiatives. This purpose-oriented knowledge management initiative is believed to be capable of supporting UNECA's vision through a knowledge-enabled process. That in turn, according to its Knowledge Management Strategy (2014), is hoped to enable UNECA to become and remain premier Think Tank on Africa transformative agenda. The success of UNECA's vision depends heavily on having sound knowledge management. According to the recent Knowledge Management Strategy of the Commission the successful achievement of UNECA's knowledge management was not articulated enough that it heavily dependent on having or not having organizational culture that facilitates and supports knowledge management.

The intriguing question, however, is that does UNECA have a knowledge-culture? And to what extent the dimensions of the dominant organizational culture (leadership style, management of employees, organizational glue, and strategic thinking and success factors) are rationalized and ready for seamless and effective knowledge management process? How the organizational culture relates to the knowledge management process and how organizational culture affects successful implementation of UNECA knowledge management initiatives.

1.2 Statement of the Problem

Regardless of size, geographical location and business model, modern organizations are well-aware of the practical implication of organizational culture both on the organizational performance and employees' effectiveness. According to (Donate & Guadamillas, 2010), knowledge management initiatives are not excluded from the positive or negative implications resulting from organizational culture. Creating and sustaining strong organizational culture plays a key success factor for effective knowledge management process. Nonetheless, organizations remain reluctant to establish a bond between organizational culture and its knowledge management activities that in turn would help to realign organization parameters to harness knowledge avail at individual, group and organizational levels (Shaw & Mason, 2003).

Scholars put little effort to conduct empirical researches that investigate the practical relationship between organizational culture and knowledge management. Some of the researches in the area not only limited in terms of depth and scope of knowledge and knowledge management aspects but also confined to individual impact of knowledge management and on organizational performance. Furthermore, Shaw & Mason (2003) stated these researches focused on profitable organizations linking knowledge management as a factor impacting more importantly its financial achievements (monetary successes).

Despite the fact that there is strong bond between organizational culture and knowledge management, the area could only attract the interest of very few nation-wide researches that endeavor to investigate the relationship between organizational culture and knowledge management. One among these very few researchers was that of Danie (2010) who also assessed knowledge management capacity of Jimma University. Another study by Hermela (2013) evaluated knowledge management maturity level of development organizations and others either focused on knowledge base system (Berhanu, 2012; Ejigu, 2012; Habtam, 2012; and Seblewongel; 2012) or targeted knowledge sharing (Harya, 2011). What was overlooked in these local studies was the link between knowledge management and other organizational parameters such as organizational culture and particularly no related study has been done in multi-national and international organizations. Basically all local researchers commonly emphasized the paramount importance of

how knowledge/knowledge management plays in achieving organizational effectiveness and for any form of organization.

Even these few researches in the area of organizational culture and knowledge management, at international and national level did not adequately address the possible implications of organizational culture on knowledge management. It also failed to map the implication and link of organizational culture and knowledge management processes in multi-national organizations including United Nations affiliated organizations. Undoubtedly non-profit and international organization recognized the paramount importance of knowledge/knowledge management in supporting its strategic plan. The target of the present research, UNECA, as one of the Economic and Social wings of the United Nations, acknowledged knowledge/knowledge management as its key resource in implementing its mandate.

Through its recent refocusing initiative, UNECA has aimed to effectively support Africa's transformative agenda. It has manifested its commitment to be a knowledge-base organization and reaffirmed its position to rely on sound knowledge/knowledge management to make policy decisions. The key activities set by UNECA, according to the UNECA Knowledge Management Strategy-2014, to strengthen its knowledge management as strategic resource include:

- Readjust UNECA Substantive Divisions to build knowledge-enabled business process and embed knowledge management in its business plans.
- Develop and release a comprehensive Knowledge Management Strategy intended to rationalize how UNECA acquires, shares and applies knowledge.
- Set up a dedicated department, Knowledge and Library Services Section (KLSS), responsible to oversee knowledge management activities of the organization.
- Put knowledge delivery and sharing incentives intended to encourage professional staff to contribute compulsory research papers per annum.
- Restructure its five Sub-Regional Offices (SROs) - the SROs are dedicated to serve as Data-Center and mandated to focus on promoting professional connections and knowledge networking, supporting the organization's efforts to engage professional communities in knowledge-sharing both regionally and in countries.

- Re-profile the role and responsibility of knowledge officers in the Sub-Regional Offices to focus on promoting professional connections and knowledge networking within the countries and sub-regional organizations under their purview.

Obviously these knowledge management initiatives demonstrate the devotion of UNECA's management to ensure that it becomes and remains Africa's premier think tank, by consistently generating top quality, thoroughly researched products reflecting the latest thinking on issues relating to Africa's transformative agenda (UNECA Knowledge Management Strategy, 2014). However, unless this commitment is backed by the necessary organizational culture (shared values, believes), its implementation could be questionable. And this calls for examining individual and collective culture of knowledge workers who play a major role in the process of knowledge management.

In its Comprehensive ICT strategy (2000), the Commission declared that it is a knowledge-base organization and managing knowledge is the lifeblood of the organization. However, according to this report, UNECA is in the business of knowledge generation and delivery, previous knowledge management initiatives brought little success and were therefore considered to be ineffective. These initiatives were considered external-facing, platform-based and they focused on web-based knowledge sharing. But there was no empirical assessment conducted to put concert evidence to reason out the failure in setting a viable and vibrant knowledge management that supports the business of the Commission. Even though studies conducted in other contexts indicate that organizational culture could impede or promote success of a given organization, no empirical study has been conducted in the Commission that warrant if the failure story of pre-2013 knowledge management initiatives had anything to do with organizational culture.

It is true that the recent endeavors of the Commission marked a new approach to reinforce and realign knowledge management as a new way of doing business. UNECA formulated to set knowledge enabled business process to support its major pillars i.e. Macroeconomic Policy, Regional Integration and Trade, Social Development, Natural Resources, Innovation and Technology, Gender and Governance.

Nonetheless, the current Knowledge Management Strategy did not clearly articulate organizational imperatives including organizational culture, as constraints in terms of affecting its knowledge management initiative. Moreover, no prior empirical researches were conducted to investigate the implication of organizational culture on their strategically importance of knowledge management initiatives and its effectiveness.

1.3 Research Question and Hypotheses

To attain the purpose of this research, five basic questions were raised which were relevant to the practical linkage between of UNECA's organizational culture and its knowledge management processes. Specific hypotheses have been drawn from the basic questions.

The basic questions are -

1. Is there any dominant organizational culture among knowledge-workers of UNECA and what is the most practiced or dominating knowledge management process at UNECA?
2. How does the dominant culture fit with the dominating knowledge management process to create a knowledge-culture? Did the knowledge-culture interface of UNECA accommodate a perfect fit to form the ideal knowledge-culture configuration?
3. How did UNECA knowledge-workers or employees perceive the overall current organizational culture, and what differences exist between the perception of knowledge-generators (KGs) and knowledge-deliverers (KDs)?
4. What was the relationship between the organizational culture types of UNECA with its knowledge management process demission?

H01-Clan organizational culture is related with the four knowledge management process i.e. socialization, externalization, and combination and internalization knowledge management at a different direction and magnitude.

H02-Adhocracy organizational culture is related with the four knowledge management process i.e. socialization, externalization, and combination and

internalization knowledge management at a different direction and magnitude.

H03-Market organizational culture is related with the four knowledge management process i.e. socialization, externalization, and combination and internalization knowledge management at a different direction and magnitude.

H04-Hierarchy organizational culture is related with the four knowledge management process i.e. socialization, externalization, and combination and internalization knowledge management at a different direction and magnitude.

5. How do organizational culture dimensions influence knowledge management variables?

1.4 Objectives of the Research

The purpose of this research was to examine the relationship between organizational culture and knowledge management in UNECA.

Specifically, this research aimed to

1. Identify the dominant organizational culture and the dominating knowledge management process among knowledge-workers of the UNECA,
2. Explore how the dominant organizational culture and dominating knowledge management process fitted together to create UNECA knowledge-culture interface,
3. Assess how organizational culture was perceived by the two knowledge-workers categories of UNECA i.e. KGs and KDs,
4. Define and identify the relationship between UNECA's dominant culture dimensions (leadership style, management of employees, organizational glue, strategic emphasis and criteria for success with knowledge management process.
5. Examine the predicting influence of organizational culture and knowledge management process in UNECA.

These in turn led to the examination of whether the Commission has an organizational culture that supports the effective implementation of knowledge management initiatives.

1.5 Significance of the Study

The researcher assumed that the research study was timely and relevant as it coincided with UNECA re-profiling exercise which headed towards incorporating a very dynamic model of knowledge-flow and implement a purpose-driven knowledge management foundation.

This research work would contribute and be great significance both in helping UNECA, primarily to successfully implement its current knowledge management initiatives by considering the unavoidable impact of organizational culture. Secondly, the findings of the research would lead UNECA to device a way of sustaining or developing the type of organizational culture that facilitates knowledge management. The findings and conclusion would also suggested relevant, doable and achievable options to develop a knowledge-culture, an organizational culture that aligns with its knowledge management initiatives, facilitate knowledge management process and support the effective implementation of knowledge management initiatives.

Moreover, the major findings of the research work would add knowledge in the area of organizational culture and knowledge management. Finally, the research would serve as a starting point, by pinpointing existing gaps, help other researchers to conduct further studies in the area.

1.6 Scope of the Study

The study mainly focused on investigating the relationship between organizational culture and knowledge management of UNECA by mapping the links between the types of organizational culture and knowledge management process. The research has included staff from seven offices located in four corners of Africa. It involves UNECA's knowledge-workers, staff both at a professional, national officers and general staff category, who were directly involved in the process of knowledge creation and delivery. Staff members with limited role in knowledge management process of the organization were excluded from this research. Organizations and Community-of Practice (COPs) which have knowledge-network

and closely connected to UNECA pertaining knowledge sharing were not the focus of this study. Though UNECA has culturally diversified staff which has added a different dimension and have impact on organizational culture, the national culture of target population was out of the scope of this research. Finally, the impact of other organizational imperatives or knowledge management enablers including organization structure, technology and infrastructure were scoped-out from this research study.

1.7 Limitations of the Study

The researcher believed that this study would have been more complete and comprehensive if, first more data collecting instruments could be used such as structured interview, which would help to elicit more input from the sample size to triangulate and substantiate data gathered from the questionnaire. Second, it would have been better to link demographic data of the target group, such as category and years of experience, with the two imperatives of this study that in turn might give a clear picture how organizational culture and knowledge management were interrelated through attributes of the knowledge-workers.

The major challenges the researcher faced, that might have an implication on the overall result of the study includes firstly, at a local level, there were limited or no empirical research works aimed at investigating the link between organizational culture and knowledge management. Secondly, using an online questionnaire to collect data, created doubt on very few respondents questioning the confidentiality and anonymity of their responses who finally decided to refrain from participating in the assessment. Finally, the time given for the research was quite short to test the instruments, gather, analyze and make the necessary corrections as required. Therefore, because of these limitations, the study by no means claimed to be conclusive. It would rather serve as a spring board to better understand the link between organizational culture and knowledge management.

1.8 Operational Definition of Terms

Knowledge Management- is a process that focuses on managing the flow of knowledge in lieu of knowledge management base on SECI model of knowledge conversion process that includes socialization, externalization, combination and internalization.

Organizational Culture – is common assumption of an organization and it is the set of shared values and norms that controls organizational members' interactions with each other and with people outside the organization. Organization culture is categorized in to four types i.e. clan, adhocracy, market and hierarchy which are identified and manifested on its six dimensions including dominant characteristics, leadership style, management of employees, organizational glue, strategic emphasis and criteria for success.

1.9 Organization of the Study

This research work is organized in five chapters. The first chapter deals with introductory elements including the background of the study, statement of the problem; objectives of the study; significance of the study; basic questions and hypotheses, scope of the study; limitations of the study; definition of key terms and organization of the study. The second chapter covers a review of the related literature which discusses important topics pertaining to organizational culture and knowledge management. The third chapter consists of research design and the methodology. The fourth chapter provides the presentation, analysis, and interpretation of the data. Finally, in the last chapter, summary of findings, conclusions and recommendations are presented.

CHAPTER TWO

LITERATURE REVIEW

As a theoretical foundation of the research work, this section comprises of not only definitions of key terminologies of the research but also the profound reviews of major concepts and models on organizational culture and knowledge management elements. Additionally this part contains the review of previous research works both in the area of organizational culture and/or knowledge management pertaining to methodology applied, findings outlined and recommendations forwarded; and of course, the conceptual model.

2.1 Organizational Culture: Concepts and Models

Scholars and experts agreed on the existence of organizational culture (Shcine, 2010), but there is no single, explicit and exhaustive definition that reflects its features and attributes. As the concept of organization culture, aka corporate culture is defined by scholars from different dimensions and contexts, difference in terms of details and focus of the definition remained obvious.

For instance, Cameron (2004) defined organizational culture as referring to the taken-for-granted values, expectations, collective memories, and implicit meanings that define that organization's core identity and behavior. Additionally, organizational or corporate culture is considered as the pattern of values, norms, beliefs, attitudes and assumptions that may not have been articulated but shapes the ways in which people in organizations behave and get things done. 'Values' refer to what is believed to be important about how people and organizations behave whereas 'norms' are the unwritten rules of behavior (Armstrong & Taylor, 2014).

Similarly, Schein (2010) defined culture (corporate culture), as a pattern of basic assumptions – invented, discovered or developed by a given group as it learns to cope with the problems of external adaptation and internal integration – that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to these problems. According to Perkins & Arvinen-Muondo (2013), the simplest way of looking at organizational culture is the standard description that it is 'the way we do things around here'. This implies that there are accepted practices and norms of

behavior in an organization and these can be passed on to newcomers and can be experienced by anybody who comes into contact with it.

Organizational culture is a mental software for the human (Hofstede, 2001) and this multidimensional concept plays a significant role in forming the way of feeling, thinking and acting. Indeed the complex nature and intangible attributes of the concept and being a relatively young field of research (Dauber, Fink, & Yolles, 2011) has contributed to the difference among scholars to coin an inclusive statement and they failed to come up with one common definition. Nonetheless, most definitions commonly specified organizational culture as a pattern of behavior and value shared by employees of an organization that peculiarly identifies and uniquely characterizes them form others.

On the bases of these popular definitions of organizational culture and from the perspective of this research, organizational culture is contextually defined as the common assumption of an organization and its set of shared values and norms. Theses shared values and norms that control organizational members' interactions with each other and with people outside their organization. Organization culture, based on the CVF model, is categorized in four types i.e. clan, adhocracy, market and hierarchy which are identified and manifested on its five dimensions including leadership style, management of employees, organizational glue, strategic emphasis and criteria for success (Schein, 2010).

In their endeavor to further understand the complex nature of organizational culture by examining its components and its ingredients, scholars applied different criteria to denominate organizational culture components and interlinks in the form of models, theories and frameworks. Some of the popular models aimed at explaining organizational culture developed by renounced scholars in the area are summarized below.

Table 2.1: Organizational Culture models, as presented by Dauber, Fink & Yolles (2011)

Model/Framework	Description	Features
Schein (2000)	Contains three basic domains including basic assumptions, espoused values and artifacts distinguishing between observable and unobservable pat of organizational culture.	The most sited and less complex model of all. Organizational culture type is based on levels of organizational culture as experienced by individuals in the organization.
Hofstede (2011)	Six dimensions of cultural differences have been acknowledged. These dimensions include: individualism vs. collectivism, power distance, uncertainty avoidance, and masculinity vs femininity, long-term vs. short-term ; and indulgence vs. restraint	It also considers the six independent dimensions of practices are known as; Process-oriented vs. results-oriented, job-oriented vs. employee oriented, professional vs. parochial, open systems vs. closed systems, tightly controlled vs. loosely controlled and finally, pragmatic vs. normative
Cameron and Quinn (2011)	The Computing Value Framework (CVF) classifies values of organizational effectiveness into four main types namely; Collaborate, Create, Compete and Control. The model presented a more specific model for classifying organizational culture types which labels each organizational culture as Clan, Market, Adhocracy and Hierarchy	Classification of organizational culture through the organization's characteristics within two dimensions; Flexibility vs. Control Stability External focus vs. Internal focus.

Like their disparity defining organizational culture, Hofstede, (2001) it obvious that scholars once again have not reached a consensus to adopt one comprehensive model that fits the different parameters of various organizations. Rather the differences remain intact as the models developed are in the emulating specific organizational setup and the modules are developed to meet specific needs. However, O'Donnell & Boyle (2008) these popular organizational culture models

are commonly, if not equally, used by researchers to better understand organizational culture either independently or in relation to other organizational dimensions.

Quinn & Rohrbaugh (1999) indicated that the Competing Values Framework (CVF) is one of the most influential and extensively used models in the area of organizational culture research. CVF is considered suitable and appropriate for the research; it originally emerged from empirical research on the question of what makes organizations effective. Similarly, (Fong & Kwok, 2009) reaffirmed that CVF is evolved and enriched broadly applicable model to validate organizational effectives through examining, identifying and harnessing the invaluable asset of organizational culture. Using its four quadrants, as indicated in figure 2.1 CVF-Organization Culture Model, this framework refers to whether an organization has a predominant internal or external focus and whether it strives for flexibility and individuality or stability and control. The framework is also based on six organizational culture dimensions and four dominant culture types (i.e. clan, adhocracy, market, and hierarchy).

Figure 2.1: CVF Organizational Culture model -adopted from Cameron (2004)

These four organizational culture are distinguished with six demission, according to Quinn & Rohrbaugh (1999), namely, the dominant characteristics of the organization, the primary leadership style and approach used within the

organization, the management of employees (how the employees are treated), the organizational bonding mechanisms that hold the organization together, the strategic emphases of the organization (what drives the company) and the criteria of success that determine how achievement is defined and what gets rewarded and celebrated.

These four dimensional CVF organizational culture is further explained by Quinn & Rohrbaugh (1999) in figure 2.2- Attributes of the CVF Organizational Culture Types where the attributes associated to each quadrant are elaborated.

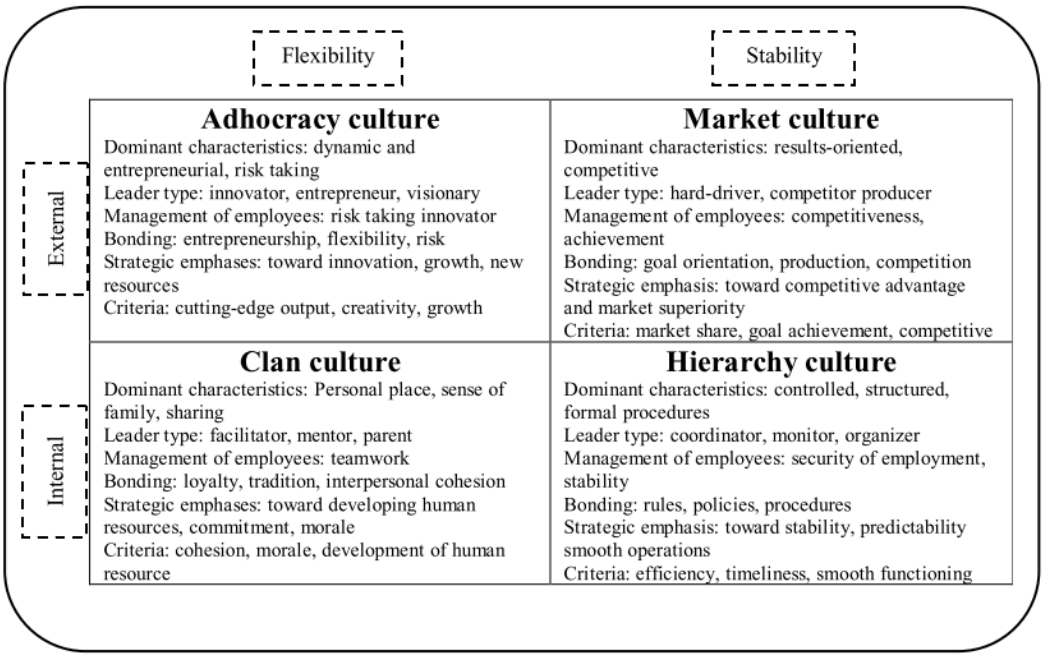


Figure 2.2: Attributes of the CVF Organizational Culture Types (Schein, 2000)

Gray & Densen (2007) stated that organizations are seldom characterized by a single culture type. Organizations tend to develop dominant culture overtime as they adapt and respond to changes in the environment (Schein, 2000). Regardless of where organizations lay as a dominant culture, Dauber, Fink & Yolles (2012), there is no good or bad/right or wrong culture; rather it needs to be a healthy culture where employees are aligned and moving in the same direction. Organizations with all four quadrants represented are considered 'balanced' and perform well in attaining organizational effectiveness. In contrast, Lee & Yu (2004) organizational culture considered to be 'imbalanced' tend to emphasize values associated with it at the expense of values that characterize other cultures that resulted in less effective organizational performance. It is important to note, however, that all four cultures

can coexist in modern organizations, with some values more dominant than others. What is expected of organizations is to nurture a balanced organizational culture and create a fit in the overall strategic approach (Gray & Densen, 2007) and Lee & Yu (2004). As highlighted by Quinn & Rohrbaugh (1999), it would be unrealistic to expect one organization to lie totally within one section of the CVF; there will be differences between groups and between individuals within groups. However, the predominant culture within an organization will be characterized by established structures and norms which reinforce that culture (Quinn & Rohrbaugh, 1999).

2.2 Why Organizational Culture matters most?

Organizations with a winning business strategy are expected to strive questing for a strong organizational culture, (Madu, 2009), characterized by a high level of trust, open communication between leadership and others. High accountability, recognition of creativity, innovation and efforts that exceed expectations were also recommended (Donate & Guadamillas, 2010).

Despite the fact that scholars tend to differ in defining organizational culture, they have a common ground and acceptance on how organizational culture affects the overall achievement of organizations. Researchers such as Quinn & Rohrbaugh (1999), Stoyko (2009), Clair & Stanley (2009) and Ramachandran, Chong & Ismail (2011) ironically came to a consensus that organizational culture, as an intangible resource to the organization, has a decisive role and impact on the bottom-line (overall performance) of organizations.

In the current competitive market organizational culture, as a soft and intangible resource, plays an important role as it has significant contribution in the process of achieving organizational goals. Perkins & Arvinen-Muondo (2013) explicitly mentioned that, there is a sense that organizational culture has a significant role to play in optimizing the internal capacity and having added value on the improved performance of firms. Likewise, Dale (2012) clearly mentioned that organizational culture is a key source of competitive advantage.

Dale (2012) concluded that by adding and demonstrating how understanding, diagnosing and conducting intervention to change organizational culture impacts its overall performance. Organizational culture is a key factor, according to Hatch (2003), not only in achieving organizational goals, but in attracting and keeping

desirable employees, creating a positive public image, and building respectful relationships with stakeholders. Of course, based on Clair & Stanley (2009) having "the right kind of culture" – a culture that is appropriate to the kind of enterprise in which an organization is engaged – is widely acknowledged to be among the most important determinants of how effective or successful the organization will be. Furthermore, a number of researchers in organizational culture came to an agreement and showed how they are convinced on how organizational culture matter Cameron (2004) as organizational culture shapes.

- What the organization considers "right decisions" which are cost effective and aligned to the objectives of the organization,
- What employees consider to be appropriate behavior and how they interact with each other within the organization for better teamwork and communication,
- How effectively individuals, work groups and the organization as a whole deal with work assigned to them,
- The speed and efficiency with which things get done,
- The organizations capacity for and receptiveness to change and
- The attitudes of outside stakeholders towards the organizations.

2.3 Diagnosing Organizational Culture

Despite the distinctiveness in approach, context and purpose of the models, organizational culture models can serve one purpose i.e. to help organization to examine/diagnosis and better understand its cultural setup. Understanding the cultural make up of the organization in turn is a meticulous way of aligning and realigning organizational culture with the overall objective of the organization (Cameron, 2004).

Understanding the organizational culture by no means is not enough, according to Cameron & Quinn (2011), for organization to testify the true value-added from strong organizational culture. Rather, according to Lim(2005); and Lai & Lee (2007), organizations need to go through a systematic process of diagnosing the current organizational culture, get the full picture of organizational culture and its subcultures, streamline and integrate organizational culture with organizational

strategy and finally nurture and sustain the right organizational culture. That can be achieved by going through rigorous and periodic organizational culture assessment. In this regard researchers and scholars have developed various standard and valid organizational culture assessment tools and instruments including some of the prominent ones Organizational Culture Assessment Instrument by Quinn & Cameron (2000), Organizational Culture Inventory by Kaur & Kahlon (2012).

Numerous organizations had gone through the fundamental process of organizational culture assessment, according to Schein (2010), for the purpose of either optimizing the link between organizational culture and other initiatives, supporting programs designed to change behaviors or enhancing leaders and managers' understanding of culture. Not surprisingly, these assessment exercises have deployed one of the organizational culture assessment tools mentioned to achieve its specific goals of organizational culture diagnosis.

OCAI is a validated instrument, based on the Competing Values Framework, and used by thousands of companies worldwide (Kaur & Kahlon, 2012). By rating six key aspects of organizational culture that were found to determine success, the input from the respondents helps to define the current organizational culture, identify the gaps to set organizational culture that could contribute to the success of the organization. The researcher often conducted organizational culture assessment using OCAI through the lens of CVF, such as Vogds (2001), Hatch (2003), Lawson(2003), Campbell (2009) and Lusthaus, Adrien & Anderson(2010), who either merely focused on organizational culture elements or examined organizational culture intermingled with other organizational imperatives. Their research work indeed were aimed at defining the dominant culture (current and preferred), evaluating the perception of organization culture among groups of employees and exploring the link between organizational culture dimensions and other parameters (Kaur & Kahlon, 2012).

Specifically, Vogds (2001), Lawson(2003) and Campbell (2009), dedicated their research works both to identify the dominant characteristics of the organization and to examine the differences in perceptions of employees on four organizational culture types as defined by Cammeron & Quin (2000). Commonly, these researches used the mean score, standard deviation value and standard error values to identify the dominant culture and to measure how different the perception

of the group is and how significant the difference would be pertaining to their respective organizational culture.

Withstanding to their differences in terms of the combination and number of variables involved in the research, Vogds (2001), Lawson (2003) and Campbell (2009), plainly considered the organizational culture with the highest mean score as a dominant culture. Thus, adhocracy culture with a mean score of 2.97 (Vogds, 2001), market culture with a mean score of 3.11 Lawson (2003) and hierarchy culture with a mean score of 3.11 Campbell (2009) emerged as a prominent organizational culture.

Tilchin & Essawi (2013).argued that different organizational set-ups carry different attitudes, behaviors, and work patterns that must be recognized to enhance effort and performance. No organization can have one dominant culture and no culture type is better than another. The value is in understanding an organization or team's culture and how that culture helps support business goals (Hatch, 2003), only then the workspace truly provide the support team members need.

Despite the type of culture that dominants the organization, organizational culture can be supportive of or hindrance, according to Iyamabo (2013), the implementation of new initiatives and the achievement of firms overall goals. In order to harness the invaluable contribution of organizational culture towards attaining the strategic goals, organizations are required to put their immense efforts to diagnose, align/realign, nurture and sustain organizational culture that overwhelmingly support organizational effectiveness. It is totally upon the organizations to nurture, develop and transfer the 'strong' organizational culture that will have an added value to the overall performance of the organization.

2.4 Knowledge Management: Concepts and Trends

It was only a couple of years ago when the human knowledge was seriously acknowledged as an indispensable resource in supporting to achieve organizational effectiveness. According to Allameha, Zamanib & Davoodi (2011), organizations set a way of managing knowledge at individual and organizational levels and strategized to integrate knowledge management as part and parcel of their business plan. Since the early 1990s, knowledge management became one of the hottest and

fad phenomena which were fully intermingled with the way organizations did business (Hutchings & Mohannak, 2007).

Currently, knowledge and knowledge management is gaining an escalating interest from both practitioners within organizations and researchers who are keen to explore and elicit more about knowledge and knowledge management (Leidner, 2006). Evidently, knowledge management had exponential growth in a number of articles published and this trend shows no signs of abating. This indicated that knowledge management is not a fad but rather knowledge management is now accepted as part of the corporate strategic agenda (Leidner, 2006). These articles by academia and researchers started their examination on knowledge/knowledge management by giving a definition that meets the specific scope of this research.

2.4.1 What is Knowledge Management?

As it is a young and less explored area of management, number of definitions to the concept appeared from different circumstances (Long, 2007). Some of the well known and highly rated or sited definitions of knowledge management are summarized below.

Marques & Simon (2006) and Olfman & Jennex (2008) who both explored knowledge management as a human resources process and expressed it differently where Marques and Simon (2006) stated knowledge management as any process and practice of creating, acquiring, capturing, sharing and using knowledge wherever it resides, to enhance learning and performance in the organization. Whereas, Olfman & Jennex (2008) defined knowledge management as the explicit and systematic management of vital knowledge and its associated process of creating, gathering, organizing, diffusing, use and exploitation, in pursuit of organizational objectives.

On the other hand, Neto, Souza, Neves & Barbosa (2008) who approached knowledge management for its interdisciplinary dimension, defined knowledge management as an effective learning process associated with exploration, exploitation and sharing of human knowledge (tacit and explicit) that uses appropriate technology and cultural environment to enhance an intellectual capital and performance. Finally, Armstrong & Taylor (2014) defined knowledge management, as a management process, which is concerned with storing and sharing the wisdom, understanding and expertise accumulated in an organization about its

processes, techniques and operations. Organizations treat knowledge as a key resource to achieve its effectiveness.

Taking into consideration all knowledge management definitions mentioned above, there is no agreed definition of "knowledge management", even among practitioners. The term is used loosely to refer to, (Wolf, 2013) a broad collection of organizational practices and approaches related to generating, capturing, disseminating know-how and other content relevant to the organization's business.

Since the definitions are coined from different grounds, sticking to either its economical, social, political or technical aspects, there is little but basic commonality between these definitions of knowledge management. Even scholars who put the prospective in the same dimension defined knowledge management differently. The ongoing discussion about defining knowledge and related terms is a sign of both the complexity and multifaceted nature of this topic and the various different viewpoints which the issue can be approached from (Paisittanand, Digman & Lee).

Despite the differences, (Lee & Choi, 2000), it is possible to conclude that knowledge management refers to a multi-disciplined approach to strategize human capital to achieve organizational objectives by making the best use of knowledge. Stankosky & Butterworth–Heinemann (2009) mentioned knowledge management as scientifically proven management process, it involves a life-cycle approach intended to convert the knowledge progressively as a strategic asset of the organization and support to achieve organization-wide objectives. Furthermore, it is generally true that knowledge management focuses on processes such as acquiring, creating and sharing knowledge and the cultural and technical foundations that support them (Al-Shammari, 2010) with or without the support of information and communication.

Considering what pervious definitions have in common and the objective of this research, knowledge management, in this context, is defined as a process that focuses on managing the flow of knowledge in lieu of knowledge management base on SECI model of knowledge conversion process that includes socialization, externalization, combination and internalization as explicitly explored by Nonaka & Takeuchi (2000).

2.4.2 Knowledge Management Process Models and Frameworks

Knowledge management is a complex and dynamic process, (Girard, 2009; and Griffiths & Koukpaki, 2008), that requires standard model and framework to conceptualize it. These models/frameworks helped not only to simplify and easily understand the complex nature of knowledge management but also helped as a roadmap to conduct researches pertaining knowledge management separately or mapping with other organizational imperatives.

Some of the well-known knowledge management models, as reviewed by Neto, Souza, Neves & Barbosa (2008), are summarized and presented, in table2.2 below, indicating its specific focus for developing the theoretical concept.

Table 2.2: Knowledge Management Models Summary

Model	Description (Key notes)	Emphasis
Nonaka's Knowledge Management Model (1999)	• Presumes that knowledge consists of tacit and explicit elements. In this aspect, tacit knowledge is defined as non verbalized, intuitive and unarticulated, whilst, explicit knowledge is articulated and can be specified in writing, drawings, computer programming and others • Considers socialization, externalization, combination and internalization as a process of converting tacit knowledge to explicit or the reciprocal • Presumes that knowledge transfer in organizations is simple and straightforward	Process and flow
Skandia Intellectual Capital Model of Knowledge Management (2000)	• Focuses on the importance of equity, human, customer and innovation in managing the flow of knowledge within and externally across the networks of partners • Gives a strong emphasis to measurement associated with each of the decomposed elements (human, customer and structure) of knowledge management assuming that it can be tightly controlled.	Social and learning process
Stankosky and Baldanza's Knowledge Management	• Addresses enabling factors such as learning, culture, leadership, organization and technology.	Organizational

Model	Description (Key notes)	Emphasis
Framework (2001)	• Presents that knowledge management encompasses a wide range of disciplines • Suggests the four major foundations of an organization which is important for knowledge management are leadership, organization structure, technology infrastructure and learning	enablers
Frid's Knowledge Management Model (2003)	• Considers knowledge management framework, the knowledge management maturity assessment levels and knowledge management implementation can be divided into five levels including knowledge chaotic, knowledge aware, knowledge focused, knowledge managed and knowledge centric	Process and flow

To summarize, despite the fact that these knowledge management models vary, in one way or another, each one of them can serve the same purpose (Haslinda & Sarinah, 2009). Furthermore, Haslinda & Sarinah (2009) iterated that knowledge management models inevitably appeared to be quite distinct which directly the result of expert's interest is and focus who perceived and conceptualize the subject matter from different dimension. Consequently, as it is true to its definition, there is no single model that is comprehensive enough that accommodates what is intended to represent the concept i.e. knowledge management. Jennex (2009) stated that even though knowledge management models have evolved from time to time and focused on one of its dimension, basically the models provide a way of translating managerial activities and guiding managerial efforts in managing knowledge in the organizations.

SECI (stands for Socialization, Externalization, Combination and Internalization) is a knowledge management conversion model, developed by Nonaka & Takeuchi (2000). It is one of the most popular models and referred by more than 155 research work in the area of knowledge management. According to Gold, Malhotra & Segars (2001), SECI matrix of knowledge conversion is increasingly being cited by authors in a widen set of disciplines and has evidently achieved something like a paradigmatic status. Through these research studies, the

model has been tested for its validation and reliability as a tool to examine knowledge management. The Nonakan's theory and his SECI model provides a comprehensive and integrated conceptual framework for organizational knowledge management (Becerra-Fernandez & Sabherwal, 2001).

Each sub-model in the knowledge convesion process, as indicated in figure 2.3, is dedicate to convert the two types of knowledge i.e. tacit and explicit. Spcifically, according to Nonaka & Takeuchi (2000),

- Socialization is the process of converting tacit knowledge into new tacit knowledge;
- Externalization is the process of articulating tacit knowledge into explicit knowledge;
- Combination is the process of converting explicit knowledge into more complex and systematic sets of explicit knowledge; and
- Internalization is the process of embodying explicit knowledge into tacit knowledge.

The popularity, validity and practicality of the model in examining knowledge management practices and the fact that it is a model adopted by the organization under study (UNECA) makes it a preferred conceptual model to test basic questions raised by this research.

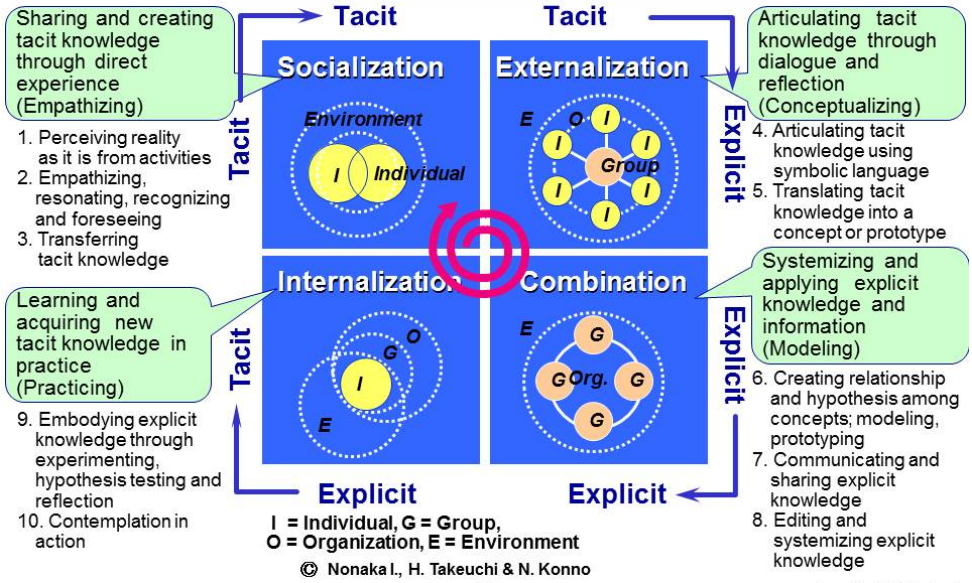


Figure 2.3: SECI Knowledge Management adopted from Nonaka & Takeuchi (2000)

2.5 The Added-value of Knowledge and Knowledge Management

As knowledge management is multifaceted, argued and presented from different perspective, having a wide range of definitions and theoretical models to present the same concept is not a situational surprise. Regardless of the definitions adopted or the models applied, with no exception, all researches agreed that knowledge management as a fad which organization cannot afford to neglect if sustaining organizational effectiveness is a key factor (Jelenic, 2011). The overall impact of knowledge management on the strategic achievement of organization's performance and knowledge as a strategic resource is further stated by Li & Zhang (2011) as, knowledge management (KM) has been recognized to be the best way to gain sustainable and unique competitiveness in the economics of knowledge(Bergeron, 2003).

Ironically, the foundation of industrialized economies has shifted from natural resources to intellectual assets (Kulkarni, Ravindran & Freeze, 2007). Hence, according to Girard (2009), executives have been compelled to examine the knowledge underlying their business and how that knowledge is used. Indeed, it has been recognized or accepted that knowledge management is broad and multi-dimensional and covers most aspects of the orgnization's activities. Therefore, to be competitive and successful, firms must create and sustain a balanced intellectual capital portfolio (Edna & Ronen, 2011). A successful company is a knowledge-creating company (Jelenic, 2011). Additionally, Islam, Mahtab & Ahmad (2007); and Jafari, Abbaspour & Azizishomami(2013) conducted their research on knowledge management and concluded their work by stating that the effective management of knowledge resources is a key imperative for firms that want to leverage their knowledge asset for competitive and improved performance.

The explicit impact of knowledge management on organizational performance is further affirmed by Armstrong (2014) and Harnessing (2011), who stated that knowledge management is about sharing knowledge in order to improve organizational effectiveness and link up the existing knowledge to the business strategy of the organization. According to Eardley & Uden (2010), effective knowledge management would help to, for example to reduce risk; increase effectiveness of the organization; allow better decisions to be made and learn from successful projects Moreover, Moradi, Saba, Azimi & Emami (2012), Emadzadw,

Mashsyekhi & Abdar (2012) and Rašula, Vukšić & Stemberger (2012) stated that effective knowledge management initiatives reduce unnecessary processes and streamlines operations; increase employee retention rates; and offer better productivity.

Conclusively, organizations are realizing that intellectual capital or corporate knowledge is a valuable asset that can be managed as effectively as physical assets in order to improve performance (Marques & Simon, 2006). The focus of knowledge management is connecting people, processes and technology for the purpose of leveraging corporate knowledge. Rašula, Vukšić & Stemberger (2012), mentioned that, understanding and recognizing knowledge management as a key resource to organizational performance is not an end by itself. But managing knowledge effectively, by setting a suitable knowledge management condition is equally important. As Moradi & al et (2012) and, Nonaka, Toyama & Konno (2000) pointed out, knowledge and knowledge management have become a direct competitive advantage for companies selling ideas and relationships. The capability to gather, lever, and use knowledge effectively becomes a major source of competitive advantage in many businesses (Moradi & al et, 2012). Hence, effective knowledge management greatly contributes and adds value to attain organizational effectiveness.

2.6 The Relationship between Organizational Culture and Knowledge Management

Organizational culture and knowledge management have commonalties as both are soft, complex and intangible attributes of organizations (Griffiths & Koukpaki , 2009), both have multi-dimensional and multi-disciplinary attributes (BenMoussa, 2009). Moreover, without universal agreement both on the definition and drawing of framework and less recognized and not linked with the strategy of the organization (Alavi, Kayworth & Leidner, 2006). Finally, by rightly having or not having them both could have the potential influence either to hinder or boost the performance of organization (Eardley & Uden, 2010).

Furthermore, (Mukherjee, 2007), organizational culture and knowledge management are interrelated as organizational culture affects the effectiveness of knowledge management initiatives. According to Chmielewska-Muciek & Sitko-Lutek (2013), one of the determinants of knowledge management is organizational culture of an enterprise. Any knowledge management strategy designed to improve

organizational effectiveness needs to seriously consider the behavioral norms and practices often labeled “organizational culture” (Yeh, Lai & Ho, 2006) that are essential to effective knowledge use. These indicate how important organizational cultural antecedents are for organizational knowledge management. Tseng (2010) stated that organizational culture can significantly promote or hinder the success of knowledge management initiatives.

Organizational culture is one of the imperatives considered as a knowledge management enabler. Long & Fahey (2000), and Lin, Hui-Yi & Lu (2014) consequently, stated that organizational culture influences behaviors central to knowledge management. Therefore, it is essential to identify the organizational culture conditions of knowledge management, and define favorable knowledge management cultural values. On the other hand, Rašula, Vukšić & Stemberger (2012), having the consent of effective knowledge management and firms valuing to knowledge management may determine shaping and improving organizational culture.

To remain competent, Mukherjee, (2007) testified that more organizations manifest their interest to tap and harness the hidden power of organizational culture and knowledge management. Concurrently evidence shows that, since 1990s, academicians and experts exerted their efforts not only to examine the value added by organizational culture and knowledge management to the overall effectiveness of firms but also to define and demystify the relationship between the two critically important elements of any firm. Quite number of studies have examined the relationship between organizational culture; knowledge management, organizational performance and competitiveness, but merely a handful of studies have examined the relationship between a specific organizational culture and knowledge management as stated by Moradi & al et (2012). These previous research works regarding organizational culture and knowledge management differ either on scoping specific elements of the two parameters, models applied to examine the relationship or type of organization target. As a result of these differences, the researchers came up with diverging findings, coined wide-range of conclusions and forwarded contextualized recommendations.

Abel & Jennex (2008) acknowledged that greater enlightenment on the cultural effect is therefore a useful contribution to understanding the most effective

way of managing knowledge sharing in organizations. The two-fold role of organizational culture, examined by Abdar (2012) both as the main obstacle and also as the empowering factor in knowledge management activities makes the importance of this factor double in efficient managing of knowledge management processes (Allameha, Zamanib & Davoodi, 2011).

Further to these commonalties experts in the area also examine how one affects the other. Particularly, Chin-Loy (2007), examined the relationship between organizational culture and knowledge management, the researcher examined six categories of cultural factors; information systems, organizational structure, reward systems, processes, people, and leadership. Chin-Loy (2007) concluded that these factors were important to achieving successful knowledge management initiatives. The researcher recommended that organizations need to create an organizational culture that emphasizes knowledge sharing to promote effective knowledge management programmes.

In order to further investigate the relationship of the two variable, researches also used different lenses to test the strength of the bondage among the attributes and dimensions of organizational and knowledge management. In the same way, (Allameha, Zamanib & Davoodi, 2011) and; Chmielewska-Muciek, Curie-Skłodowska & Sitko-Lutek (2013) examined the kind of relationship between different types of organizational culture and different dimension of knowledge management. In these articles the relationship between four kinds of organizational culture which are group, developmental, hierarchical and logical (market) culture and six dimensions of knowledge management has been examined. In their research, they have found that two fold role of culture, both as the main obstacle and also as the empowering factor in knowledge management activities, make the importance of this factor double in efficient managing of knowledge management processes. The results indicated that there is a meaningful relationship (about 99%) between different kinds of organizational culture and six dimensions of knowledge management.

Particularly, research works by Long & Fahey (2000), Lawson (2003), Seraji, Shoar, Abasi & Norouzi (2013) and Rai (2011) are some of the few highly sited empirical works that commonly applied in their research to diagnose cultural barriers to knowledge management, explicitly indicated that organizational culture

is increasingly recognized as a major booster to leveraging intellectual assets. These articles commonly identified four ways in which culture influences the behaviors central to knowledge creation, sharing, and use. First, organizational culture, in particularly subcultures, shape assumptions about what knowledge is and which knowledge is worth managing. Second, culture defines the relationships between individual and organizational knowledge, determining who is expected to control specific knowledge, as well as who must share it and who can accumulate it. Third, organizational culture creates the context for social interaction that determines how knowledge will be used in particular situations. Fourth, culture shapes the process by which new knowledge-with its accompanying uncertainties-are created, legitimized, and distributed in organizations. These empirical work suggested specific actions managers could take to assess the different aspects of organizational culture most likely to influence knowledge-related behaviors. This diagnosis is a critical first step in developing a strategy and specific interventions to align the firm's culture in support of more effective knowledge use.

Lawson (2003) conducted a comprehensive research with the intent of testing two basic questions pertaining to organizational culture and knowledge management, i.e. 1)“Does organizational culture have a positive effect on the implementation of knowledge management“ and 2) “Is there a culture type that supports the successful implementation of knowledge management? In this research work, the researcher indicted that organizational culture had a positive correlation with knowledge management. The researcher answered the basic question first by revealing that organizational culture does have an impact on knowledge management and secondly by indication the types of organizational culture such as hierarchy did not support the six knowledge management dimensions. Whereas market culture type was found this culture type had the necessary intents to support knowledge management. Accordingly the researchers highlighted several of recommendations including the need for further studies to find and reveal the organizational culture type that directly support knowledge management processes and to examine how different business sectors managed their knowledge process.

Similarly, Seraji, Shoar, Abasi & Norouzi (2013), conducted a descriptive research aimed to distinguish between organizational culture and knowledge management and along with identifying the knowledge management, and finally,

determining the relationship between the current available knowledge management with specified components of organizational culture in the related organization. These researchers ironically found out that a positive and meaningful correlation between knowledge management and organizational culture existed. Moreover, there should be an effort along with increasing creativity, managers to create a situation when knowledge-workers participate in group activities with feeling of self-belongingness and give opportunities to participate in decision making.

The positive relationship between organizational culture and knowledge management is further reaffirmed by Kaur, Kahlon, & Randhawa (2012) who attempted to highlight the importance of organizational culture in knowledge management. They postulated that a right and proper organizational culture will further amplify the success of knowledge management in organizations.

In the same way Li, Zhang & Zhang (2012) in their research found that organizational culture impacts knowledge management. They stated that from the perspective of total effect, organizational culture as a whole has a positive influence on knowledge management. That in turn is taken as proof to indicate the important role of organizational culture in knowledge management. They have indicated that knowledge management practices should be accompanied by cultural intervention. Furthermore, for the respective mode of SECI process, they have indicated that four cultural traits have different effects on four SECI modes. This relationship shows some possible ways to improve SECI-based knowledge management process by promoting one cultural trait. Moreover, this paper has provided the empirical approach to analyze knowledge management and its facilitating factors by employing the statistical analysis of correlation and regression to contextualize the result of the study.

Other researchers such as Leiden (2006), Tseng (2012), Asl, Goodarzi & Sajjadi (2012), Fong & Kwok (2009), Donate & Guadamillas (2010) and many others conducted their research works intending to examine the relationship between organizational culture and knowledge management. Withstanding to their differences in approach and focus, these researches commonly reached to the conclusion that organizational culture has an impact on knowledge management regardless to the size, business model and level of firms.

Tseng (2010) particularly found out that adhocracy culture enables knowledge conversion and enhances corporate performance more than clan and hierarchy culture. The researcher further explained that organization can nurture an adhocracy culture; making it easy to create an environment where knowledge-workers can learn, feel comfortable, and have the opportunity to be creative and innovative, improve corporate performance and increase the organization's value.

Though all these research works focused on the comprehensive element of organizational culture and knowledge management, some researches preferred to study one or more specific elements of the parameters. For example, Girdauskiene & Savanevičienė (2007) conducted an empirical research to examine the influence of organizational culture on effective knowledge transfer which is on element of knowledge management process. On the other hand Al-Alawi, Al-Marzooqi & Mohammed (2009) and Gurteen (2009) assessed the influence of organizational culture on knowledge sharing and the influence of organizational culture on knowledge creation respectively. Other researchers like Harorimana (2010) and Moradi & et al (2012) strongly suggested that knowledge-based organization to develop knowledge-culture that enables to realize the potential locked into knowledge assets resides within the individuals and groups of the organization.

Despite the fact that theses research works reviewed above examined the relationship between the two parameters applied correlation coefficient (r) to examine the relationship between organizational culture and knowledge management dimensions, researchers like Ho (2013), Donate1 and Guadamillas (2010) took their research and investigated predicting relationship between organizational culture and knowledge management. These research works found out that a significant multi-regression relationship between knowledge management and organizational culture with and coefficient of determination (r^2) 0.46 and 0.74 respectively. According to their findings organizational culture appeared to be predictor factor to knowledge management.

Moreover, Alnsoor (2008), Jokar (2012) and Asl, Goodarzi & Sajjadi (2012) applied multi-regression analysis to investigate the relationship between organizational culture and knowledge management and determine the predictor. Particularly, the first two researches commonly used CVF and SECI models to investigate the influencing factor of organizational culture and knowledge

management dimensions. In both cases, the researchers revealed the type link after executing the regression coefficient (r^2) and beta-value (β).

Surely none of these research works targeted the same population, business areas and research were approached and examined how organizational culture matters to knowledge management initiatives. Nonetheless, all came to the consensus that firstly organizational culture impacts the successful implementation of knowledge management. Secondly, with no exception they recommended that organizations to nurture and sustain organizational culture that facilitates knowledge management in order to capitalize and optimized knowledge as a competitive advantage.

In summary, regardless of the methodology applied, the tools deployed, the models used and the groups targeted by different research conducted to examine the link between organizational culture and knowledge management identified bondages between the two variables. Moreover, the researchers concluded that, as a result of the link, the impact in not limited to one affecting the other positively or negatively but the implication of these variables become indispensable on other organization imperatives including successful implementation of organization-wide initiatives.

2.7 The Essence of Knowledge -culture

A knowledge-centered culture is the culture supporting knowledge management as a combination of factors creating such an environment, in which knowledge is actually created, spread and used (Anantatmula, 2009). Likewise, Pauleen, (2007) and Chung (2011) used the term knowledge-culture subordinate to knowledge and interpret it as elements of organization structure providing perfect conditions for generating and sharing knowledge. As knowledge management initiatives won't take hold unless they are supported by an organization's culture, cultural factors must be considered when developing knowledge management strategies (Bergeron, 2003).

Additionally, Chmielewska-Muciek & Sitko-Lutek (2013) who conducted research entitled "Organizational Culture Conditions of Knowledge Management" not only revealed the relationship between knowledge management and organizational but also suggested conditions that could help shape organizational culture supporting knowledge management; strengthening focus on people, strong

presenting of pro-innovation, confirm collectivism, demonstrating openness on environment and use of knowledge management in dealing with changes. The researchers also indicated that although shaping organizational culture is a difficult process due to its complexity. However, knowledge management requires consideration for existing cultural factors in implementation of proper operational solutions needed to reshape proper culture values.

Organizational culture that features and supports knowledge management, according to Danish, Munir & Butt (2012), described as aggressive aims of organization favorable knowledge management, proactive goals aiming at change of environment. These features of organizational culture in favor of effective knowledge management are reflected in knowledge-workers behavior, which may be treated as direct manifestation of knowledge-workers attitudes in relation to different aspects and organizational solutions concerning knowledge management. Indirectly, employees behavior may also be interpret as showing cultural values. Defining them will enable to know the values appropriate to implement initiative of knowledge management. Promoting and strengthening shared value among knowledge workers of the organization that have positive impact on the success of knowledge management is vital.

Previous research works were not limited to demonstrating the strong link between organizational culture and knowledge management but further affirmed the importance of building a strong organizational culture that supports knowledge management i.e. knowledge-culture. As stated by Choy & Suk (2005) building knowledge culture is of increasing importance, as it plays a paramount role in providing sound knowledge management and effective knowledge-based economic development. Travica (2013), described knowledge culture as form of organizational culture that combines elements of individualistic, group or macro-organizational cultures to facilitate a heedful management of the entire knowledge management process. Travica (2013) further explained knowledge culture as a hybrid culture category that combines the elements of four kinds of organizational cultures and knowledge management processes as illustrated in figure 2.4 below.

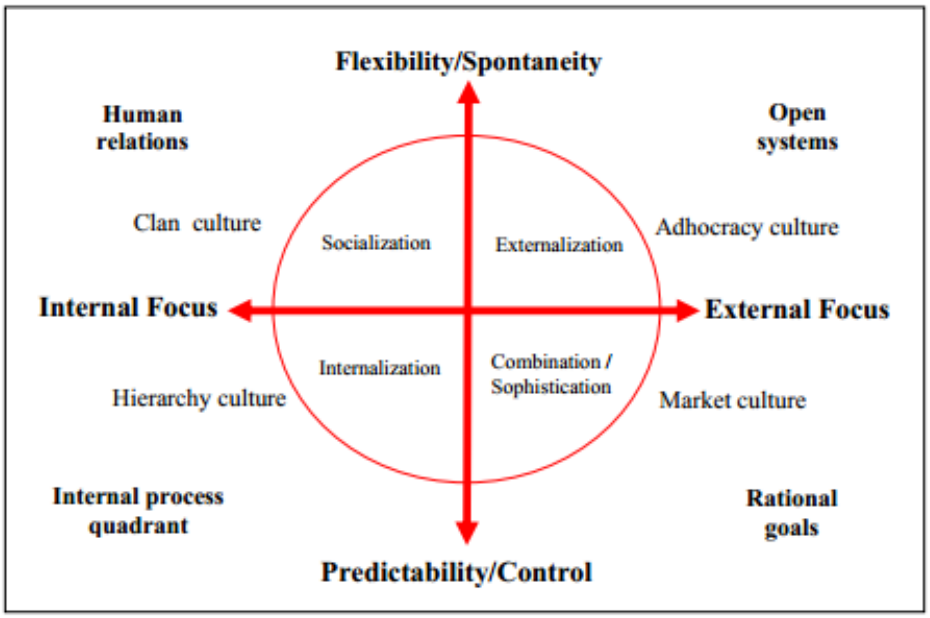


Figure 2.4: Organizational Knowledge Management Model (Travica, 2013)

Furthermore, for the purpose of indicating the magnitude of organizational culture and knowledge management, Gray & Densten (2010) and Argote, McEvily, & Reagans (2003), proposed the integration of The Competing Values Framework with Nonaka & Takeuchi's (2000) knowledge creation and conversion model. The proposed Organizational Knowledge Management Model, as indicated in figure-2.4 that can serve as a model to comprehend the strong bondage between culture and knowledge and as a conceptual model to raise knowledge-culture. The researches further explained the model and its component in relation to facilitating knowledge management process.

Based on conclusions and recommendations of Travica (2013), Clair & Stanley (2005); and Oliver & Kandadi(2006) the following table 2.3 summarizes the characteristics or dimensions knowledge culture.

Table 2.3: Knowledge-Culture Dimensions Summary

Travica (2013)	Oliver & Kandadi (2006)	Clair & Stanley (2005)
• Openness of knowledge culture that places across the four organizational culture quadrants • Creative teamwork is the way to reach beyond a fiefdom • Reregulate knowledge codification and diffusion • Proprietary knowledge through bureaucratic means	• Emphasize the value of co-operation over competition; • Proclaim the importance of openness and sharing at the top managerial level; • Ensure senior managers behave in a candid and open manner; • Avoid ranking individuals against each other in personnel evaluations; • Ensure that every knowledge worker owns the enterprise • Reward individuals for sharing; • Reward teams for leveraging knowledge	• Strength in collaboration (with no disincentives to collaborate • support of the integrity of the knowledge process, with an emphasis on transparency • Professional allegiance to the organization or enterprise; allegiance to an external influence • Respect for and enthusiasm for knowledge services as a management and service-delivery methodology • Respect for the intellectual foundation for the effort; the intellectual quest is not disdained

In summary knowledge culture is defined as an accumulation of shared beliefs and values—most often within an organization or other group of people—about knowledge and the application of knowledge for that organization or group's success. Moreover, the contemporary knowledge-based economy when the intangible resources, specially knowledge and culture, play a paramount and decisive role in achieving organizational effectiveness, for knowledge-base organizations recognizing and understanding the importance and link of these

resources is not an end by itself. Rather organizations are expected not only to harness the potential of organizational culture and knowledge management to boost its performance but also need the determination and practicality to create and sustain an organizational culture that supports and facilitates knowledge management process i.e. building a knowledge-culture.

2.8 Conceptual Framework

In order to attain the objectives of this research, the concept of organizational culture and knowledge management are contextualized and attached to specific standardized models. Accordingly organizational culture, as the independent variable of the research is associated with Cammero & Quin (2000) conceptualization of variables linked with CVF where organizational culture is categorized into four types i.e. clan, adhocracy, market and hierarchy which are identified and manifested on its six dimensions including leadership style, management of employees, organizational glue, strategic emphasis and criteria for success. Similarly, knowledge management, as a dependent variable, was tied up with the popular knowledge management process model i.e. SECI that incorporate four conversion process that includes socialization, externalization, combination and internalization.

Based on these arguments, developed a conceptual framework, as indicated in figure 2.5 below, that would provide a clear picture of what was intended to achieve from this piece of work and the framework was also used as a guide to examine the basic questions and test the hypotheses made

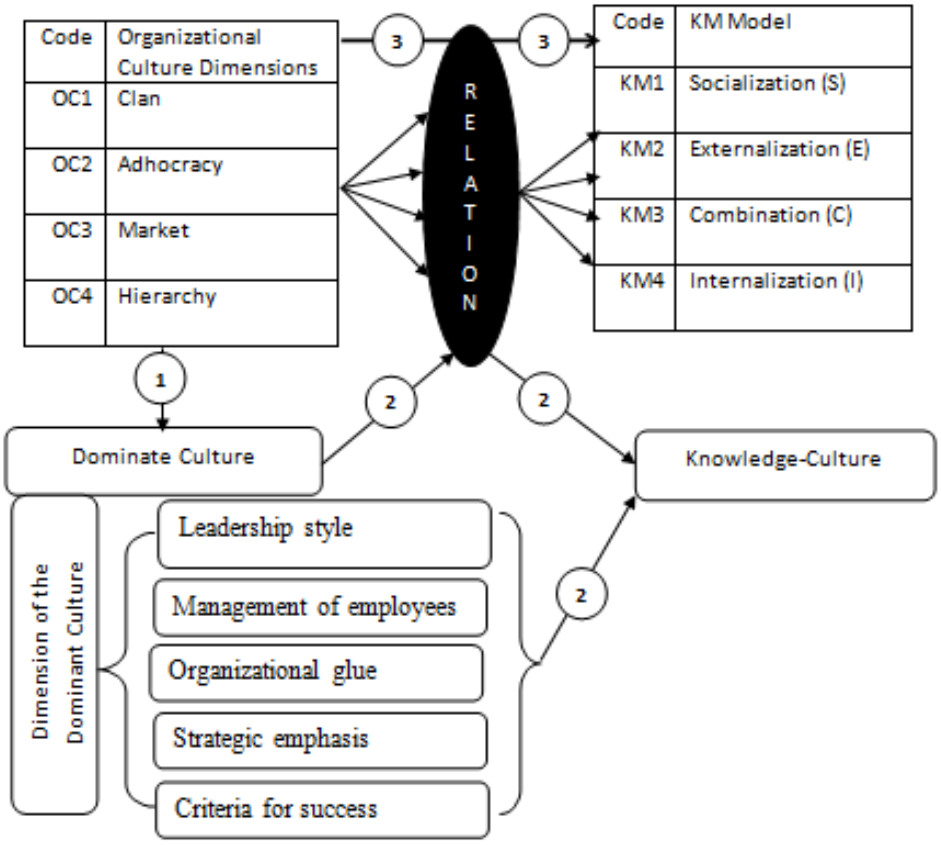


Figure 2.5: The Link between Organizational Culture and Knowledge Management – Conceptual Framework

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This section of the research comprises of the key methodological and design elements pertaining standard models adopted, research tools applied and statistical tools used which are relevant and appropriate to meet the objectives of the study. Additionally, primary and secondary sources of data, data collecting tools and its validation and reliability; and data analysis and interpretation techniques are included.

3.1 The Research Design

In order to give answers the primary research questions and test the proposed hypotheses, the researcher applied the following procedures. First, the conceptual model of this research deployed the two models i.e. Quinn & Rorbaugh's (1999) Computing Value Framework (CVF); and Nonaka & Takeuchi,s (2000) SECI model providing a link between organizational culture and knowledge management respectively. The Competing Value Framework has emerged, according to Quinn & Rohrbaugh (1999), over twenty-five years ago, used and validated by numerous researches to study organizational culture and organizational effectiveness. Moreover, the researcher took SECI model as a preferred tool to examine knowledge management parameters not only it is probably the most widely cited theory in knowledge management but a model that was adopted by the organization under study to implement its knowledge management conversion process.

Second, for this research a cross-sectional descriptive survey design was considered because the data was collected only once. As the two data collecting tools on organizational culture and knowledge management have specific measurement scales, quantitative research was adopted. A survey was constituted as an appropriate research design of collecting data for descriptive or exploratory studies (Mathiyazhagan & Deoki, 2010). It can be used in studies in which individuals are the unit of analysis, and it is also considered best suited for measuring attitudes and obtaining personal and social facts as well as beliefs (Mathiyazhagan & Deoki, 2010). According to Sigh (2006), descriptive survey research method is used to study immediate status of a phenomenon, facts findings and to examine the relationships of traits and characteristics. Therefore, the

researcher believed that, this research design would help to obtain information about the relationship between organizational culture and knowledge management of the organization under the study. Additionally, researchers used quantitative approaches where the perception of respondents interpreted and quantified (Creswell, 2009).

3.2 Sources of Data

Both primary and secondary sources of data were employed to fully answer the research questions and test the hypotheses. The primary sources of data were collected from UNECA knowledge workers (KWs), using standard questionnaires (OCAI and SECI Assessment) from international, local officers and supportive staff level. The secondary sources of data were documents such as organizational policies, business plans, strategy documents, rules & regulations of the organization, job descriptions and terms of references of knowledge-workers which further reviewed.

3.3 Population and Sample Size

In order to decide on the sample size of the target population, the researcher has considered constraint of resources such as time and money. But the researcher put a means to ensure different categories of the target population were included and represented in the sample size. The researcher has deployed the following sample size selection procedures that helped to have fair and appropriate representation of the target population.

The target population for this research were all UNECA staff (N=601) who were working in seven offices and located in different parts of Africa including Ethiopia, Rwanda, Zambia, Niger, Cameron, Senegal and Morocco . In order to reach to statically valid and viable conclusions, as indicated in table 3.1 Population and Sample Size, the sample size of this research was 163 knowledge-workers of the Commission.

Table 3.1: Population and Sample Size

No.	Category	Population	Sample Size	%	Remark
1	All Staff	601	369	61.4%	All staff in Division and Offices of the Commission
2	**UNECA – KWs Knowledge Workers (KWs)**	**369**	**163**	**44%**	Selected randomly (lottery) Does not include 46 knowledge workers who participated in the pre-test.
	Total	**601**	**163**	**27 %**	Using 95% confidence level and 5% sampling error probability technique

3.4 Sampling Techniques

The target and accessible populations were UNECA staff (N=601) distributed in seven Substantive Divisions, one Administrative Division, five Sub-Regional Offices and one specialized office distributed in seven African Countries. The target population (N=369), that includes all knowledge-workers of different categories comprises of Directors and Professional staffs (n=92), National Officers (n=10) and General Service staff (n=51) and whose work was directly related to the knowledge management process of the organization. From the total population of 601 officers 163(27.1%), as indicated in table 3.2, were included in the study. These 163 sample respondents were selected from each category called Divisions/Office using proportionate stratified sampling and purposive sampling applied targeting 369 knowledge workers and simple random sampling techniques to pick sample size of n=163. The reason why the researcher preferred this technique was that the samples were very large and to increase the probability of including unique character of each member of the population as well as to ensure proportional representation of the population in the sample and also in simple random sampling technique, by alphabetically sorting the e-mail address of knowledge-workers, all members of the population have an equal chance to be selected. The researcher found purposive sampling techniques as an appropriate option as the research targeted UNECA staff who were substantially involved in the knowledge creation and delivery activities. The stratified sampling structures, as indicated in the annex (see Annex A: Sampling structure) was also applied to

include sample from offices and divisions. This selection was adhered to the current organizational business mode (see Annex B: Business Model of UNECA) where the organization knowledge management structure was embedded. Accordingly staff members who have a major role in knowledge management initiatives of the organization and staff member whose knowledge management related workload was above 30% of their day-to-day tasks were targeted. In addition to the literal definition of knowledge-workers, the researcher has reviewed sample terms-of-reference and work plans of selected workgroup to determine the level of staff involved in knowledge management processes.

Table 3.2: Population and Sampling Frame

Location	Division/Offices	Directors/ Professionals	National Officers	General Staff	Total (N)	Knowledge-workers	Sample (n)
Addis Ababa, Ethiopia (HQ)	Substantive Divisions	150	4	231	378	131(60 D/Ps, 4 NOs and 45 GSs)	93
	African center for Statistics (ACS)	17	3	30	50		
	Capacity Building Division (CDD)	12	0	29	41		
	Public Information and Knowledge Management Division (PIKMD)	15	0	23	33		
	Micro-Economics Policy (MPD)	43	0	17	63		
	Regional Integration and Trade Division (RITD)	30	0	39	72		
	Special Initiative Division (SID)	23	0	36	62		
	Social Policy Division (SPD)	10	0	37	31		
	Strategic Planning and Operational Quality Division (SPOQD)	5	1	20	26		
	Division of Administration	10	6	80	94	45(6 D/Ps, 6 NOs and 35 GSs)	32
	SROs	23	8	26	57	33(17 D/Ps, 6 NOs and 10 GSs)	30
Kigali, Rwanda	Eastern Africa	4	2	3	9		
Yaoundé, Cameron	Central Africa	7	1	5	13		
Rabat, Morocco	North Africa	3	2	8	13		
Lusaka, Zambia	Southern Africa	5	2	5	12		
Niamey, Niger	West Africa	4	1	5	10		
Dakar, Senegal	IDEP	4	0	3	7	8 (3 D/Ps, 0 NOs and 5 GSs)	8
					Percentage from N	369/601 = 44%	163/601= 26%
					Stratified Sampling	Purposive Sampling	Simple random sampling (lottery)

3.5 Data Collecting Instruments

The data gathering tools for this study were questionnaires and document review. A questionnaire was administered to 163 sample respondents.

Two types of standardized questionnaires were used, namely:

1. Cameron and Quinn's (2000) Organizational Culture Assessment Instrument (OCAI), and
2. SECI Knowledge Management Process (2003) Assessment

Cameron and Quinn's (2000) Organizational Culture Assessment Instrument (OCAI)

In order to identify the cultural orientations of the UNECA knowledge-workers, OCAI by Cameron & Quinn (2000), (see Annex C- OCAI Questionnaire– Part II), was adopted. OCAI consists of 24 questions which were relevant to the key dimensions of organizational culture: dominant characteristics, organizational leadership style, and management of employees, organizational glue, strategic emphases, and criteria for success.

Each question has four alternative statements representing different cultural orientations making a total of 24 questions. All respondents were asked to rate their organizations' culture on a five-point Likert Scale. In this scoring system, for each of the five response categories (0=Strongly Disagree, 1=Disagree, 2=Neutral, 3=Agree, and 4=Strongly Agree), with the highest score of 4 assigned to "Strongly Agree". The overall organizational culture profile was then derived by calculating the standard mean score of the respondents.

SECI Knowledge Management Process (2003) Assessment

The SECI knowledge management process assessment questionnaire, (see Annex C- SECI Questionnaire – Part III), was used to obtain information on the status of knowledge creation, knowledge sharing, knowledge application and knowledge retention within an organization. Converting the various answers to a Likert Scale to measure the frequency of knowledge management practices (0= Not at all to 4= Frequently if not always) was used to measure the most practiced knowledge management process to meet knowledge delivery requirements of UNECA.

3.6 Procedures of Data Collection

A standard and state-of-the-art online survey tool, Monkey-Survey Platinum vision, was used to upload the two questionnaires and the link of the online survey was accessible via e-mail. The questionnaires were prepared in English which is the official language of the organization under study (UNECA). Both data collecting instruments (OCAI and SECI Assessment) were available for researchers free of charge. Hence, the researcher was not required to secure permission to use these tools from groups or the institutions which have a legal and copy right of the tools. Rather, prior to the administration of the questionnaire, the researcher made contact with the UNECA authoritative bodies, in person, to gain full participation from the target groups and to obtain meaningful data. The final online questionnaires were disseminated to the selected sample size. Lastly, out of 163 distributed questionnaires 156 (95.7%) were collected through the online survey tool and made available for further analysis.

3.7 Reliability and Validity

According to Santos (1999), two important concepts a researcher should consider in selecting or designing data collecting tools are reliability (internal consistency) and validity (construct validity). These concepts help to assess and judge whether the research provides a good measure of the variables included in the research. Reliability refers to the consistency of scores or answers from one administration of an instrument to another and from one set of items to another (Fraenkel & Wallen, 2008). A reliable instrument provides a research result which is consistent despite the difference over time and target. On the other hand validity refers to the appropriateness, meaningfulness, correctness and usefulness of any inferences the researcher draws based on the data obtained through the use of an instrument (Santon, 1999). By taking this in to account, assessing the reliability of scales used in the questionnaire, a coefficient of internal consistency was calculated using Cronbach's alpha methodology (Santos, 1999). The results for the statements contained in the OCAI and SECI is indicated in table 3.3 OCAI and SECI reliability summary which was proved by various researchers in the area.

Cronbach’s alpha reliability coefficients were calculated to estimate the reliability of OCAI Assessment and SECI Knowledge Management Survey

instruments. The researcher had applied three levels of checking and cross-checking the reliability of the tools.

First, previously calculated and agreed Cronbach's alpha reliability coefficients of the instruments by other prominent researchers in the area of organizational culture and knowledge management were reviewed. Cameron and Quinn (2000) demonstrated that OCAI instrument measured the four types of organizational culture in a study of 334 institutions of higher education, with 12 – 24 individuals responding from each institution for a total of 3,406 individuals participating. Reliability coefficients (Cronbach alpha) were calculated for each of the different culture types being assessed by the instrument. Coefficients were 0.890 for the clan and adhocracy culture and 0.860 for the market and hierarchy cultures which indicated the acceptable range for two organizational culture variables. Moreover, reliability and validity of the SECI assessment tool was acquired through analyzing data from different sources. The data from different sources can help for crosschecking the information obtained. At the same time, the reliability was gained during the analysis part when those proved information would interpret in consistent manner. Internal consistency of this study checked with the Cronbach's alpha. If alpha is high (0.800 or higher), then this suggests that all of the items are reliable and the entire test is internally consistent (Robert, 2006).

Second, as the researcher made minor changes on the standard questions on both instruments, the researcher conducted a pre-test assessment on randomly selected 46 knowledge-workers (both from knowledge-generators and knowledge-deliverers category). When deciding to use the 46 sample size for the pre-test, the researcher took into account the minimum data SPSS could take to execute the reliability coefficient. The Cronbach's alpha reliability coefficients of this pre-test were calculated for the purpose of making sure that the outcomes were in the pre-test fall in range of proven reliability coefficients. The pre-test was administered by considering the following two conditions,

The samples participated in the pre-test were not included in the sample size (n=163) of the actual data collection process but were part of 369 knowledge-workers,

The researcher gave special attention to the results of questions which were contextualized to meet specific working conditions of UNECA. Particularly the

questions included in both instruments that were developed to meet competitive conditions of business-oriented organizations were paraphrased to reflect the comparative working environment of United Nations affiliated organizations like UNECA. From OCAI instrument two questions including question number 3 and 19 were customized whereas from SECI Knowledge Management survey tool three questions including question number 4, 16 and 20 were subject to change.

After the successful result of the pre-test, the Cronbach's Alpha reliability coefficients were calculated for knowledge-generators and knowledge-deliverers of the sample size of 66 and 97 respondents respectively.

Thirdly, the calculated and reviewed Cronbach's alpha reliability coefficients results for organizational culture and knowledge management process dimensions collected from 156 respondents are summarized and presented below in table 3.3.

Table 3.3: Reliability Test Cronbach's Alpha

Variables	Dimensions of variables	Cronbach's Alpha			Overall evaluation
		Pre-test	This research	Acceptable range	
OC	Clan	.603	.705	0.670 - 0.800	Accepted
	Adhocracy	.607	.672	0.560- 0.720	Accepted
	Market	.689	.746	0.660- 0.771	Accepted
	Hierarchy	.730	.502	0.600- 0 .800	Good
Organizational Culture		.600	.875	0.680- 0.820	Good
KM	Socialization	.711	.649	0.655- 0.733	Accepted
	Externalization	.700	.617	0.500- 0.790	Accepted
	Combination	.670	.556	0.650- 0.810	Good
	Internalization	.610	.568	0.588- 0.745	Good
Knowledge Management		.709	.859	0.590- 0.870	Accepted

In this regard, the Cronbach's alpha for this study were 0.875 and 0.859 this shows the items was reliable and the entire test or questions are internally consistent for OCAI and SECI respectively. Hence, the researcher accepted the Cronbach's alpha calculated and presented in table 3.3 above, for OCAI and SECI instruments both tools were deployed to collect primary data.

According to Singh (2007), the figure of 0.755 or more usually is treated as a rule of thumb to denote an acceptable level of reliability. Therefore, for this

research, the Cronbach's Alpha reliability coefficient for OCAI was 0.875 and SECI was 0.859, both were acceptable. As indicated above in table 3.3, the researcher found that both OCAI and SECI instruments used to collect raw data on organizational culture and knowledge management dimensions from the sample size were reliable. That in turn profoundly led the researcher to make sound and viable conclusions based on the research hypothesis and to set viable conclusions and recommendations accordingly. Therefore, the researcher took further steps to calculate both descriptive, inferential statistical results and execute correlation/regression analysis that gave input to answer basic questions of the research and test the hypothesis.

3.8 Variables of the Study

For this research organizational culture (based on CVF model- clan, adhocracy, market and hierarchy) and its six dimensions were treated as independent variables. On the other hand, knowledge management parameters (SECI elements of knowledge conversion) were considered as dependent variables. These variables were further explained in table 3.4 below, which also includes specific indicators of the parameters as mentioned in the questionnaire.

Table 3.4: Independent and Dependent Variables Summary

Organizational Culture – Independent Variable		
Variable	**Dimensions**	**Indicators**
Organizational Culture	Clan	1, 5, 9, 13, 17, 21
	Adhocracy	2, 6, 10, 14, 18, 22
	Market	3, 7, 11, 15, 19, 23
	Hierarchy	4, 8, 12, 16, 20, 24
Knowledge Management – Dependent Variable		
Variables	**Dimensions**	**Indicators**
Knowledge Management	Socialization	1, 5, 9, 13, 17, 21
	Externalization	2, 6, 10, 14, 18, 22
	Combination	3, 7, 11, 15, 19, 23
	Internalization	4, 8, 12, 16, 20, 24

3.9 Data Analysis

Data collected through questionnaire were analyzed and interpreted quantitatively which were further organized and treated with different statistical techniques for analysis and inferences. The scores for each of the items of OCAI and SECI were exported from the online survey to a spreadsheet automatically. These scores were categorized into appropriate categories according to their OCAI and SECI classifications and then calculated. Both descriptive and inferential statistical data were calculated using software called SPSS version 20 to compare one set of scores to another.

Descriptive statistics, such as mean and standard deviation, were calculated to identify the dominant organizational culture and dominating knowledge management process based on the perception of the respondents. The t-test value was calculated to compare the perception of UNECA knowledge-workers on organizational culture variables. Pearson's correlation was used to examine the link between the two variables of the study. Correlation coefficient (r) was used to determine the positive (direct) or negative (inverse) relationship between organizational culture and knowledge management. Regression analysis was used to identify the predicting effect between organizational culture and knowledge management. The regression coefficient (r^2) was applied to measure the predicting effect relationship between the two key variables of the research.

Finally, the significance level of the relationship and impact was measured using alpha-level (p). The alpha-level was used to test the hypothesis of the research where according to Huck (2012), being one-tailed or two-tailed having the value greater or less than the value of 0.01 and used to determine to what extent the researchers secured statistical evidence that would support the type of relationship mentioned in the hypotheses. The p-value which was either greater of less than the two-tailed value of 0.05 was used to determine to what extent of research could provide evidence to support the relationship identified between the two imperatives.

Regression analysis was also calculated to measure the beta value (β coefficients) that indicated how strongly organizational culture influences the knowledge management variables. The multiple regression analysis was applied to measure the influencing factor between two variables, (David, 2009), in this case, organizational culture and knowledge management. Accordingly, if the coefficient

is positive, it shows a relationship between the two variables and the relationship considered as direct predictor. If the β coefficient is negative then the relationship is indirect and considered as an inverse predictor. If the β coefficient is equal to 0 then there is no predicting relationship between the variables (David, 2009).

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

This chapter begins with the description of major demographic characteristics of the target population i.e. knowledge workers of UNECA, their category, years of experience and level of education. That is followed by presentation of data analyzed and presented deploying standard statistical tools such as mean scores, standard deviation, standard mean error and t-test. In this section, the data was further interpreted to indicate the dominant culture, the dominating knowledge management process and comparing perception of knowledge workers in the two categories i.e. knowledge–generators (KGs) and knowledge-deliverers (KDs), pertaining the organizational culture and preferred/favored knowledge management. Furthermore, this part is used to present the result of hypotheses test revealing the correlation between organizational culture type and knowledge management process dimensions based on CVF and SECI models respectively. Finally the test result of multi-regression relationship (applying regression coefficient (r^2) between organizational culture and knowledge management inclusively presented in this section of the research work.

4.1 The Study Sample

As indicated earlier, the target population of the present study was 601 staff members of UNECA who were either on fixed term, continual or permanent appointment. Of particular interest to the study were 369 knowledge-workers of the Commission, categorized as knowledge-generators and knowledge-deliverers who work in seven different office of the organization namely the Headquarter, five Sub-regional Offices and one specialized institution were the target of this research. The target employees were located in six major countries and cities of Africa including Ethiopia (Addis Ababa), Rwanda (Kigali), Zambia (Lusaka), Niger (Niamey), Morocco (Rabat) and Senegal(Dakar).

The sample size of this study composed of 66 KGs and 97 KDs from all duty station of UNECA. A total of 163 questionnaires were distributed online, on Survey Monkey Premium version, to the respondents and out of these questionnaires a total of 156 useable questionnaires were successfully completed and submitted online. Encouragingly, the total response rate was very high over 95% upon which

analysis of this research was based on, as indicated in table 4., where over 95% response rate was secured and presented.

Table 4.1: Sample Size and Response Rate

	Division/Office	Sample	Response	Response Rate (%)	Invalid Responses
K-Generator	SID	9	8	91%	1 non-respondent
	SPD	11	11	100%	
	MPD	15	13	87%	
	RITD	13	13	100%	1 invalid
	ACS	19	19	100%	
Sub-total		**66**	**65**	**97%**	
K-Deliverer	AUC-ECA-AfDB	2	2	100%	
	IDEP	3	3	100%	
	SPOQD	5	5	100%	
	SRO-WA	5	4	100%	
	OES/PATCO	6	6	100%	
	SRO-EA	6	6	100%	
	SRO-NA	6	6	100%	
	SRO-CA	7	7	100%	
	SRO-SA	8	8	100%	
	CDD	10	9	90%	2 non-respondent
	DOA	18	17	94%	1 invalid
	PIKMD	17	17	100%	
Sub-total		**97**	**91**	**94%**	**7**
	Grand Total	**163**	**156**	**95%**	**5%**

4.2 Demographic Characteristics of Sample Respondents

The profile of 156 sample respondents of UNECA knowledge-workers were summarized in the form of frequency and percentage. The demographic characteristics of the sample size include category, years of experience, and highest level of educational level. The demographic characteristics of sample respondents were calculated to indicate the distribution and representativeness of sample respondents in the two categories and across the organization. In this research,

examining the implication of respondents' demographic attributes, such as category, towards organizational culture and knowledge management was out of scope. Nonetheless the researchers preferred to describe the respondents to provide a better picture of the respondents involved in the study.

4.2.1 Knowledge-workers by Category

As indicated in Table 4.2, knowledge-workers in different categories were represented. A little over 57% (89 in number) were Professional staff, 34% of General Service and 9% of National Officers.

Table 4.2: Sample Category Distribution

Category	Frequency	Percent	Valid Percent	Cumulative Percent
Professional	89	57.1	57.1	57.1
National Officer	14	9.0	9.0	66.0
General Staff	53	34.0	34.0	100.0
Total	156	100.0	100.0	

4.2.2 Years of Experience

As shown in Table- 4.3, only 16 % of the knowledge-workers have less than three years of implying that vast majority of the staff (84%) were well versed with the working environment of the organization. As argued by Bergeron (2003), a long experience in a given organization is helpful in allowing the staff to become familiar with the organizational culture. They can also be involved in the process of personality and experience creating culture of the organization. Accordingly, the respondents staying in an organizational for long have acquired organization capability that would be helpful for retaining knowledge in the organization.

Table 4.3: Sample Years of Experience Distribution

	Frequency	Percent	Valid Percent	Cumulative Percent
Below 3 years	25	16.0	16.0	16.0
From 3 to 5 years	28	17.9	17.9	34.0
From 6 to 8 years	50	32.1	32.1	66.0
Above 8 years	53	34.0	34.0	100.0
Total	156	100.0	100.0	

4.2.3 Level of Education

As indicated in table 4.4, the highest level of education of the respondents, more than 74% were having second and third level degree at a MA/MSc and PhD.

According to Hana & Lucie (2011) highly qualified employees are potential sources of tacit knowledge & creating new-knowledge and knowledge-based economy is characterized by increasing demand for more highly-skilled workers.

Table 4.4: Respondents Highest Education Level Distribution

Education Level		Frequency	Percent	Valid Percent	Cumulative Percent
	PhD	21	13.5	13.5	13.5
	MA/MSc	96	61.5	61.5	75.0
	BA/BSc	38	24.4	24.4	99.4
	High School Diploma	1	.6	.6	100.0
	Total	156	100.0	100.0	

4.3 Results of Descriptive Statistics

This research deployed basic descriptive statistical tools such as mean score and standard deviation intended to find out the dominant organizational culture and dominating knowledge management process of the knowledge workers. Results given in the table 4.5 below summarizes the organizational culture assessment of the sample respondents.

Table 4.5: Mean Scores and Standard Deviation

Organizational Culture			
	N	Mean	Std. Deviation
Clan	156	3.01	.67
Adhocracy	156	2.79	.66
Market	156	2.92	.63
Hierarchy	156	3.26	.53
Knowledge Management			
Socialization	156	2.83	.67
Externalization	156	3.25	.66
Combination	156	2.92	.63
Internalization	156	3.08	.58

Table 4.5 in the above shows that the mean score and standard deviation of four organizational culture types and four knowledge management processes which was interpreted to indicate the dominant culture and most practiced knowledge management process of UNECA.

The descriptive statistical results, presented above, marked that hierarchy organizational culture took the highest mean score (3.26; SD= .53) followed by clan organizational culture mean (i.e. mean score = 3.01; SD=.67). These findings were more or less consistent with that of earlier studies (e.g., Campbell, 2009; Lawson, 2003). Campbell's (2009) study reported that adhocracy organizational culture had the highest with mean score of 3.3. On the other hand, Lawson (2003) revealed that market organizational culture had the highest mean score which was of 3.21. It is important to note that in both studies organizational culture (in agreement with the present study) had mean scores which was greater than 3.00. That indicates organizational culture characterized by innovation and growth (adhocracy) was identified as a dominant culture (Campbell, 2009). In contrast, the market organizational culture, characterized by goal oriented, assertive, driven, accountable, decisive, competitive, became the prominent organizational culture for Lawson (2003).

This research an organizational culture predominately characterized by efficiency and quality (i.e. hierarchy) had a mean score of 3.26 indicating that it was dominant organizational culture. That was followed by clan organizational culture dimension which had a mean score of 3.01 based on the overall perception of UNECA knowledge-workers as represented in the figure 4.1.These dominant organizational culture, hierarchy and clan, both are internally focused but control orientation and flexibility that are attributes associated to hierarchy (the most dominant culture) and for clan which was the second most dominant organizational culture of UNECA.

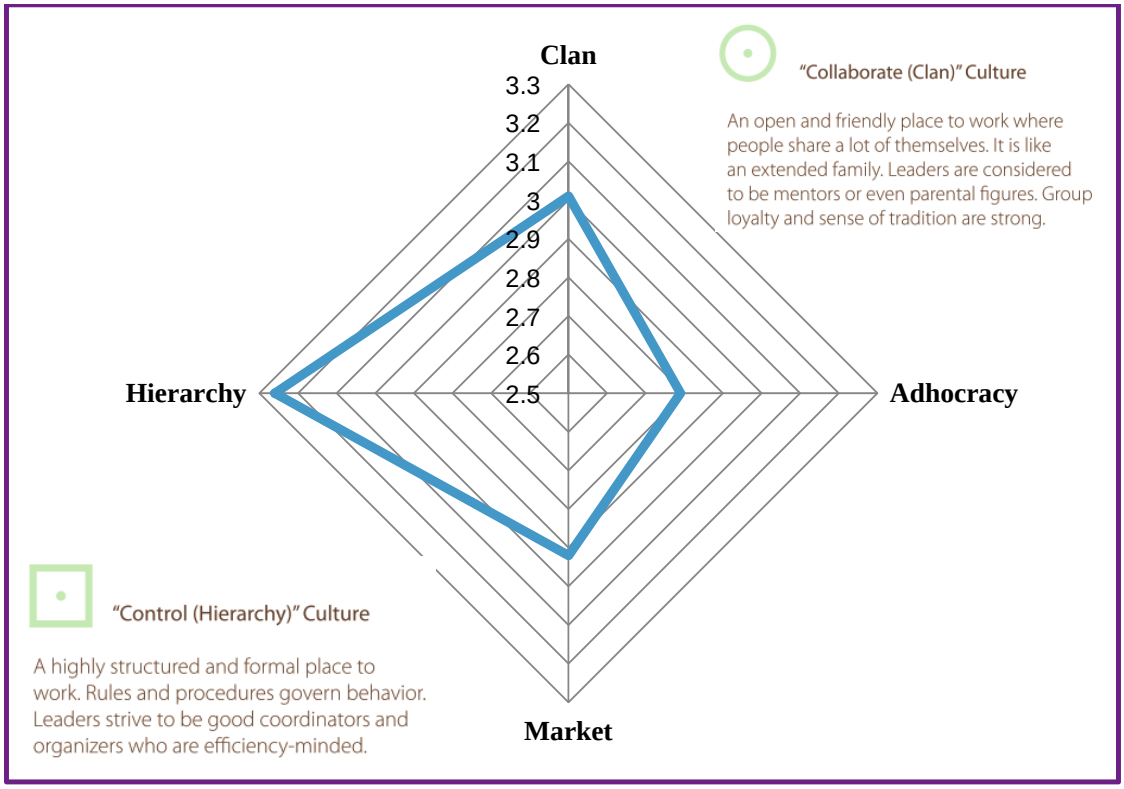


Figure 4.1: Dominant Organizational Culture

According to Gray & Densten (2001) organizations are characterized by one or two dominant organizational culture. But organizations with all four quadrants represented are considered to be 'balanced' providng a conducive environment to successfully achieve change initiatives and seemed to show improved performance.

Pertaining to knowledge management descriptive statistic results indicated that externalization had the highest mean i.e. 3.25, followed by internalization (mean score=3.08). On the other hand, socialization had the least mean score (mean= 2.83).

Similarly, Alnsoor (2008), Magnier-Watanabe, Benton and Senoo (2011) and Karim, Razi and Mohamed (2012) have conducted their research on knowledge management process through the SECI model. Commonly, these researchers focused on the mean score of each knowledge management process and determined the most dominating knowledge management practice and that played a major role in managing corporate knowledge. In the case of Magnier-Watanabe, Benton and Senoo (2011); and Karim, Razi and Mohamed(2012) three out of four SECI knowledge management processes have a mean score above 2.75. Nonetheless

socialization had the highest mean score of 3.2 for Magnier-Watanabe, Benton & Senoo (2011) and internalization had the highest mean score of 3.15 for Karim, Razi & Mohamed (2012). Accordingly, knowledge management process that is dedicated to convert tacit to tacit (socialization) and knowledge conversion process from explicit to tacit type stood internalization as most practiced knowledge management process of these researchers respectively.

In accordance with these previous researches suggestions, for this research a knowledge management process that articulates tacit knowledge into explicit knowledge (externalization) with the highest mean score of 3.25 was revealed as a dominating knowledge management process in UNECA. As indicated in the figure 4.2 blow, comparing the standard mean score of the the three research works by Magnier-Watanabe, Benton & Senoo (2011), Karim, Razi & Mohamed (2012) and this research represented by X, Y and Z in the chart, each has identified different dominating knowledge management process of SECI in the context of the organization under study.

As stated by Alnsoor (2008) and Tammets (2012) firms tend to rely on one or more knowledge management process which is further explained as intrinsic factors included the dominance of certain knowledge creation activities linked to the dominance of the frequency of use of certain SECI model knowledge creation modes. This was due to the extrinsic factors that the model does not capture including environmental and demographical factors. Environmental issues that affected the knowledge creation process include leadership, management, culture, process, procedures, behavior and human resources.

Therefore, not all knowledge management processes become actively and equality contributed to knowledge management endeavors of firms. That resulted organizations to relay on selected knowledge management processes and that in turn provide incomplete knowledge conversion process.

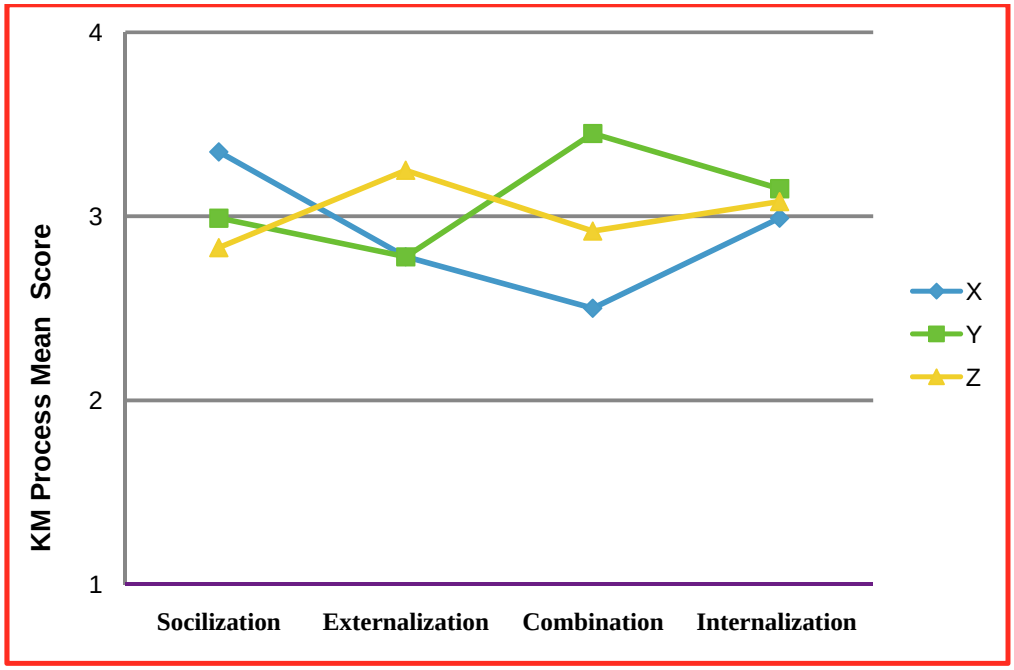


Figure 4.2: Dominant Knowledge Management Process Chart

Of course the differences in the type of most favorable or mature knowledge management process appeared to be not exceptional as Lee & Choi (2000) explicitly stated that one or more knowledge management process profoundly applied depending on the overall configuration of the organization, the strategic intent of knowledge management and organizational culture nurtured to support specific knowledge management process. Hence the unique organizational configuration (including distinct organizational imperatives) of UNECA might favored knowledge management activities associated to what externalization and socialization knowledge management process were perceived by the respondents.

On the base of the mean score of organizational culture and knowledge management, the convergence between the two variables towards forming integrated knowledge-culture interface was drawn. As figure 4.3 indicates, the assimilation between dominant organizational culture and dominating knowledge management process based on what was proposed by Gray & Densten (2010) and by Travica(2013) to form knowledge-culture using CVF and SECI models where the respective four quadrants of the model seemed to streamlined to provide a knowledge-culture interface.

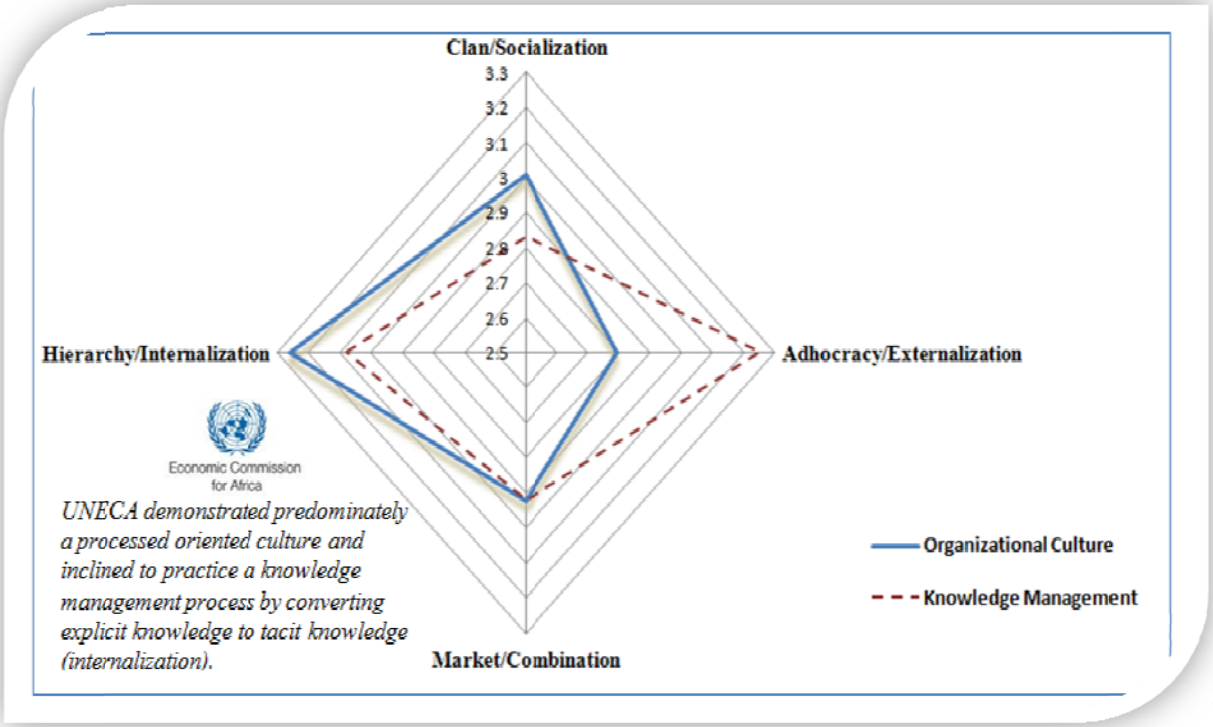


Figure 4.3: Knowledge-culture Interface of UNECA

In this relation, the dominant organizational culture and the dominating knowledge manage process chart above revealed the knowledge-culture domain or interface of UNECA and indicated how the two came together and fitted to create a knowledge-culture interface of the Commission.

Accordingly, as indicated in figure 4.3, the knowledge-culture interface manifested a match between the most dominant culture (hierarchy) and the second most dominating knowledge management process i.e. internalization. This implied that UNECA was lean on and took advantage of its process-based culture to convert and exercise its most frequent knowledge management process dedicated to convert tacit knowledge to explicit.

4.4 The Perception of Knowledge-workers on Organizational Culture

The descriptive statistics results presented in this section were aimed at answering the following research question: "How do UNECA knowledge-workers or employees perceive the overall current organizational culture, and what differences exist between the perception of knowledge-generators (KGs) and knowledge-deliverers (KDs)?"

Therefore, as indicated in the table below, the mean scores and the standard deviation were calculated for the purpose of comparing the perception of KDs with KGs in relation to the four organization culture dimensions. The comparison made on the mean scores of the groups on organizational culture types were based on two basic assumptions. First, the two measured groups, namely knowledge-generators (KGs) and knowledge-deliverers (KDs) were independent and secondly the samples were picked randomly. The result of the t-test analysis is presented in table 4.6.

Table 4.6: t-Test Result of Respondents Perception on Organizational Culture

	Role	N	Mean	Std. Deviation	Independent Samples t- Test		
					T	Df	Sig. (2-tailed)
Clan	KGs	65	2.96	.69	-.75	156	.46
	KDs	91	3.04	.65			
Adhocracy	KGs	65	2.75	.71	-.62	156	.54
	KDs	91	2.82	.62			
Market	KGs	65	2.91	.65	-.05	156	.96
	KDs	91	2.92	.61			
Hierarchy	KGs	65	3.22	.57	-.68	156	.50
	KDs	91	3.28	.50			
OC	KGs	65	2.96	.56	-.63	156	.53
	KDs	91	3.01	.48			

As shown in table 4.6, the overall mean score of organizational culture for both KDs and KGs ranges from 2.75 (adhocracy organizational type mean sore for KGs) to 3.28 (KDs' mean score for hierarchy organizational culture dimension).

According to the result the mean score, KDs' was relatively higher than the mean score of KGs in all four organizational culture dimensions. Specifically the mean score for KDs' responses on clan organizational culture was 3.04 whereas mean score of KDs' was 2.96 (SD=0.69). This indicated that the clan organizational culture mean score of KDs was higher than those of their comparators i.e. KGs.

Similarly, the mean score of for KDs' category on adhocracy organizational culture was 2.82 (with SD=0.71) which higher was than the KDs' responses with the mean score of 2.75 and standard deviation of 0.71. It implied that the knowledge-deliverers category of the research sample perceive their organization

(UNECA) as an organization with collaborate culture, externally focused and further identified by its dynamism, creativity, high risk-orientation and commitment to innovation.

Regarding market organizational culture dimension, once again the KDs had slightly higher mean score of 2.92 that knowledge management workers dedicated in developing and promoting sound and innovative and appropriate policy ideas (KGs) whose mean score was 2.91. As the scores of both KGs and KDs were very close, the result implied that the knowledge workers of UNECA equally perceive their organization characteristics, at least on organizational attributes which were less popular or less dominant organizational culture.

Comparing KGs, the hierarchy organizational culture dimension scored a higher perception rate by KDs, whose standard mean score was 3.28 with standard deviation of 0.50. The same hierarchy type of organizational culture which is mainly characterized by less flexibility and more internally focused, concentrating on internal processes, was almost similarly perceived by KGs with the mean score of 3.22 and standard deviation of 0.57.

As a whole, the mean scores of KDs were higher than that of the KGs along all the four variables but the differences were not statistically significant. The clan organizational culture type was the dimension where the two knowledge-workers variables (whose role in knowledge management differ) indicated that their perception was relatively widely dispersed from the mean with a standard deviation value of 0.69 and 0.65 for KGs and KDs respectively. It indicated that knowledge-workers of UNECA whose role was delivering knowledge perceived their organization culture as clan which noticeable for its mentoring, facilitating, nurturing leadership style. Though the difference in perception among KGs and KDs on their organization culture was manifested, not only that the variation was minimal but also there was not significant statistical evidence that supports the variation between the two categories.

In relation to previous researches conducted to find how organizational culture was perceived by different groups of the respective organization under investigation, for example Campbell (2009) and Lawson (2003), the outcome of researcher differed in the following ways. The findings of Campbell (2009) on market organizational culture dimension precisely coincided with the finding of this

research where both knowledge-workers categories showed very close contest in terms of their perception on market organizational culture dimension with the standard mean score of 2.91 and standard deviation 0.65 for KGs; and with mean score of 2.92 and standard deviation 0.61 for KDs. This result pointed out to how the two groups commonly perceived the market organizational culture dimension of UNECA, which is manifested its strategic emphasis on competitive actions and winning. These two researches unequivocally ended-up with similar findings on market organizational culture type though the variables, target population and sample size of the two studies were quite different.

Additionally the cumulative mean score of the KDs and KGs, of this research, on organizational culture parameters were closely linked with the collective standard mean score of male and female variables, by Lawson (2003), who had slightly different perception with the mean score of 2.89 and 3.22 respectively. On the other hand the findings of Campbell's (2009) on the perception of the research variable on organizational culture was totally different from the finding of this research where all the three variables have a very close perception with little or no difference in terms of their perception towards their organizational culture. The three managerial role based categories (line-managers, technical managers and strategic managers) of Campbell (2009) had, correspondingly, a mean score of 3.11, 3.13 and 3.14.

In addition to executing the mean score and standard deviation value to compare the perception of two variables of this research, t-test analysis for equality of mean scores for this research were calculated to measure if there was significant variation or not between mean scores of the two distinct knowledge workers group i.e. knowledge-generators (KGs) and knowledge-deliverer(KDs). The research used 95% ($p<0.05$) confidence interval of the difference to compare the perception of the two groups on the four organizational culture dimensions namely clan, adhocracy, market and hierarchy. The researcher applied 95 %($p>0.05$) confidence interval of difference, as indicated in table 4.7

Accordingly, with no exception in all organizational culture dimensions KDs showed a higher mean score over KGs. Both groups had the highest standard mean (mean=3.22 and 3.28) for hierarchy organizational culture dimension respectively. Similarly both groups showed their relative commonality by scoring the least mean

score for adhocracy organizational culture where mean score for KGs was 2.75 and mean score for KDs was 2.82 that manifests minimum difference on the way the two groups perceived the specified organizational culture dimension which is also clearly indicated in figure 4.4 below.

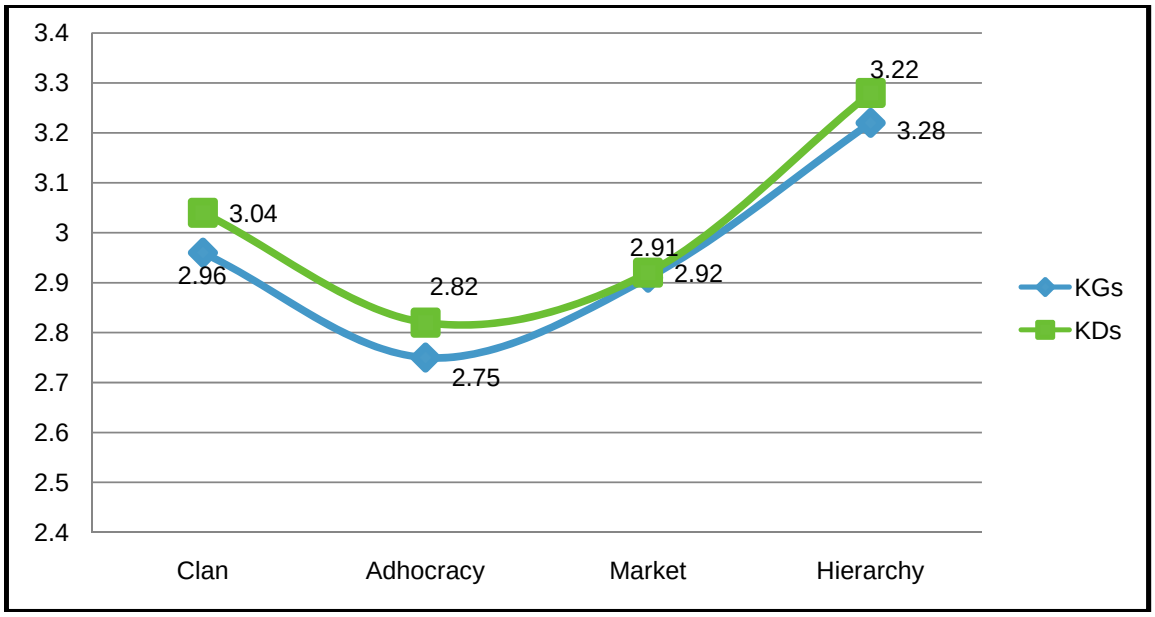


Figure 4.4: t-Test KGs and KDs indication their perception on Organizational Culture

Evidently, the t-test indicated that there were no significant differences among the two samples of this research (KGs and KDs) in all four dimension of the organization culture as the p-values were greater than 0.05(ranging from 0.45 to 0.96). The outcome of this research was totally different from what was revealed by Lawson (2003) where all the p-values of CVF organizational culture types were below 0.05 and manifested major differences among the two categories of the sample indicating that there was significant evidence at 5% confidence level to support the difference of the variables in perceiving their organizational culture. Apparently, Campbell (2009) indicated that two out of four organizational culture dimensions scored higher degree of variation indicating how significant the research found out the same groups differed in terms of their perception to clan and market organizational culture where the p-values were well below 0.05.

Conclusively the difference and agreement or how significant the variation was in perceiving organizational culture among the different variables of the study, indicated by the mean score hinted that there was no way that all researches conducted on organizational culture to come to the common point in terms

organizational culture with highest or lowest variation. This might be resulted from the type of organization and its business strategy, the way the research variables were categorized; sample sized and mix of the target population identified by various researches underway.

In this connection, the way organizational culture was perceived and the level of agreement of the sample towards the organizational culture parameter indicates how well the common organizational culture and its attributes shared and understood with a connotation on how strong and sustainable the culture was through the organization. Hence, Campbell (2009) who found out the perception of the variables on their organizational culture that was so negligible and non-existent suggested that the organization culture was strong and had a positive impact on the overall performance and effectiveness of the organization. Contrary to this, Lawson (2003) who ended up with having a noticeable difference on perception of organizational culture, measured in terms of variation of mean scores and p-value, among the two variables (male and female) pinpointed as there was little room in common in terms of how the employees observe their culture which in turn indicates the common culture was not shared and reached through the organization, That inferred particularly to challenges the organization faces in its endeavors to introduce and implement successful organization-wide change initiatives and projects.

4.5 The Relationship between Organizational Culture and Knowledge Management

The primary objective of this research was to reveal the practical relationship that exists between organizational culture and knowledge management process of UNECA. For the purpose of examining and demystifying the pragmatic relationships between the two variables, the researcher used two-tailed Pearson Correlation analysis (r) to indicate the type and magnitude of relationship and p-vale to indicate to what extent the relationship identified was supported by significant statistical evidences. Further to the correlation analysis, to attain the same goal, the research also applied multi-regression analysis (regression coefficient r^2) that revealed the predicator effect of the independent variable. The result of the analysis provides correlation coefficients to indicate the strength and

direction of the relationship between organizational culture and knowledge management processes.

4.9.1 Pearson Correlation Analysis

According to Huck (2012), a positive correlation coefficient (r) indicates a positive and direct relationship and a negative correlation coefficient (r) indicates a negative relationship and an indirect or inverse relationship between the two variables. A zero correlation and a p-value which is not tied to a 0.01 or 0.05 two-tailed level indicate that there is no correlation between the variables. The value of correlation coefficients (r) nearer to +1 or –1 indicates high degree of correlation between the two variables. In accordance with the proofed theory of Somwkh & Lewin (2005) if correlation coefficient (r) is below 0.350 it is considered as a weak relationship; if correlation coefficient (r) is between 0.351 and 0.650 it indicated moderately strong relationship; and if correlation coefficient (r) is between 0.670 and 0.999 it indicates a strong relationship.

The significance of relationship was determined by p-value. For this study significance level of 0.05 or 0.01 were taken as the standard for a two-tailed test of correlation and if the p-value is less than the alpha level of 0.05 ($P<0.05$) or 0.01 ($P<0.01$), the researcher assumed that there was significant correlation between organizational culture and knowledge management. On the other hand, if the p-value is not less than the alpha level of 0.05 ($P>0.05$) or 0.01 ($P>0.01$), the researcher concluded that there is no significant relationship between the two variables. The calculated Pearson's correlation result is presented in table 4.7 below and a detailed correlation analysis matrix is attached in the annex (see Annex D).

On the bases of the correlation analysis, the researcher tested each research hypotheses which was presented in introductory part of this research work. As table 4.7 indicates below, organizational culture and knowledge management, without mentioning any of its dimensions, were positively and moderately related where the correlation coefficient ($r=0.481$) is between 0.350 and 0.650. Based on the p-value ($p=0.000$) which was less than 0.01, this relationship was supported by statistically significant evidence with a 1% confidence level.

Table 4.7: Correlation Analysis Result

		Socialization	Externalization	Combination	Internalization	KM
Clan	Pearson Correlation	.709(**)	.235(**)	-.199(*)	.223(**)	.348(**)
	Sig. (2-tailed)	.000	.003	.013	.035	.000
	N	156	156	156	156	156
Adhocracy	Pearson Correlation	.279(**)	.392(**)	.254(**)	.105	.283(**)
	Sig. (2-tailed)	.023	.000	.001	.191	.000
	N	156	156	156	156	156
Market	Pearson Correlation	-.239(**)	.259(**)	.419(**)	.169(*)	.110
	Sig. (2-tailed)	.003	.031	.000	.035	.173
	N	156	156	156	156	156
Hierarchy	Pearson Correlation	.145	.654(**)	.166(*)	.304(**)	.439(**)
	Sig. (2-tailed)	.071	.000	.038	.000	.000
	N	156	156	156	156	156
OC	Pearson Correlation	.289(**)	.542(**)	.249(**)	.280(**)	.481(**)
	Sig. (2-tailed)	.000	.000	.002	.000	.000
	N	156	156	156	156	156

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Hypothesis1 (H01)-Clan organizational culture is related with the four knowledge management processes i.e. socialization, externalization, combination and internalization knowledge management at a different direction and magnitude.

Based on the correlation analysis evidence presented in table 4-7 above, it is indicated that there was a positive and strong relationship between clan organizational culture and socialization knowledge management process where r-value (r=0.709 with p=000) was greater than 0.650. Since the p-value (p=000) was less than 0.01, and concluded that there was sufficient evidence at the 1% level of confidence that there was a positive relationship between clan organizational culture and socialization knowledge management dimension.

Apparently, the relationship between clan organizational culture and externalization knowledge management, as exhibited in table 4.7, appeared to be positive but weak in terms of the strength of the bondage where r-value (r= 0.235 with p=0.003) was less than 0.350. Table 4.7 also reveals that p-value (p=0.003) was less than 0.01, the researcher considered that as proof to reaffirm that there was somehow significant evidence at the 1% level of confidence in support of the

positive relationship between clan organizational culture and externalization knowledge management dimensions of the dependent and independent variables of this study i.e. organizational culture and knowledge management at UNECA respectively.

According to correlation analysis result in table 4.7, where r-value(r=-0.199 with p=0.013), which was less than 0.350, it was obvious that the link between clan organizational culture and combination knowledge management was characterized by negative and weakly related. Furthermore, the data indicated that the p-value (p=0.013) which was less than 0.05, the result revealed that there was significant evidence at the 5% level of confidence in embracing the negating relationship between clan organizational culture and combination knowledge management aspects of the dependent and independent variables of this study.

Furthermore, from table 4-7 above it was clear that there was positive and relatively weak relationship between clan organizational culture and internalization knowledge management where r-value (r=0.223 with p=0.035) less than 0.350. Since the p-value (p=0.035) which was greater than 0.01 it was presumed that there was no sufficient evidence at the 1% level of confidence in favor of the positive relationship between clan organizational culture and internalization knowledge management at UNECA.

Based on the correlation analysis result, where the hypothesis aimed to test the relationship between clan organizational culture the four knowledge management process, it was revealed that dependent variables had no similar link to the four dimensions of the independent variable. To be more specific, the clan organizational culture had a positive but weak link with externalization knowledge management whereas it built a positive and strong relation with socialization but negative and weak bondage with combination knowledge management.

Hypothesis 2 (H02)-Adhocracy organizational culture is related to the four knowledge management processes i.e. socialization, externalization, combination and internalization knowledge management at a different direction and magnitude.

The evidence presented in table 4.7 above, it was clear that there was positive and relatively weak relationship between adhocracy organizational culture and socialization knowledge management where r-value (r=0.279 with p=0.023) less

than 0.350. Since the p-value (p=0.023) which was greater than 0.01, infers that there was no significant statistical evidence to verify the relationship and there was no sufficient evidence at the 1% level of confidence level to confirm the positive relationship between clan organizational culture and internalization knowledge management at UNECA.

The correlation analysis data, as outlined in the above table 4.7 presenting the correlation between organization culture and knowledge management manifested that there was a positive and moderately strong link between adhocracy organizational culture and externalization knowledge management process where r-value (r= 0.392 with p=000) was between 0.350 and 0.650. As the p-value (p=000) was less than 0.01 it implies that there was significant evidence at the 1% level of confidence in support of the positive relationship between adhocracy organizational culture and externalization knowledge management process.

The relationship between adhocracy organizational culture and combination knowledge management, as exhibited in table 4.7, appeared to be positive but weak in terms of the strength of the bondage where r-value (r= 0.254with p=0.001) was less than 0.350. table 4.7 also revealed that p-value (p=0.001) was less than 0.01, the researcher used the result as a testimony to reaffirm that there was somehow significant evidence at the 1% level of confidence in support of the positive relationship between adhocracy organizational culture and combination knowledge management of the dependent and independent variables of this study.

The correlation analysis result presented in table 4.7, affirmed that adhocracy and internalization dimension had r-value (r=0.105 and p=0.191) which was positive and weak. But as p-value was linked neither to the two-tailed value of 0.01 nor 0.05 levels, it can be concluded that there was no relationship between the two variables. The correlation analysis result also helped to test the hypothesis coined to verify the kind or relationship that might exist between adhocracy organizational culture and the four SECI knowledge management processes. Accordingly, it was revealed that the independent variable was related positively with three of the dependent variable, though the strength of the tie varies, namely socialization externalization and combination. Additionally, the result also uncovered the situation where adhocracy organizational culture by no means linked with internalization knowledge management.

Hypothesis3 (H03) Market organizational culture is related to the four knowledge management processes i.e. socialization, externalization, combination and internalization knowledge management at a different direction and magnitude.

According to correlation analysis result in table 4.7, where r-value(r= -0.239 with p=0.003), it was for real that market organizational culture and socialization knowledge management were linked negative and weakly where (r-value was less than 0.350). Furthermore the data indicates that the p-value (p=0.003) which was less than 0.01 and revealed that there was significant evidence at the 1% level of confidence in supporting the negating relationship between market organizational culture and socialization knowledge management aspects of the dependent and independent variables of this study.

From table 4.7 above it was clear that there was positive and relatively weak relationship between market organizational culture and externalization knowledge management where r-value (r=0.259 with p=0.031) less than 0.350. Since the p-value (p=0.031) which was greater than 0.01, it can be concluded that there was no sufficient evidence at the 1% level of confidence that there was a positive relationship between market organizational culture and externalization knowledge management at UNECA.

The evidence above in table 4.7 presenting the correlation between organization culture and knowledge management indicated that there was positive and moderately strong link between market organizational culture and combination knowledge management process where r-value (r=0.491 with p=000) was between 0.350 and 0.650. As the p-value (p=000) which was less than 0.01and implied that there as significant evidence at the 1% level of confidence in support of the positive relationship between market organizational culture and combination knowledge management process of the dependent and independent variables of this study (organizational culture and knowledge management) at UNECA.

The relationship between market organizational culture and internalization knowledge management, as exhibited in table 4.7, appeared to be positive but weak in terms of the strength of the bondage where r-value (r= 0.169 with p=0.035) was less than 0.350. Table 4.7 also reveals that p-value (p=0.035) was less than 0.05 and it reaffirmed that there was significant evidence at the 5% level of confidence in

support of the positive relationship between market organizational culture and internalization knowledge management.

Basically, what the correlation analysis also provided was the answer to the hypothesis set to test the link between market organizational culture dimension with the four SECI knowledge management processes. Hence, as an independent variable market organizational culture was directly (positively) related with externalization, combination and internalization, where as it had a negative (indirect) link with socialization knowledge management process.

Hypothesis4 (H04)-Hierarchy organizational culture is related with the four knowledge management processes i.e. socialization, externalization, combination and internalization knowledge management at a different direction and magnitude.

The correlation analysis result presented in table 4.7, affirms that hierarchy and socialization dimension has r-value (r=0.145 and p=0.071) appeared to be positive but weak. Nonetheless, the p-value was not attached to either to the 0.01 or 0.05 two-tailed level. It was considered that there was no relationship between hierarchy organizational culture and socialization knowledge management at UNECA.

On the bases of the correlation analysis data presented in table 4-7 above, it was indicated that there was positive and strong relationship between hierarchy organizational culture and externalization knowledge management process where r-value (r=0.654 with p=000) was greater than 0.650. Since the p-value (p=000) was less than 0.01, it can be concluded that there was sufficient evidence at the 1% level of confidence to support the positive relationship between hierarchy organizational culture and externalization knowledge management dimension at UNECA.

The relationship between hierarchy organizational culture and combination knowledge management, as exhibited in table 4.7, appeared to be positive but weak in terms of the strength of the bondage between the two dimensions where r-value (r= 0.166 with p=0.038) was less than 0.350. Table 4.7 also revealed that p-value (p=0.038) was less than 0.05 which reaffirmed that there was significant evidence at the 5% level of confidence in support of the positive relationship between hierarchy organizational culture and combination knowledge management of the dependent

and independent variables of this study (organizational culture and knowledge management) at UNECA.

The relationship between hierarchy organizational culture and internalization knowledge management, as exhibited in table 4.7, appeared to be positive but weak in terms of the strength of the bondage where r-value (r= 0.304 with p=000) was less than 0.350. table 4.7 also reveals that p-value (p=000) was less than 0.01, it was taken as a proof to reaffirm that there was somehow significant evidence at the 1% level of confidence in support of the positive relationship between hierarchy organizational culture and internalization knowledge management of the dependent and independent variables of this study (organizational culture and knowledge management) at UNECA.

Evidently, the correlation analysis result was used to test the hypothesis intended to verify how hierarchy organizational culture was related with four SECI knowledge management processes. Consequently, hierarchy organizational culture had no link with socialization but positively linked with externalization, combination and internalization knowledge management processes regardless of the magnitude and strength of the bondage.

From the data presented in the correlation analysis summary, it was clear that the specific organizational culture variables were related with particular knowledge management process at different direction, magnitude and strength. Categorically, the researcher has identified six distinct groups of relationships between organizational culture and knowledge management. These categories were based on similarity on the type of correlation (positive or negative), how strong the relationship was (the range of r-value), and how significant the relationship was (p-value).

Category 1- Relationships designated by positive and strong correlation with significant evidence for the type of relationship identified (r= +ve, r – value was greater than 0.650, p-value less 0.01 or 0.05).

This category includes the relationship between,

- Clan organizational culture and socialization knowledge management process and
- Hierarchy organizational culture and externalization knowledge management.

This relationship is also graphically presented in figure 4.5 below.

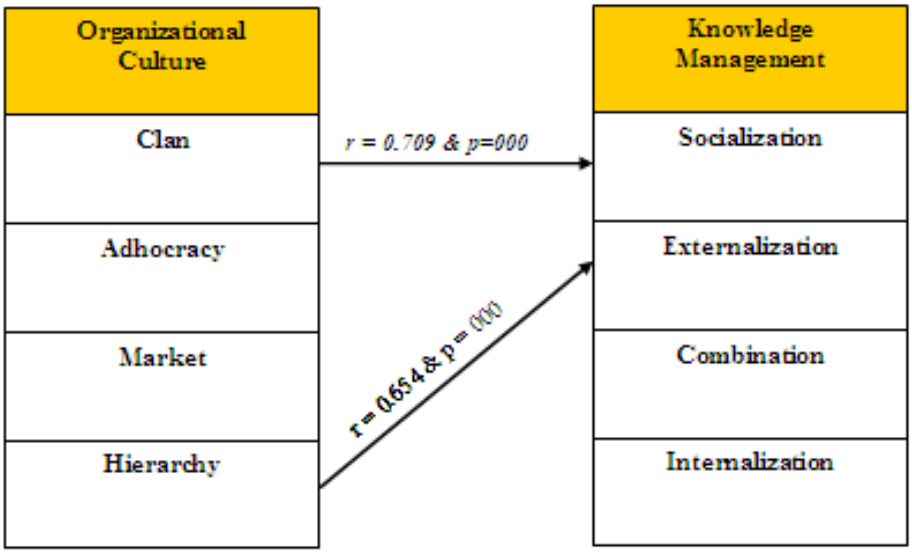


Figure 4.5: Correlated positively and strong with significant statistical evidence

Thus the two-tailed significant level (p-value) was less than 0.01 and 0.05 and there was significant evidence at the1% or 5% level of confidence in support of the positive relationship between the specified organizational culture and knowledge management dimensions.

Similar to these types of relationship, Tseng (2010), Harorimana (2010) and Ebrahi, Fazelidinan & Safania (2013) revealed positive and strong relationship with significant statistical evidence between organizational culture and knowledge management dimension. Nonetheless, the related dimensions were different as the link between adhocracy organizational culture and externalization knowledge management process where r-value (r=0.662 and p=0.000 (p<0.05) by Tseng (2010). Whereas, Harorimana (2010) discovered the same relationship type between market organizational culture and combination knowledge management where r-value (r=0.699 and p=0.000 (p<0.01) was greater than 0.650. Emphatically what Ebrahi, Fazelidinan & Safania (2013) also explored correlation between the two variables that belongs to this category, where (r=0.788 and p=0.031 (p<0.05) and (r=0.702 and p=.000 (p<0.01)) representing the relationship between hierarchy organizational culture and internalization knowledge management and relationship between clan organizational culture and socialization knowledge management, respectively.

Category 2- Relationships labeled as positive with moderately strong and had an indication of concert statistical significant evidence to further support

the existence of the type of relationship (r = +ve and 0.350 > r <0.650, p>0.01 or 0.05).

This category includes the relationship between,

- Adhocracy organizational culture and externalization knowledge management.
- Market organizational culture and combination knowledge management

This relationship is also graphically presented in figure 4.6 below.

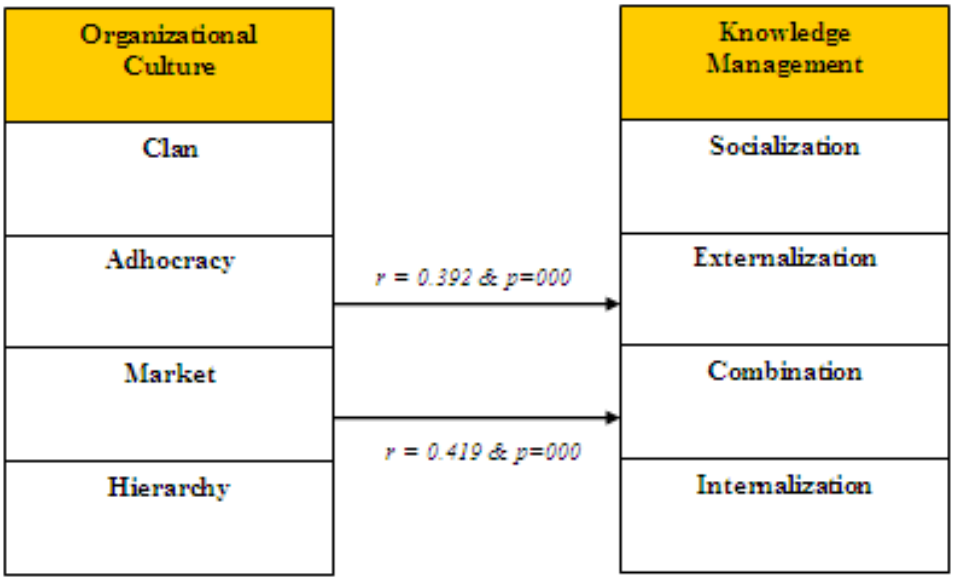


Figure 4.6: Correlated positively and moderately strong with significant statistical evidence

Here the two-tailed significant level (p-value) was less than 0.01 or 0.05 and there was significant evidence at the1% or 5% level of confidence in support of the positive relationship between the specified organizational culture and knowledge management dimension.

Alike this type of relationship in this category Harorimana (2010) revealed a positive and quite strong relationship between adhocracy organizational culture and externalization knowledge management (r=0.443, p=0.023 and p<0.05). Additionally, Tseng (2010) and Ebrahi, Fazelidinan & Safania (2013) commonly laid a relationship with similar attributes but linking clan organizational culture and externalization knowledge management where the former associated with r-value (r=0.391 and p=0.00 (p>0.05) and the later placed r-value (r=0.359 and p=0.01 (p>0.01)) for the two variables of their respective study.

Category 3- Relationships marked by positive correlation but weak in strength and still there was concert evidence to justify the type of relationship formulated (r = +ve, and r>0.350, p>0.01 or 0.05).

This category includes the relationship between,

- Clan organizational culture and externalization knowledge management
- Adhocracy organizational culture and combination knowledge management
- Market organizational culture and internalization knowledge management.
- Hierarchy organizational culture and combination knowledge management.
- Hierarchy organizational culture and internalization knowledge management,

This relationship is also graphically presented in figure 4.7 below.

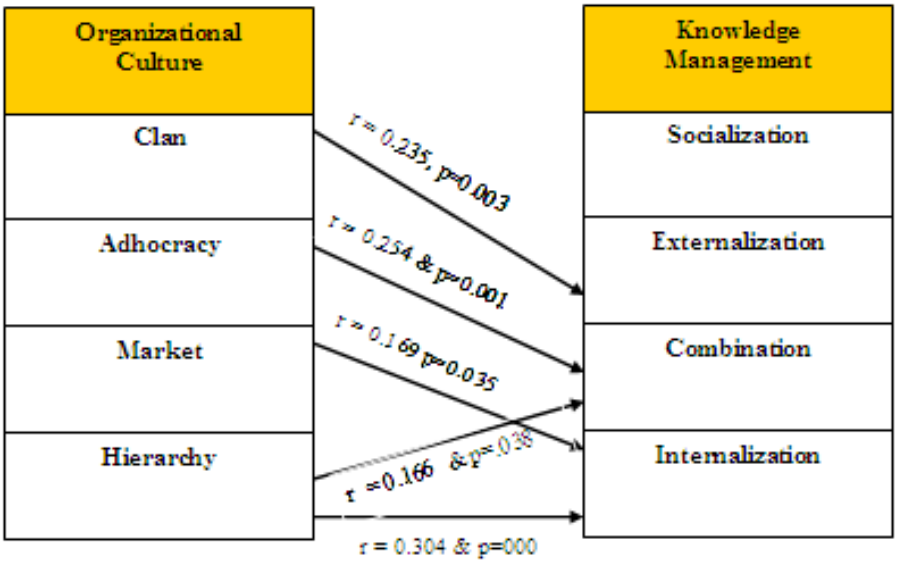


Figure 4.7: Correlated positively but weak having significant statistical evidence

So, the two-tailed significant level (p-value) was less than 0.01 or 0.05 and there was significant evidence at the 1% or 5% level of confidence in support of the positive relationship between the specified organizational culture and knowledge management dimension.

Apparently, Ebrahi, Fazelidinan & Safania (2013) and Tseng (2010) who had got a common ground and explored the same type of relationship between hierarchy organizational culture and combination knowledge management; and between adhocracy organizational culture and combination knowledge management. But both came up with a distinct r-value where r-value, was less than 0.350 (r=0.220, p=000

and p<0.01) and (r=0.189, p=0.012 and p<0.05) respectively. At the same time Harorimana (2010) defined a type of relationship mentioned as positive but weak between clan organizational culture and externalization knowledge management where r-value (r=0.220, p=000 and p<0.01) was less than 0.350. Unfortunately none of these researchers mentioned pertaining to the relationship between market organizational culture and internalization knowledge management; and hierarchy organizational culture and internalization knowledge management which belong to the current relationship category according to this study.

Category 4- This category was identified with positive r-value but with no relationship between the variables as the p-value was linked neither of the two-tailed levels neither to 0.01 nor 0.05. There was no way even to define whether there was statistically significant evidence to support the relations.

This category includes the relationship between.

- Adhocracy organizational culture and internalization knowledge management
- Hierarchy organizational culture and socialization knowledge management

This relationship is also graphically presented in figure 4.8 below.

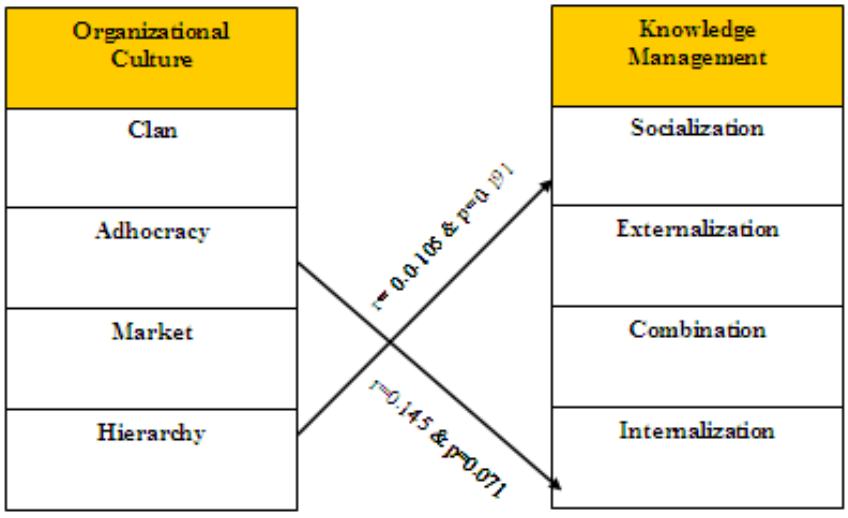


Figure 4.8: No relationship and not linked to either of the two-tailed levels

There was no significant evidence to support either way of the relationship direction as the two-tailed significant level (p-value) were not linked to either at 0.01 or 0.05 level that could not led to conclude how significant the link would

between be the specified organizational culture and knowledge management dimensions.

Paradoxically, what Tseng (2010) revealed on the relationship between adhocracy organizational culture and socialization knowledge management stood to the opposite side of what was explored where the former declared the two dimensions related negatively and the former explicitly revealed r-value which was less than 0.350 (r=-0.213 and p=0.012). On the other hand Ebrahi, Fazelidinan & Safania (2013) discovered zero relationship between hierarchy organizational culture and socialization knowledge management where r-value less than 0.350 but not linked to 0.01 or 0.05 of two-tailed significance level. Nonthless, according to Harorimana (2010) all the four dimensions of organizational culture and knowledge management processes were, in any way, linked and created a bondage regardless of how strong or weak the relationships appeared to be.

Category 5- Relationships tagged as negative correlation, weak link and with significant evidence to concretely proof the negating relationship (r = -ve, p>0.01 or 0.05) and r<0.350).

This category includes the relationship between.

- Clan organizational culture and combination knowledge management
- Market organizational culture and socialization knowledge management,

This relationship is also graphically presented in figure 4.9 below.

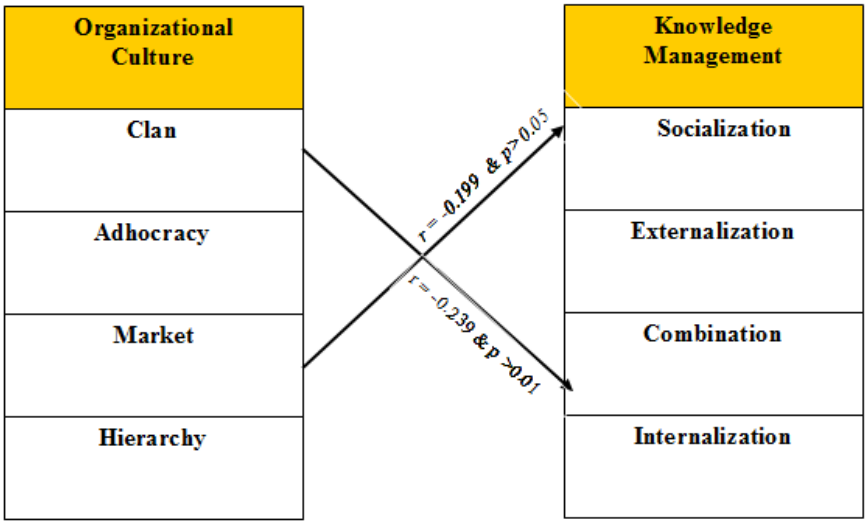


Figure 4.9: Correlated negatively and weak with significant statistical evidence

Here the two-tailed significant level (p-value) was less than 0.01 and 0.05 and there was significant evidence at the1% or 5% level of confidence in support of the negative relationship between the specified organizational culture and knowledge management dimensions.

Seemingly, Ebrahi, Fazelidinan & Safania (2013) and Tseng (2010) uncovered the negating bondage that existed between market organizational culture and socialization knowledge management. Both agreed that r-value of this relationship was blow 0.350 but they differed on the p-value where Ebrahi, Fazelidinan & Safania (2013) claimed p-value ($p=0.41$) was greater than 0.01 implying that there was no statistically significant evidence to back-up the relationship mentioned. To the contrary, Tseng (2010) unambiguously indicated that p-value ($p=0.003$) was less than 0.05 that not only used to reaffirm the existence of significant evidence at the 5% level of confidence in support of the negative relationship between market organizational culture and socialization knowledge management. Harorimana (2010) affirmatively consolidated the findings where r-value ($r=-0.141$, $p=0.011$ ($p<0.05$) the relationship between clan organizational culture and combination knowledge management appeared to be negative and weak with strong statistically evidence to support the type of relationship defined.

Category 6- Relationships categorized as positively correlated, weak strength of the bondage and there was no significant evidence to affirm the existing relationship ($r = +ve$, $p>0.01$ or 0.05 and $r<0.350$).

This category represented the relationship between.

- Clan organizational culture and internalization knowledge management
- Adhocracy organizational culture and socialization knowledge management
- Market organizational culture and externalization knowledge management

This relationship is also graphically presented in figure 4.10 below.

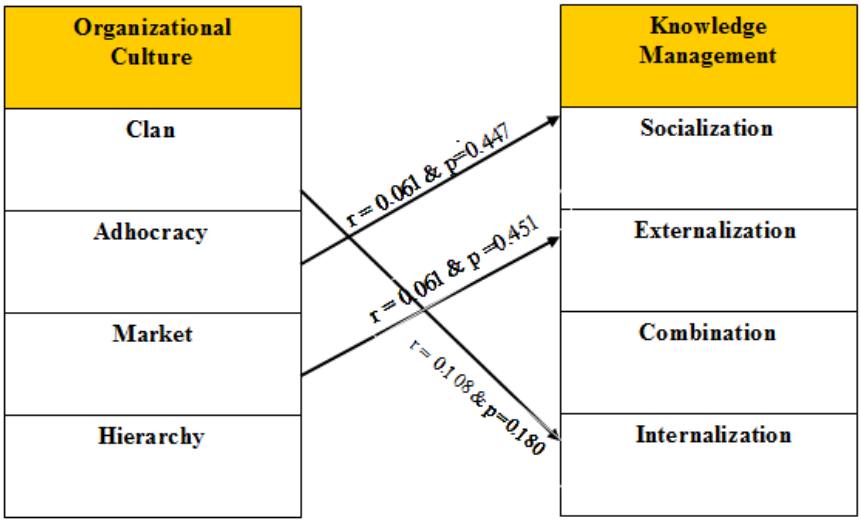


Figure 4.10: Correlated positively and weakly with no significant statistical evidence

The two-tailed significant level (p-value) was greater than 0.01 or 0.05 and there was no significant evidence at the 1% or 5% level of confidence in support of the positive relationship between the specified organizational culture and knowledge management variables.

In relation to this category, Tseng (2010) identified a similar type of correlation to both adhocracy organizational culture and socialization knowledge management; and market organizational culture and externalization knowledge management dimensions. Specifically the relationship found to be positive except that the link between the former pair was relatively strong (r-value >0.350 and <0.650). Nonetheless, in both cases, as p-value (p=0.46, p>0.01) the evidence was not significant enough to sustain the relationship identified. Additionally, Ebrahi, Fazelidinan & Safania (2013) disclosed that the relationship between clan organizational culture and internalization knowledge management as positive, weak (where r-value was less than 0.350) and it was assumed that there was a strong statistical evidence to support the relationship defined.

Uniquely to what were specified in the six categories of relationship above, Harorimana (2010) identified a positive and strong bondage between market organizational culture and externalization knowledge management process where r-value (r=0.775 with p-value (p=0.60), was greater than 0.650. But as the p-value (p=0.60) was greater than 0.05, there was no statistically significant evidence to support the relationship. Moreover, Tseng (2010) exceptionally revealed that

adhocracy organizational culture and socialization knowledge management were related indirectly (with r-value negative), the relationship was strong($r>0.650$) and with significant statically evidence where p-value ($p=0.003$) was less than 0.05.

With special emphasis to the dominant organizational culture of the Commission, the researcher has picked and identified three distinct relationships that existed between the dominant organizational culture types (hierarchy and clan) and the four knowledge management processes. According to the summary of the correlation analysis as presented in table- 4.10, the following have been revealed.

Table 4.8: Summary of the dominant culture correlation with knowledge management dimensions

Dominant Organizational Culture	Knowledge Management Variables			
	Socialization	Externalization	Combination	Internalization
Hierarchy	Positive but weak	Positive and strong	Positive but weak	Positive but weak
Clan	Positive and strong	Positive but weak	Positive but weak	Negative and weak

Generally, both hierarchy and clan organizational culture dimensions created a positive and strong link with externalization and socialization knowledge management processes respectively. As hierarchy organizational culture was strongly and positively linked with externalization and clan with socialization, this relationship inferred that the most dominant organizational culture of UNECA (hierarchy) was positively linked but its tie with socialization, combination and internalization knowledge dimensions appeared to be weak. Similarly, clan organizational culture as the second most dominant organizational culture, had a positive but weak link with externalization and combination knowledge management process. Distinctively, the second most dominant organizational culture (clan) was negatively linked with internalization. This result inferred that process-oriented and highly structured working environment on UNECA found to be unfavorable for a knowledge management process dedicated to explicit knowledge to tacit knowledge.

In summary, regardless of the direction of the relationship (positive, negative or zero), how strong the relationship was and to what extent there was or there was no significant or sufficient statistical evidence to support the relationship, most of

the dimensions of organizational culture and knowledge management were related. Moreover, in most cases the p-value was less than 0.01 or 0.05 where there was a 1% level or 5% level of confidence in support of the link between organizational culture and knowledge management dimensions.

4.9.2 Multi-Regression Analysis

In order to gain an insight into the relationships between organizational culture and knowledge management variables and to identify the predictive relationships between the two sets of variables, if any, multiple regression analysis was calculated.

As it was explicitly stated in the introductory part of the research paper, one of the objectives of this study was to identify if organizational culture has the predictor impact on knowledge management dimensions. Accordingly a multi-regression analysis regression coefficient (r^2) was executed to test the relationship between the dimensions of organizational culture (clan, adhocracy, market and hierarchy) and to each dimension in knowledge management process i.e. socialization, externalization, combination and internalization. In this research, a significance level of 0.05 or 5% level was used as a basis to determine the predictor and how significant the impact that multiple regression coefficients (β). The result of multi-regression analysis between organizational culture (based on CVF) and knowledge management process (applying SECI) was presented in table 4.8 and details of the regression analysis is attached in the annex (see in Annex E).

Table 4.8 below, presented that there was predicting influence between organizational culture dimensions as independent variable and knowledge management variables as dependent variable.

Table 4.9: Multi -Regressions Analysis

Model	Depended Variables											
	Socialization			***Externalization***			***Combination***			***Internalization***		
	β	B	Sig	β	B	Sig	β	B	Sig	β	B	Sig
(Constant)		2.497	.014		1.186	.237		5.481	.000		5.564	.000
Clan	.662	9.756	*.000*	.048	.690	.491	-.246	-2.955	.004	.256	2.928	.004
Adhocracy	.036	.511	.610	.150	2.082	.039	.134	1.559	.121	-.141	-1.563	.120
Market	-.128	-1.986	.049	.090	1.357	.177	.343	4.328	.000	.232	2.786	.006
Hierarchy	.003	.043	.966	.575	8.952	.000	.106	1.383	.169	.233	2.885	.004
	R = 0.704; R^2 = .496 (49.6%); F(4,151) = 37.168; Sig = 0.000			R = 0.684; R^2 = .467 46.7%); F(4,151) = 33.18; Sig = 0.000			R = 0.491; R^2 = .241 (24.1%); F(4,151) = 12.004; Sig = 0.000			R = 0.402; R^2 = .161 (16.1%); F(4,151) = 7.257; Sig = 0.000		

The multi-regression analysis table revealed that clan organizational culture explained r^2 =49.6% (0.496) of the variance in socialization (F (4,151) =37.168; p=0.000)). The result indicated that the three organizational culture dimensions i.e. clan (β=0.662; p=0.014), adhocracy (β=0.036; p=0.610 and hierarchy (β=0.003; p=0.996) were positively associated with the socialization. This implied that the three dimensions of organization culture were directly responsible for creating and maintaining socialization knowledge management process. Moreover, it was revealed that clan organizational culture was the most predictor variable for socialization where the significant level at the 0.000 (p<000) followed by adhocracy organizational culture with p-value (p=0.610; p>000). However, hierarchy organizational culture, though its' contribution was positive (β=0.003; p=0.996), but its effect was not significant on socialization knowledge management process where p-value (p=0.966; p>0.000). To the contrary, the market organizational culture dimension (β=-0.128, p=0.49), was neither positively related nor significantly contributed towards socialization knowledge management process.

Regarding the predicting relation between the independent variable organizational culture and externalization knowledge management process, the regression analysis table uncovered where regression-coefficient r^2=49.6% of the variance in externalization F(4,151)=33.18; p=0.000). The regression analysis table also showed that hierarchy organizational culture (β=0.662; p=000) positively associated with the externalization and this dimension was the most predictor variable for externalization where the significance level was at the 0.000 (p<000)

and r^2=57.7%). Though both adhocracy (at r^2=15%), market (at r^2=9%), and clan (at r^2=4%), organizational culture were positively associated with externalization knowledge management process, but the impact was not significant as p-values (p=0.039; p=0.117 & p=0.490 respectively) were greater than 0.000.

When it comes to examining the influencing factor of organizational culture (independent variable) and combination knowledge management process (dependent variable), the regression analysis table indicated that multi-regression value(r^2=24.1%) of variance combination F(4,151)=33.18;p= 0.000. Accordingly, three distinct relationships were drawn between organizational culture and combination knowledge management process.

- Market organizational culture was positively related with combination organization culture with beta-vale (β=0.343) and the relationship was significant to an impact to predict combination knowledge management where p-value (p=000) was equal to 000.
- Both adhocracy and hierarchy organizational culture were positively related but no significant impact to be a predictor where beta-value and p-values (β=0.134; p=0.121 and β=0.106; p=0.169 sequentially) were greater than 0.000.
- Clan organizational culture was negatively related with combination knowledge management where beta-value β=0.-246 and the impact of this negating relationship was not significant as p-value (p=0.044) was greater than 000.

The multi-regression analysis table indicated that clan organizational culture explained r^2=.161 (16.1%); of the variance in socialization F (4,151)=7.257; p=0.000. The result showed that two organizational culture dimensions market (β=0.232; 0.006 and hierarchy (β=0.233; p=0.004) were positively associated with the internalization. That implied that the two dimensions of organization culture directly contributed to promote internalization knowledge management process. Even though these independent variables were predictors to internalization knowledge management, the effect was not significant on externalization knowledge management process where p-value (p=0.006 & 0.004) was greater than 000 in both cases.

Finally both clan and adhocracy organizational culture, were negatively associated, where beta-value (β=-0.256 & β=-0.114) with the internalization and the

impact was not significant as p-value (p=0.004 & 0.120) were greater than 000 in both cases. That implied that the two dimensions of organization culture were not directly contributing to promote internalization knowledge management process.

In summary, based on the regression analysis, the researcher identified two groups of relations between the two variables,

A- Organizational culture dimension as a predictor (positive regression coefficient, highest regression coefficient ($r^{2)}$ value and p-value =000 and highest r-value. This category includes the relationship between,

- Clan organizational culture as a predictor and having an impact on socialization knowledge management process.
- Market organizational culture as a predictor and having significant impact on combination knowledge management process.
- Hierarchy organizational culture as a predictor significantly inflecting externalization knowledge management process.

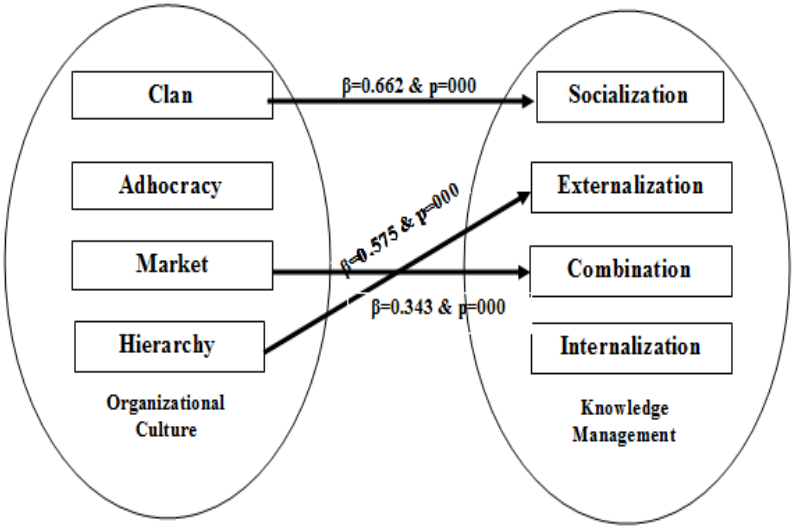


Figure 4.11: Organizational Culture – Predictors to Knowledge Management

Corresponding to the type of impact relation in this category, Jokar (2012) and Azimi-Pour & Nili-Ahmadabadi (2014) identified a positive relation with significant impact between adhocracy and externalization with regression-value (r^2=0.567; p=000 and r^2=0.600; p=000) respectively. Likewise Jokar (2012) and Tayyab (2009) identified a positive relationship where clan organizational culture having a predicting effect on socialization knowledge management process with the

regression coefficient (r^2=0.567; p=000 r^2=0.567; p=000 correspondingly). Moreover, Tayyab (2009) drawn a positive relation between hierarchy organizational culture positively influencing internalization knowledge management process where the regression coefficient (r^2=0.607; p=000).

B- Organizational culture having a suppressor effect (negative regression coefficient, and p-value >000 but the negating impact was not significant. This category includes the following relationships.

- Clan organizational culture had a negative relationship with combination knowledge management. That implies that organizational culture dimension was not suitable to facilitate the conversion process of explicit knowledge to explicit knowledge i.e. combination.
- Adhocracy organizational culture was negatively related with internalization where the regression coefficient was negative that in turn would set unfavorable influence in knowledge management process intended to convert from explicit to tacit knowledge.
- Market organizational culture negatively inflecting socialization knowledge management process. That means market culture was not positively contributing and facilitating the process of converting tacit to tacit knowledge.

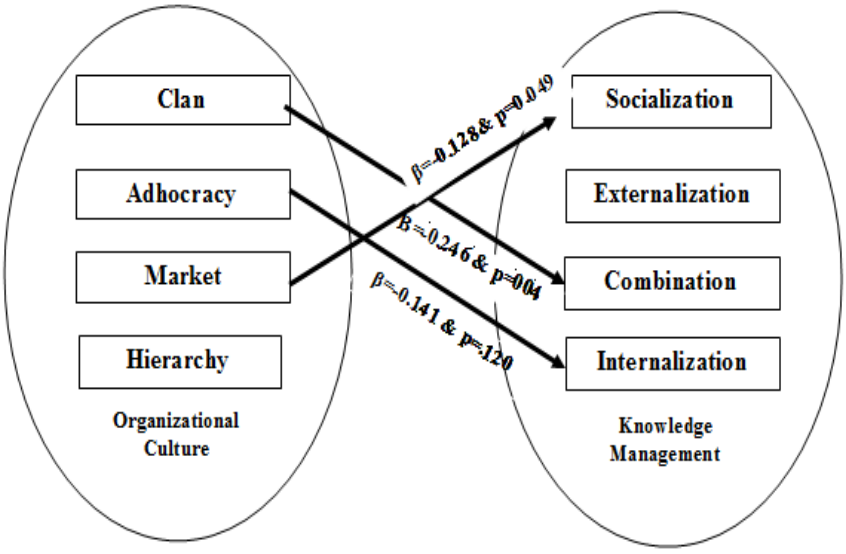


Figure 4.12: Organizational culture – suppressor effects to knowledge management

Unequivocally, Tayyab (2009) indicated a negative relationship between clan organizational culture and combination knowledge management process where the organizational dimension negatively influencing the corresponding knowledge

management process (r^2=-0.307; p=0.066, p>0.05). Moreover, Jokar (2012); and Azimi-Pour & Nili-Ahmadabadi (2014) identified a negative relationship between market organizational culture and externalization, adhocracy organizational culture and internalization knowledge management process where the regression coefficient (r^2=-0.290, p=0.03) and (r^2=-0.290, p=0.011). Though these research works agreed on the suppressor influence of organizational dimension on the corresponding knowledge management variable, both differed in terms of the level of significance as the former stated that the negative influence was significant as p-value (p=0.03) was less than 0.05 but not the latter which declared the suppressor effect was not significant as p-value (p=0.11) was greater than 0.01.

Focusing on the dominant organizational culture i.e. hierarchy and clan and how these two dimensions had a determining effect on the SCEI knowledge management process the four quadrants matrix was developed to present the regression analysis result. According to figure 4.6 that summarizes the regression analysis result of the dominant organizational cultures and dominating knowledge management processes, the following were revealed.

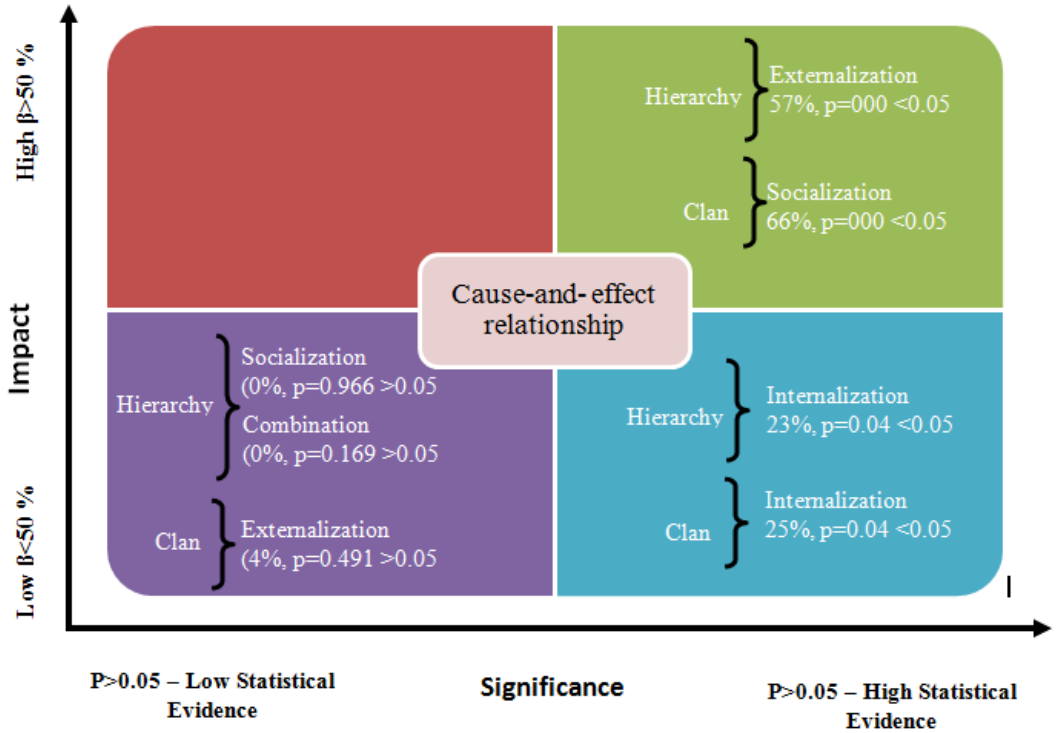


Figure 4.13: The four quadrants matrix of the dominant Organizational Culture and its determinant factor on Knowledge Management dimensions

- Both the first and second dominant organizational cultures of UNECA, i.e. hierarchy and clan, were identified as predictors and have strong impact, where β-value was greater than 50% and p-value less than 0.05, on the externalization and socialization knowledge management dimensions respectively.
- As a dominant organizational culture types of UNECA, both hierarchy and clan organizational culture, have a positive impact on internalization knowledge management process but the influence was not that strong where β-value was less than 50% and p-value less than 0.05 (indicating that there was statistical evidence to substantial the type of relationship identified.
- In the third category, though the impact of hierarchy and clan organizational culture found to be positive but the link was so weak (β-value was between 0% and 4%) where and there was no statistical significant evidence to support, and in all cases the p-value was greater than 0.05.
- In addition to the what was presented in the four quadrants matrix of the predicting effect relationship of the dominant, exceptionally the second dominant organizational culture of UNECA i.e. clan found to be negatively related with combination knowledge management process where β-value was negative β=-0.246). The result indicated that clan organization culture has a suppressor effect on combination knowledge management process.

In conclusion, elements of independent and dependent variable of this study demonstrated to have a relationship measured in terms of regression analysis coefficient (r^2). The type of relationship between organizational culture and knowledge management process were categorically identified that some having a predicting influence with positive regression coefficient where as others showed a suppressor effect associated with negative regression coefficient. Organizational culture elements with positive coefficient were expected to facilitate the knowledge management process that tied up with it whereas organizational culture dimensions with negative coefficient supposed to have a hindrance factor on the corresponding knowledge management process. Furthermore, the p-value resulted from the relationship between the variables indicated how significant the influence would be in terms of the independent variable affects the dependent variable.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter of the research work is dedicated to summarize, pinpoint and outline major findings of the study in line with the basic questions and hypothesis, what conclusions were drawn from the data presented and analyzed. Certainly what the researcher suggested as the way forward to strengthen the link between organizational culture and knowledge management dimensions and the overall consents recommended by the researcher as a means to build an effective knowledge-culture in the context of UNECA are included in this section of the research.

5.1 Summary of Major Findings

Basically, this research was aimed at examining the relationship that may exist between organizational culture and knowledge management parameters of UNECA. Specifically, the research sought to examine and identify the dominant organizational culture and dominating knowledge management process based on CVF and SECI models, explore how organizational culture of UNECA was perceived by its knowledge workers (KGs and KDs), examine the correlation between knowledge management the perception of knowledge and investigate the predicting impact of the four dimensions of organizational culture on knowledge management parameters.

The standardized and validated tools of OCAI and SECI knowledge management assessment tools were deployed to diagnose organizational culture and assess knowledge-management process. A total of 156 knowledge-workers from seven different offices of the Commission provided usable data which was availed for further analysis. Descriptive statistics, t-test, analysis Pearson's correlation analysis (r-value) and multi-regression analysis (r^2- value) were used to analyze the data.

From the descriptive data-analysis, hierarchy organizational culture was found to be the dominant organizational culture which characterized UNECA as an organization that:

- Adheres to formal rules, regulations and bureaucracy is demonstrating a hierarchy culture;
- Has several traditional layers of management, and emphasis is placed on following the chain of command;
- Its leaders helped by their power, status and position to manage their employees and
- Known for its organized, efficient operations as central part of the organization's strategy and mission.

Following hierarchy organization culture, clan organizational culture was manifested by its knowledge-workers as the second most dominant organizational culture of UNECA, where the Commission, strongly emphasize internal collaboration and acting more like a family and concerned with teamwork and morale, emphasizes loyalty, an organization wide shared vision and goals, and ongoing employee development.

The two organizational culture types identified and associated with UNECA as dominant i.e. hierarchy (control) and clan (collaborate) are both an inward focus with concern for integration. However, collaborate (clan) emphasizes on discretion rather than the stability and control of control (hierarchy) that gave UNECA a dimension of flexibility and discretion and the stability and control respectively.

The findings of this research, regarding the dominant organizational culture, was not in agreement with that of Campbell (2009) and Lawson (2003) who identified adhocracy and market organizational culture types as dominant type respectively. This inconsistency might have resulted from the difference of organization type and organizational configuration targeted by the researcher. Unlike this study which was associated with UNECA, UN-affiliated and international organization; Campbell (2009) targeted a manufacturing industry whereas Lawson (2003) worked on academic institution.

With regard to the dominating knowledge management, the study revealed that internalization was a dominating knowledge management process. More specifically, it was found that UNECA put its knowledge management emphasis more on experiencing and practicing knowledge management practices through learning and acquiring new tacit knowledge in practice by embodying explicit

knowledge through experimenting hypothesis testing and reflection and contemplation in action. Additionally, the second most practiced knowledge management process exercised by UNECA was externalization, demonstrated by articulating tacit knowledge through dialogue and reflection i.e. conceptualization, using symbolic language and translating tacit knowledge in to a concept or prototype.

When it comes to translating and mapping the dominant organizational culture type and dominating knowledge management process into the conceptual mode of knowledge-culture, in line with the recommendation of scholars in the field (e.g., Gary & Densten, 2010 and Travica, 2013), it was found out that hierarchy/internalization quadrant were best fitted to indicate UNECA's knowledge-culture interface. The hierarchy/internalization comprises of the number one dominant culture type (hierarchy) and second best dominating knowledge management process i.e. internalization. That means UNECA exhibited more of tacit-to-explicit knowledge management process that matched with process and procedure oriented organizational culture. Nonetheless, the type of knowledge management process identified as the most practiced by UNECA i.e. externalization mapped with one of the least dominant organizational culture among knowledge-workers of UNECA i.e. adhocracy. This mismatch between the two dimensions created a paradoxical relation where UNECA knowledge-workers dominantly exercised externalization knowledge management process without the existence of supporting organizational culture i.e. adhocracy. On the other hand, the second most dominant organizational culture of UNECA i.e. clan was associated with the one of the least exercised knowledge management process i.e. socialization. This absurd type of consolidation in the clan/socialization quadrant inferred that UNECA knowledge-workers were exercising the least of socialization knowledge management process (tacit-to-tacit) thought there was an open-system culture that was conducive enough but not exploited much. Finally the market/combination quadrant was identified the quadrant the accommodated the least dominant organizational culture (market) and a knowledge management process that was not explored much (combination) by UNECA knowledge-workers. Hence, the knowledge-culture interface of UNECA appeared to be mix of somehow perfect matches between dominant organizational culture types and dominating knowledge

management process, such as hierarchy/internalization and an imperfect mapping as it was manifested in clan/socialization and adhocracy/externalization quadrants.

In this regard what Tseng (2010) identified as a dominating knowledge management coincided with what was revealed here, where internalization knowledge management process created a perfect fit with hierarchy organization culture. But the match between clan organizational culture and socialization knowledge management which was revealed by Tseng (2010) appeared to be different from the result of this research work. This inconsistency might be resulted from the fact that the target group of both studies differ both in attributes and size. Comparatively, Tseng (2010) and Asl, Goodarzi & Sajjadi (2012), where there was a better match between the dominant organization culture and dominating knowledge management dimensions that created relatively a preferred link between the corresponding quadrants of the two variables that in turn put a foundation for knowledge-culture in the respective firms.

The result of the t-test calculated, which was applied to examine the perception of knowledge the two-knowledge-workers category (i.e. KGs and KDs) on UNECA organizational culture, uncovered the following key findings. Exclusive of the four dimensions of the organizational culture, generally there was difference in perception between KGs and KDs but the variation in perception could not be substantiated by concrete statistical evidence. Specifically, almost there was no difference among KGs and KDs in terms of perceiving market organizational culture which was the least dominant. Rather the two categories put their highest difference on clan organizational culture. Both KGs and KDs come to the consensus to reaffirm what have been identified as the dominant organizational culture i.e. hierarchy and clan culture types. Eventually, the two categories demonstrated a very close contest in perceiving on hierarchy organizational culture and other non-dominant culture types, which explicitly indicated the there was high level of agreement by KGs and KDs on UNECA organizational culture. The implication was that some dimensions of organizational culture of UNECA was communicated and shared among its knowledge-workers where others not. This in turn led to renounce and affirm that the organizational culture was strong if not to the expected level and in the state of supporting and facilitating organization-wide projects for change including knowledge management initiatives. The findings of this research where

knowledge-workers from both groups have little or no difference in perceiving the organizational culture and its attributes was consistent to the findings of Campbell(2009) .

Regarding the result of the correlation analysis between organizational culture and knowledge management dimension of UNECA, it was revealed the type of relationship, the magnitude of the link and the extent of evidences available to support how the two dimensions were interrelated. More specifically, this study indicated positive and strong relationship between clan organizational culture and socialization knowledge management; and hierarchy organizational culture and externalization. That implicitly supported the consent that the type of organizational culture positively supports and has a direct impact on the corresponding knowledge dimension. On the other hand, clan organizational culture and combination knowledge management; and market organizational culture and socialization were inversely or indirectly related. As a result of this negative relationship the organizational culture type in this category had unfavorable condition in the process of implementing the corresponding knowledge management process. To be specific, first, according to the result of this study, an open and friendly place to work had an adverse impact in a knowledge management process set to convert explicit knowledge to explicit knowledge. Secondly, result-driven and competitive environment found to be counter-productive for a knowledge management process heading to process and convet tacit to tacit knowledge by means of sharing and creating tacit knowledge through direct experience (empathizing).

Furthermore, adhocracy organizational culture and internalization knowledge management; and hierarchy organizational and socialization knowledge management were found to have no meaningful relationship where the organization culture dimensions had, in any way, influencing power in either facilitating or hindering the they of knowledge management process. Distinctively, whether UNECA has a dynamic, innovative or risk-taking orientation or not, it might not have any added value to support or hinder knowledge management process dedicated to convert explicit knowledge to tacit knowledge through practicing.

Categorically, the tie between clan organizational culture and internalization; adhocracy organizational culture and socialization knowledge management; and

market organizational culture and externalization found to be positive. Nonetheless, the link could not be proved with substantial evidences where UNECA knowledge-workers did not provide evidence that could truly showed the type of relationship identified. Hence the researcher declared the respective dimensions in this category have no relationship which implied that none of the independent variables (organizational culture) could influence either positively or negatively in the process of implementing the parallel knowledge management process.

Overwhelmingly much of links hypothesized and tested in this research work found to be positive though the relationship was not that strong. Particularly clan organizational culture and socialization knowledge management; and hierarchy organizational culture and externalization knowledge management established an amicable relationship where the independent variables were strongly influenced by the respective dependent variables in a good way. Based on the outcome of the analysis, UNECA knowledge-workers manifested that UNECA being demonstrating an inward focus and with concern for integration (its clan culture attributes) provide relatively conducive atmosphere for tacit-to-tacit knowledge conversion process. Equally, the hierarchical organizational attributes of UNECA manifested its orientation on stability and control as well as internal focus and integration positively contributes in its endeavors exerted to convert tacit knowledge to explicit knowledge. Moreover the dimension of organizational culture and knowledge including the tie between clan and externalization; adhocracy and combination; market and internalization; hierarchy and combination; and hierarchy and internalization confirmed to be positive but loosely linked where the independent variable could have an added value and adhered to support the corresponding knowledge management dimension. For example, UNECA have hierarchy organizational culture (which appeared twice in this category) could optimistically but not tremendously gave ways for kind of knowledge management processes set to convert explicit to explicit and explicit to tacit.

By giving specific emphasis on how the organizational culture identified as dominant in UNECA i.e. hierarchy and clan organizational culture with four dimensions of the dependent variable (knowledge management), it became apparent that seven out of eight relationships were correlated positively. Particularly, UNECA being hierarchical and characterized by its most dominant organizational

culture as valuing standardization, control, and a well-defined structure for authority and decision making; and its leaders having high capability to organize, coordinate, and monitor people and processes, found to be positive and supportive enough, with no exception but minor differences, for all four SECI knowledge management processes. Similarly, what was found to be the second most dominant organizational culture of UNECA, unequivocally stood to support all knowledge management process except combination knowledge management dimensions. In this scenario, the controlled working environment of UNECA, rather had a negative and hindering impact in the process of converting organizational knowledge which is tangible and documented (explicit knowledge) to generate another explicit knowledge.

With regard to the relationship between the dominant organizational culture and dominating knowledge management, what was identified by this research was consistent to what Asl, Goodarzi & Sajjadi (2012) who revealed that hierarchy organizational culture, as a dominant culture, positively and strongly linked the SECI knowledge management processes but had no relationship with socialization knowledge management process.

Primarily, the research also aimed at investigating the impact of organizational culture dimension on knowledge management where the researcher deployed multi-regression analysis. The calculated regression-coefficient (r^2) indicated that the independent variable i.e. organizational culture caused both a predictor and suppressor effect on knowledge management dimensions at different magnitude and strength. According to the multi-regression analysis, the following clearly marked and influencing relationship were drawn with specific emphasis to the dominant organizational culture and dominating knowledge management process of UNECA.

Hierarchy organizational culture, which was identified as the most dominant organizational culture of UNECA and denominated by its very formalized and structured place, bureaucratic procedures generally govern what people do have a predicator effect on both dominating knowledge management processes of UNECA i.e. externalization and internalization. Though the level of impact varied in both cases, UNECA with dominant organizational culture and giving emphasis to permanence and stability; and giving much importance to efficient, smooth

operations provided a suitable and conducive environment that facilitates and supports the process of converting tacit knowledge to explicit and explicit to tacit knowledge.

On the other hand, clan organizational culture which was identified as the second most dominant organizational culture of UNECA positively influence both externalization and internalization knowledge management processes. Nonetheless, in both situations the impact of clan organizational culture was either inconsiderable or even none. Therefore, the existence of high trust, openness and participation persist, that attributed the clan culture of UNECA, had little or no impact in facilitating the process of converting tacit knowledge to explicit and explicit to tacit knowledge.

Though socialization and combination knowledge management were not among the knowledge management processes that have been exercised frequently, the clan organizational culture, as one of the dominant organizational culture had totally a diverging impact on these knowledge management processes. Clan organization culture appeared to be a predictor to socialization with strong impact whereas the same organizational culture had a suppressor effect and negative influence on combination knowledge process. This implied that UNECA having a clan organizational culture manifested by its concern for people, placing a premium on teamwork, participation, and consensus positively supports and help the endeavors of UNECA in converting tacit-to-tacit knowledge(socialization) but the same organizational culture set up negated or negatively influence the process of converting knowledge from explicit to explicit.

What Tayyab (2009) revealed as the findings of influencing relationship between the dominant organizational culture and dominating knowledge management process was parallel to what was identified here. In both cases hierarchy organizational was a predictor to internalization knowledge management. But to the contrary of the previous findings Jakor (2012) explored and identified hierarchy organizational having a suppressor effect on the same knowledge management dimension i.e. internalization. The similarity and discrepancy of these findings might be caused by the type of organization under investigation and differences in terms of attributes of the target population.

All in all, the different dimensions of organizational culture have a different impact on specific knowledge management processes where both facilitating and hindrance factors were applicable.

5.2 Conclusions

The principal objective of this research work was to examine and identify any practical relationship that may exist between organization culture and knowledge management process of UNECA. According to the findings of the research, the following conclusions were made which were aligned to the basic questions raised and hypothesis made.

As hierarchy and clan organizational culture appeared to be the dominating organizational culture of UNECA, it can be concluded that the Commission had no balanced organizational culture. It could be argued that UNECA organizational culture was in-balanced that in turn resulted in, where the adhocracy and market organizational culture dimensions seemed to be negligible, and the existing in-balanced organizational culture in turn could cost and became a liability to the Commission for not achieving high level of organizational performance and effectiveness. Moreover, the in-balance manifested on UNECA organizational configuration might not be as supportive enough as expected to any organization-wide change management initiatives and projects including knowledge management.

Though UNECA exerted much of its effort to be a knowledge-base organization, as particularly reflected in the recent organization wide restructuring exercise aimed at refocusing UNECA for effectively support of its member states though knowledge-generation and knowledge delivery, the present study indicated that the Commission tend to depend on one or two knowledge management processes to deliver the required knowledge services. Specifically externalization and internalization knowledge management processes were what UNECA knowledge-workers practiced immensely. That was demonstrated by giving minimal attention to the other half of a comprehensive knowledge management processes i.e. socialization and combination. Hence, what UNECA exercising in its knowledge-delivery process was incomplete or lacked the right-mix towards a full-fledged knowledge-based organization approaches.

As a result of UNECA dominated by one or two organizational culture types and frequently practicing one or two knowledge management process, it was obvious that the knowledge-culture interface was not only incomplete but also did not accommodate the link between the preferred match of the CVF organizational culture and the SECI knowledge management process. These mismatches between the specific dimensions of organizational culture and knowledge management process could not provide UNECA the opportunity to have what was proposed as an effective organizational knowledge management model by Trivaina (2013) that comprises of what is label as a knowledge-culture. So UNECA, in one way or another, refrained from demonstrating what a well-established knowledge-culture expected to manifest including openness to change and experimentation, informal relation among employees; and motivation of individuals and groups.

Though the variation was minimal, the two categories of knowledge-workers of UNECA (KGs and KDs) perceived the various elements of organizational culture differently. Particularly KGs and KDs showed their differences on the dominant organizational culture (hierarchy and clan) where the gap was also wide. This variation in perception among knowledge-workers of UNECA testified that UNECA has not done enough or expected to do better in sharing, communicating and practicing the dominant organizational culture. Consequently, UNECA was not positioned to take advantage of its intangible organizational resource (organizational culture) to support and facilitate organization-wide initiatives such as knowledge management. An organizational culture, like the one in UNECA, which was in some way diversely perceived by employees and not communicated well has inconsiderable impact on the organization effort to boost effectiveness and efficiency rather it brought an adverse effect or negative implications.

Not all organizational culture dimensions were interrelated with knowledge management variables at the same magnitude and strength. Specifically the dominant organizational culture types of UNECA were correlated in a meaningful way with the dominating knowledge management processes. Though the strong and positive relationship identified between hierarchy and externalization; and clan and socialization knowledge management coincided with what was considered as knowledge-culture, most of the links between the two dimensions were either weak or existed without significant evidence to support the relationship. Of course clan

organizational culture stood out differently by creating a negative bondage with internalization knowledge management. These mixed correlations between the dominant organizational culture and dominating knowledge management undoubtedly not only demonstrated the supporting impact of organizational culture but also the variables have negative impactions and hampers UNECA effort in building knowledge-culture.

It was only in a few cases where the independent variable (organizational culture) showed a positive, strong and predictor impact on the corresponding dependent variables (knowledge management). Particularly out of the possible eight influencing relationships between the dominant organizational culture and dominating knowledge management process, only two results revealed positive, strong and predictor impact namely the link between hierarchy and externalization; and clan and socialization. These predicting relationship outcomes gave directives to UNECA that two of its dominant organizational cultures were supportive and facilitators to two knowledge management processes. Though this could be considered as positive but not adequate enough for UNECA to reach to its knowledge-culture upbringings.

Finally, according to the findings of the research although there were some positive insights that shaded light on the knowledge management efforts of UNECA, it was indicated that there would be a lot of challenges ahead of UNECA to be a full-fledged knowledge-base organization through developing a knowledge-culture. The overall conclusion to this research was that there was positive practical relationship between organizational culture and knowledge management. In particular UNECA,

- Having an in-balanced organization culture,
- Inclining on one or two knowledge management processes to deliver knowledge,
- Accommodating a mismatch between organizational culture dimensions and knowledge management variables to form the conceptual knowledge-management model,
- Knowledge-workers in any way exhibited their differences in perceiving most of the organizational culture dimensions,

- Having widely diversified correlation between organizational culture dimensions and
- Not having strong knowledge-culture that might put a positive impact and capable of facilitating knowledge management processes posted a flag to UNECA that it has a long way to go to attain an effective knowledge-culture that could immensity contributes to achieve its refocusing goals and organizational effectiveness.

5.3 Recommendations

After examining how the organizational culture elements of UNECA were related to its knowledge management processes, the research has identified the gaps and defined solutions that could bridge the identified gaps and pave the way towards building an effective knowledge-culture. Accordingly, the researcher recommended the following doable, achievable, and relevant, series and interrelated actions that could led UNECA to have organizational culture that fully supports and facilitates its knowledge management initiatives.

UNECA might consider implementing a comprehensive and continuous roadmap, (see Annex F- UNECA's Roadmap toward Effective Knowledge–culture) that might help to build a more effective knowledge-culture including what the Commission to consider the following recommendations.

i.) As a strong organizational culture arises consciously, senior management of UNECA better sustain and nurture the relevant organizational culture that currently supports knowledge management through rituals and rites of passage that help to prolong UNECA corporate culture by building morale.

ii.) UNECA might put its effort to develop and maintain a knowledge management model which is integrated to its strategic plan, mission and vision and compatible with UNECA organizational parameters basically to its people, process and technology. Moreover, UNECA should consider its knowledge management model that is result-oriented, comprehensive and deploying appropriate tools.

iii.) The management of UNECA also could consider to be engaged in creating and building organizational culture settings that support and facilitate knowledge management either through employing potentially suitable

employees, later by employees taking in to consideration of what common values already exist among knowledge-workers of the Commission.

iv.) The management of UNECA might consider to explore new approaches and options to manage and deliver knowledge effectively by encourage UNECA knowledge-workers to cooperate, create, and share knowledge and to experiment intended to improve organizational capabilities through better use of the organization's individual and collective knowledge resources. These resources include skills, capabilities, experience, routines, and norms, as well as technologies.

v.) UNECA management better to strive to communicate and share the appropriate organizational culture and effective knowledge management practices through setting up a participatory decision making system and integrating organizational culture and knowledge management as part of the strategic plan of UNECA. UNECA could set a horizontal and vertical communication that enable the organization to convey its goals, philosophy and strategy that will serve as a reference point for further developing and maintaining its organizational culture.

vi.) UNECA might build and sustain an effective knowledge-culture by practicing shared responsibilities between the management and employees who are expected to demonstrate

Managers	**Knowledge-workers**
• Empowering its employee	Willingness to cooperate
• Incentive, motivate and acknowledge	Creativity and innovation
• Tolerating mistakes	Risk taking and networking
• Building trust	Openness for change

vii.) UNECA also might consider to have the culture of assessing, evaluating and diagnosing how fit the two intangible resources of the organization are its alignment to the vision/mission of the organization periodically through a feedback system that will put UNECA in a series loop of checking and verifying its valuable resources and make changes to improve its knowledge management approach and configuration as required.

Recommendations for further studies

The researcher also suggested that future researches in the area to consider the, inclusion of

1. Elements of national culture that could help better understanding of organizational culture and its impact on knowledge management initiatives. Taking the national culture would be more pertinent in multi-national organizations like UNECA where its knowledge-workers had a diversified cultural background.
2. The impact of other organizational imperatives considered as knowledge management-enablers including leadership, organizational structure and infrastructure.
3. Options to explore the extent to which knowledge management could be influenced by knowledge-workers characteristics including category, gender and level of their professional qualification.

Reference

Abdar, M. F.(2012). Knowledge management capabilities and organizational performance, *Interdisciplinary Journal of Contemporary Research in Business*, 3(11), 90-121.

Abel, U. & Jennex, M. (Ed.), (2008). *A conceptual model for knowledge sharing as dependent on cultural factors*, IGI Global, Covent Garden, London.

Al-Alawi, A.I., Al-Marzooqi, N.Y. & Mohammed Y. F.(2007). Organizational culture and knowledge sharing: Critical success factors. *Journal of Knowledge Management*, 11(2), 22-42.

Alavi, M., Kayworth, T. & Leidner, D.(2006). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of Management Information Systems*, 22(3), 191-224.

Allameha M., Zamanib, M., & Davoodi, S.(2011). The Relationship between organizational culture and knowledge Management: A case study: Isfahan University. *Procedia Computer Science*, 3, 1224–1236.

Alnsoor, M.(2008).*Using SECI knowledge creation model.* University of Glasgow, Department of Management, UK.

Al-Shammari, M.(2010). *Knowledge management in emerging economies*, IGI Global, UK.

Anantatmula, V.(2009*). Knowledge, management criteria*, Elsevier Butterworth–Heinemann, Burlington, USA.

Argote, L., McEvily, B. & Reagans, R.(2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management Science*, 49(4), 571-582.

Armstrong M. & Taylor S.(2014). *Handbook of human resource management practice*, 13th Ed, Kogan Page, UK.

Asl, N., Goodarzi, M. & Sajjadi, N.(2012). The relationship between organizational culture and knowledge management in the Islamic Republic of Iran's International, *Journal of Academic Research in Business and Social Sciences*, 2(1).

Becerra-Fernandez, I. & Sabherwal, R.(2001). Organizational knowledge management: A contingency perspective, *Journal of Management Information Systems*, 18(1), 23-55.

BenMoussa, C. (2009). Barriers to knowledge management: A theoretical framework and a review of industrial cases, *World Academy of Science, Engineering and Technology*, 3, 6-22.

Bergeron, B.(2003). *Essentials of knowledge management*, John Wiley & Sons, London.

Bratianu, C. & Orzea, I, (2010). Organizational knowledge creation and management. *Challenges for Knowledge Society*, 5(3), 41-62.

Cameron, K. & Quinn, R.(2011). *Diagnosing and changing organizational culture: Based on the Competing Values Framework*, (3rd Ed.), Kogan Page, USA.

Cameron, K. (2004). *A process for changing organizational culture*, University of Michigan Business School, Michael Driver, USA.

Campbell, M. (2009), *Identification of organizational cultural factors that impact knowledge management*, University of Oregon Applied Information Management Program, USA.

Creswell, J. (2002). *Research design: Qualitative, quantitative, and mixed Methods approaches*, 2nd Ed, University of Nebraska, Lincoln.

Chilton, M. & Bloodgood, J. M.(2007). *Measuring the dimensions of tacit and explicit knowledge: Enhancing knowledge management*, Kansas State University, USA.

Chin-Loy, C. (2007). The Influence of organizational culture on the success of knowledge management practices with North American companies. *International Business & Economics Research Jour*nal, 6(3), 15- 36.

Chmielewska-Muciek, D., Curie-Skłodowska, M, & Sitko-Lutek, A. (2013). *Organizational culture conditions of knowledge management,* University in Lublin, Poland.

Choy, C. & Suk, C.(2005). Critical factors in the successful implementation of knowledge management, *Journal of Knowledge Management Practice*, 2(9).

Chung, T., (2011), *How knowledge creation capabilities lead to competitive advantage*, Chatham University, USA.

Clair, G. & Stanley, D. (2009). *Building the knowledge culture: The knowledge service effect*. SMR International, New York.

Dale, K. (2012). *Perception of organizational culture of multi-campus community college*, Colorado State University Fort Collins, Colorado, USA.

Danish, R., Munir, Y. & Butt, S. (2012). Moderating role of organizational culture between knowledge management and organizational effectiveness. *World Applied Sciences Journal* 20 (1), 45-53.

Dauber, D., Fink, G. & Yolles, M. (2011). Configuration model of organizational culture. *SAGE Open*, 1–16.

David , L. (2009) A Practical Guide to Scientific Data Analysis, John Wiley & Sons, Ltd

Donate, M. & Guadamillas, F. (2010).The effect of organizational culture on knowledge management practices and innovation. *Knowledge and Process Management*, 17(2), 82–94.

Eardley, A. & Uden, L. (2010). *Innovative knowledge management,* IGI Global, UK.

Ebrahi, M., Fazelidinan, F. & Safania, R. (2013). Study of relationship between knowledge management and organizational development. *International Research Journal of Applied and Basic Sciences,* 4 (1), 168-173.

Edna, P. & Ronen, T.(2011). *The complete guide to knowledge management: A strategic plan to leverage your company's intellectual capital*, John Wiley & Son, London.

Essawi, M. & Tilchin, O. (2013). A model of knowledge management culture change, *American Journal of Industrial and Business Management*, 3, 467-471.

Fong, P.& Kwok, C. (2009). Organizational culture and knowledge management success at project and organizational levels in contracting firms, *Journal of Construction Engineering and Management*, 135(12), 1348-1356.

Fraenkel, J. R. & Wallen, N. E. (2008). How to Design and Evaluate Research in Education (7th ed.), New York: McGraw Hill.

Girard, J. (2009). *A leader's guide to knowledge management*. Business Expert Press, USA,

Girdauskienė, L. & Savanevičienė, A, (2007). Influence of knowledge culture on effective knowledge transfer, *Engineering Economics*, 4 (54).

Gold, A., Malhotra, A. & Segars, A. (2001). Knowledge management: An organizational capabilities perspective, *Journal of Management Information Systems*, 18(1).

Gray, J. & Densten, I.(2007), Towards an integrative model of organizational culture and knowledge management, *International Journal of Organizational Behavior*, 9(2), 594-603.

Griffiths, D. & Koukpaki, S.(2008). *Are we stuck with knowledge management? A case for strategic knowledge resource development*, University of Edinburgh, UK.

Gurteen, D.,(2009) Creating a knowledge sharing culture, *Knowledge Management Magazine*, 2(5).

Hana, U. & Lucie, L. (2011). Staff turnover as a possible threat to knowledge loss, *Journal of Competitiveness*, 3.

Harnessing, N.M. (2011). *Knowledge power for competitive advantage*, Naval Postgraduate School, USA.

Harorimana, D. (2010) *Knowledge, culture, and cultural impact on knowledge management: Some lessons for researchers and practitioners*, Southampton Solent University, UK.

Harorimana, D. (2010). *Cultural implications of knowledge sharing, management and transfer: Identifying competitive advantage*, Southampton Solent University, UK.

Haslinda, A. & Sarinah, A (2009) A review of knowledge management models, *The Journal of International Social Research*, 2(9).

Hatch, M. (2003). The dynamics of organizational culture source*: The Academy of Management Review*, 18(4), 657-693.

Ho, C. (2013), The relationship between knowledge management enablers and performance, *Industrial Management & Data Systems* (109)1, 98-117.

Hofstede, G., (2011). Dimensionalizing cultures: The Hofstede Model in context, Online *Readings in Psychology and Culture*, 2(1).

Hunk, S.W. (2012). Reading Statistics and Research (7th Ed), Boylston Street, Boston.

Hutchings, K. & Mohannak, K. (Ed). (2007). *Knowledge management in developing economies, A Cross-cultural and institutional approach*, Edward Elgar Publishing, Inc. Cheltenham, UK.

Islam Z., Mahtab H. and Ahmad A. (2007) The role of knowledge management practices on organizational context and organizational effective, ABAC Journal, 28(1), 42-53.

Iyamabo, J. (2013). Corporate identity: Identifying dominant elements incorporate culture models, *Journal of Management Research*, 5(3).

Jafari, S., Abbaspour, A. & Azizishomami, M., (2013). The effect of organizational culture on the knowledge management implementation processes, *Institute of Interdisciplinary Business Research*, 5(1).

Jelenic, D. (2011). *Importance of knowledge management in organizations with emphasis on balanced scorecard learning*, University of Nis, Serbia.

Jennex, M. (2010). *Reflections on knowledge management research and practice*, San Diego State University, USA.

Jennex, M. (2009), *Conceptual models and outcomes of advancing knowledge management*, IGI Global, UK.

Jennex, M. (Ed.). (2008). *Current issues in knowledge management*, IGI Global, Covent Garden, London.

Jennex, M. (Ed.). (2008). *Introduction: The need for knowledge management current issues in knowledge management*, IGI Global, Covent Garden, London.

Jennex, M. (Ed.). (2008). *The impact of culture and context on knowledge management*. IGI Global, Covent Garden, London.

Jokar, A. (2012). Investigating the relationship between knowledge management processes and organizational culture, *New York Science Journal* 5(8).

Karim, N., Razi, M., & Mohamed, N. (2012).Measuring employee readiness for knowledge management using intention to be involved with KM SECI processes", *Business Process Management Journal*, 18(5),777 – 791.

Kothari, C.R. (2004). Research Methodology: Method and techniques (2nd Ed.). New Delhi: New age international (P) limited.

Kaur, V., & Kahlon, R. R. (2012). Conceptual framework of relationship between knowledge management and organizational culture, *Gian Jyoti e-Journal*, 1(2).

Kulkarni, U. , Ravindran, S.& Freeze, R. (2007).A knowledge management success model: Theoretical development and empirical validation, *Journal of Management Information Systems*, 23(3), 309-347.

Lai, M. & Lee, G. (2007). Relationships of organizational culture toward knowledge activities, *Business Process Management Journal*, 13(2), 306-322.

Lawson, S., (2003). *Examining the relationship between organizational culture and knowledge management*, , Nova Southeastern University, USA.

Lee, H. & Choi, B.(2000). *Knowledge management enablers, processes, and organizational performance: An integration and empirical examination* APDSI .

Lee, S. K. J. & Yu, K. (2004) Corporate culture and organisational performance, *Journal of Managerial Psychology*, 19(4): 340-359.

Leidner, D. (2006). The role of culture in knowledge management: A case study of two global firms, *International Journal of e-Collaboration*, 2(1), 17-40.

Leidner D (2006). The role of culture in knowledge management: A case study of two global firms *International Journal of e-Collaboration*, 2(1), 17-40.

Li, B., Zhang, J., & Zhang, X. (2011). Organizational culture and knowledge management: An exploratory study, *Creative and Knowledge Society/International Scientific Journal*, 3(1) 65–77.

Lim, B. (2005).Examining the organizational culture and organizational performance link, *Leadership & Organization Development Journal*, 16(5), 16-21.

Lin, P., Hui-Yi H., & Lu, M. (2014). *Effects of knowledge management and corporate culture on organizational innovation climate*, Revista Internacional de Sociología (RIS).

Locke, E. (Ed). (2009). 2nd Edition. *Handbook of Organizational Behaviour Indispensible-Knowledge for Evidence-based Management-*, A John Wiley and Sons, Ltd, Publication, United Kingdom.

Long, D, (2007). *Building the knowledge-based organization: How culture drives knowledge behaviors*, Ernst & Young LLP.

Long, D. & Fahey, L. (2000). Diagnosing cultural barriers to knowledge management, The *Academy of Management Executive* 14(4), 113-127.

Lucas, L. (2006). The role of culture on knowledge transfer: the case of the multinational corporation. *The Learning Organization*. 13(3), 257-279.

Lusthaus, C., Adrien, M. & Anderson, G. (2004). *Organizational culture assessment: A framework for improving performance Inter-American Development Bank*. Washington D.C.

Madu B.(2009). Organization culture as driver of competitive advantage, *Journal of Academic and Business*, 3(5), 34-51.

Magnier-Watanabe, R., Benton, C. & Senoo, D. (2011). A study of knowledge management enablers across countries, *Knowledge Management Research & Practice* ,9, 17–28.

Marques, D.P. & Simon, F.J. (2006). The effect of knowledge management practices on firms performance, *Journal of Knowledge Management*, 10(3), 143-156.

Martens, B. & Suliman, H., (2011) *The professionalization of knowledge management*, University of Oklahoma, USA.

Mathiyazhagan, T. & Deoki, N. (2010). Survey research method, Media Mimansa, India, New Delhi.

Moradi, E, Saba, A., Azimi S. & Emami, R. (2012). The Relationship between organizational culture and knowledge management, *International Journal of Innovative Ideas*, 12(3), 30-46.

Mukherjee, A.(2007) *The dynamics of organizational culture and knowledge management*, Purdue University, USA.

Neto, R., Souza, R. Neves, J.& Barbosa, R. (2008). Strategic knowledge management: In search of a knowledge-based organizational model, *The Learning Organization*, 14(2), 247-256.

Nguyen, N. & Umemoto, K., (2001). *Foundations of cross-cultural knowledge management*, Japan Advanced Institute of Science and Technology, Japan.

Nonaka, I. & Takeuchi, H. (2000). *The knowledge-creating Company: How Japanese companies create the dynamics of innovation*, Oxford University Press, London.

Nonaka, I., Toyama, R. & Konno, N., (2000). SECI, ba and leadership: A unified model of dynamic knowledge creation, *Long Range Planning* 33, 5- 34.

O'Donnell, O. & Boyle, R. (2008) *Understanding and managing organizational culture*, Institute of Public Administration, Dublin, Ireland.

Olfman, L & Jennex, M. (Ed.). (2008). *A model of knowledge management success*, IGI Global, Covent Garden, London.

Oliver, S. & Kandadi, K. R. (2006). How to develop knowledge culture in organizations? A multiple case study of large distributed organizations, *Journal of Knowledge Management*, 10(4), 6-24.

O'Sullivan, K. (Ed). (2008). *Strategic knowledge management in multinational organizations*, New York Institute of Technology, Hershey , New York.

Paisittanand, S., Digman, L. & Lee S. (2011). *The effect of knowledge process capabilities and knowledge infrastructure capabilities on strategy Implementation effectiveness,* Bangkok University, Thailand.

Pauleen, D. (Ed), (2007), *Cross-cultural perspectives on knowledge management*, Libraries Unlimited Knowledge Management Series, London.

Perkins, S., & Arvinen-Muondo, R. (2013). *Organizational behavior*, Kogan Page, USA.

Plessis, M.(2006). *The impact of organizational culture on knowledge management*, Chandos Publishing, USA.

Quinn, R. & Rohrbaugh, J. (1999) A competing values approach to organizational effectiveness, *Public Productivity Review,* 5(2), 122-140.

Rad, S.,Ghazanfari, M., Jafari, M.& Rad , S. (2009), Relationship between organizational culture and knowledge management, *Journal of Knowledge, Culture and Change Management,* 8(8), 69-80.

Rahgozar, R., Afshangian, F., & Ehteshami, K. (2012). The Relationship between organizational culture and knowledge management: A case study at the University of Shiraz, *Journal of Basic and Applied Scientific*, 2(4), 3198-3207.

Rai, R. (2011). Knowledge management and organizational culture: a theoretical integrative framework, *Journal of Knowledge Management*, 15(5), 779-801.

Ramachandran, S, Chong, D. & Ismail, H., (2011). Organizational culture: An exploratory study comparing faculties' perspectives within public and private universities in Malaysia", *International Journal of e-Collaboration* 2(5), 178 - 221.

Rašula, J, Bosilj, V., & Stumberger, I. (2012). The impact of knowledge management on organizational performance, *Economic and Business Review* 14(2), 147-168.

Ribière, V. (2005). *Building a knowledge-centered culture: A matter of trust*, Jordan Hill, Oxford, UK.

Rivera-Vazquez, J., Ortiz-Fournier, L. & Flores, F.(2009). Overcoming cultural barriers for innovation and knowledge sharing, *Journal of Knowledge Management* 13(5), 257-270.

Schein, E. (2010). *Organizational culture and leadership*, (4th Ed.), Jossey-Bass, UK.

Seraji, R., Shoar, S., Abasi, A. & Norouz, D. (2013). Study of the relationship between knowledge management and organizational culture- Case study: Agriculture organization of Qom, *International Research Journal of Applied and Basic Sciences*, 4 (6), 1535-1542.

Shahzad, F. (2012).Impact of organizational culture on organizational performance: An overview, *Institute of Interdisciplinary Business Research*, 3(9).

Shaw, N. & Mason, G. (2003). An expanded model of the effects of organizational culture upon the acceptance of knowledge management, *Institute of Interdisciplinary Business Research*, 1(6).

Singh K. (2007). Quantitative Social research method. Sege publication India Pvt. Ltd. Delhi and printed at Chaman Enterprises, New Delhi.

Stankosky, M., Butterworth–Heinemann, E. (2009). *Creating the discipline of knowledge management*, Linacre House, Jordan Hill, UK.

Stoyko, P. (2008). *Organizational culture and the management of organizational memory*, IGI Global, Canada School of Public Service, Canada.

Tammet, K.(2012), Meta-analysis of Nonaka & Takeuchi's knowledge management model in the context of lifelong learning, *Journal of Knowledge Management Practice*, 13(4).

Tilchin, O. & Essawi, M. (2013). Knowledge Management through organizational culture change. *International Journal of Business Administration*, 4(5).

Travica, B. (2013). Conceptualizing knowledge-culture. *International Institute for Applied Knowledge Management* 1(2), 85-123.

Tseng, S.(2010). The correlation between organizational culture and knowledge conversion on corporate performance. *Journal of Knowledge Management Practice*, 14(2), 269 – 284.

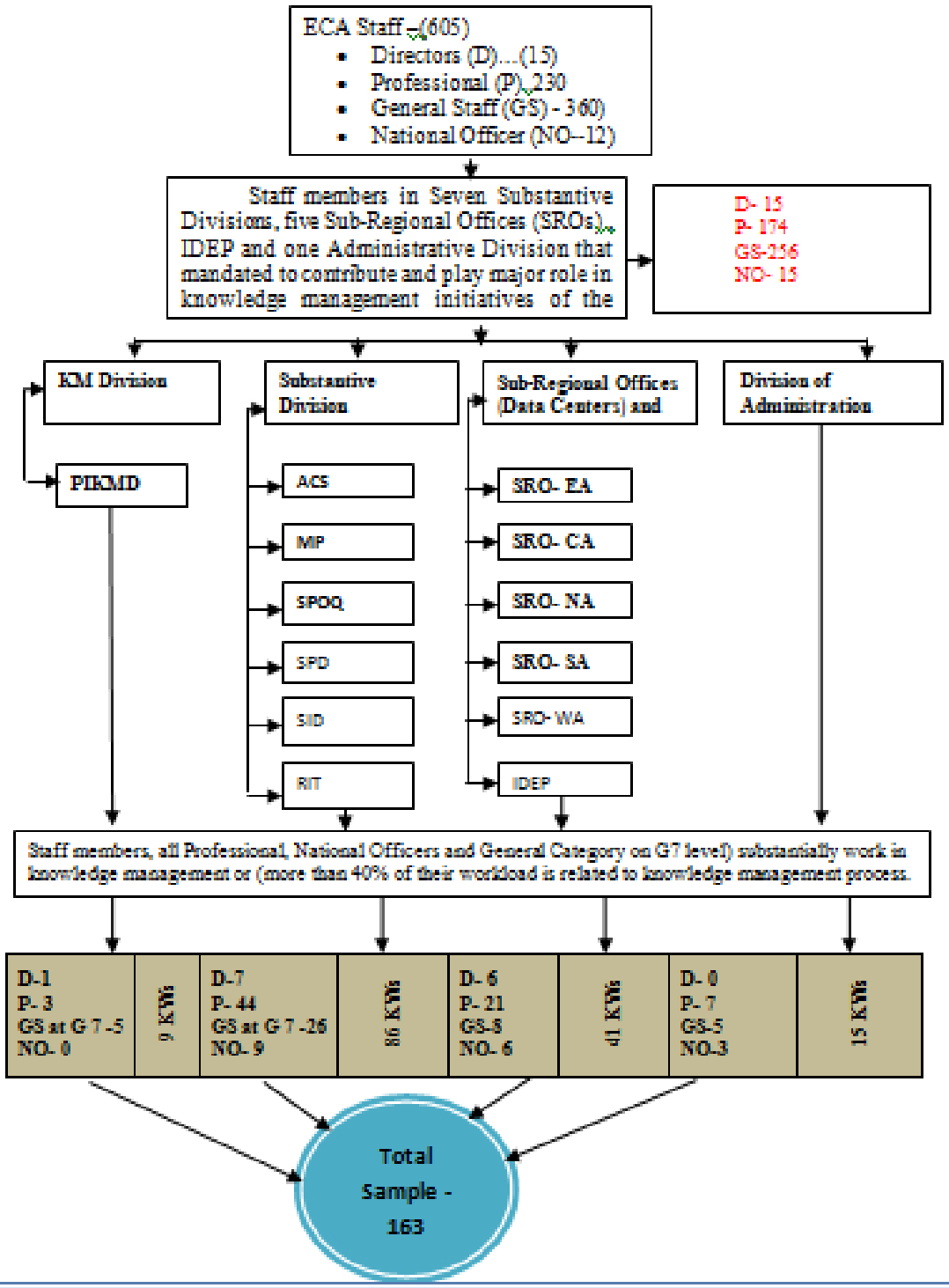
Vogds, J., (2001) *Perception of organizational values and culture at various levels of an organization*, The Graduate College University of Wisconsin-Stout, USA.

Wolf, P.(2013). Balanced evaluation: monitoring the "success" of a knowledge management project, *Historical Social Research*, 36(1), 262-287.

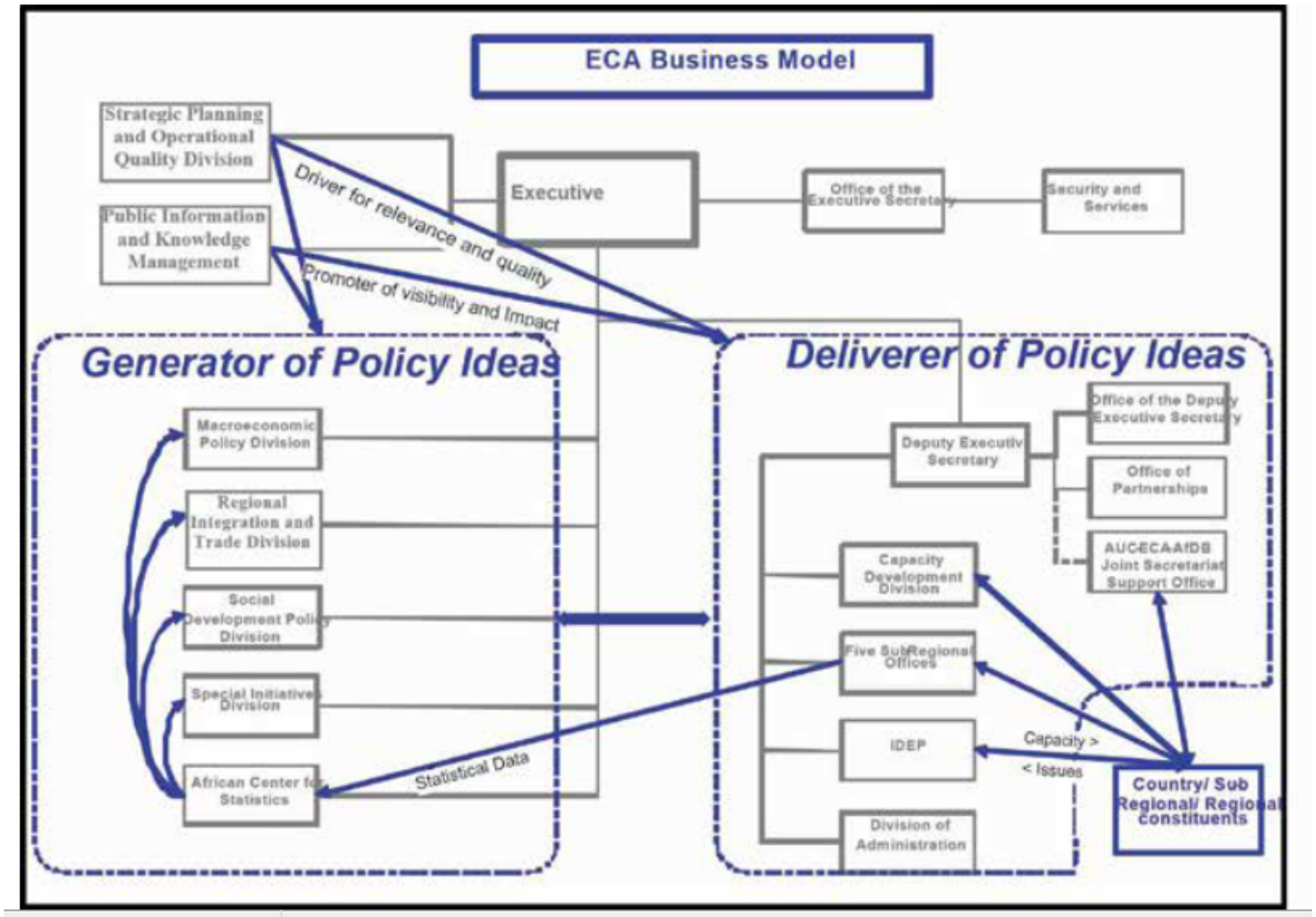
Yeh, Y., Lai, S. & Ho, C. (2006). Knowledge management enablers: a case study, *Industrial Management & Data*, 106(6), 793-810.

Annexes

Annex A: Sampling Structure



Annex B: Business Model of UNECA



Annex C: OCAI and SECI Questionnaire

The Pragmatic Relationship between Organizational Culture and Knowledge Management –the case of UNECA

Dear Respondents,

This questionnaire is designed to solicit relevant information for the research carried out on the topic "The Pragmatic Relationship between Organizational Culture and Knowledge Management- the case of UNECA". The study is conducted for academic purposes for partial fulfillment of the requirements of a Master of Art Degree in Human Resource and Organizational Development. The soundness and validity of the research findings highly depend on your kind and genuine responses. Therefore, I kindly request you to fill the questionnaire carefully and return within five days.

The purpose of the questionnaire is to obtain the opinions of UNECA staff regarding their perception of knowledge management practices and how organizational culture affects the effectiveness of knowledge management initiatives of the Commission.

Confidentiality - Please note that the information obtained from respondents is solely for research purposes and will be treated as confidential.

Should you have any question or require clarification, please contact me by phone on 251-115-443136 or via e-mail to bbogale@uneca.org.

Thank you in advance

Personal Information
Part I: Respondents' Demographic Data

Guide: Please note that you are not required to disclose your identity. Please select the right alternative box or provide the right information on the space to the corresponding question.

1. Division/Office

Division/Office

2. Category

- Professional
- National Officer
- General Staff

3. Highest Level of Educational Qualification

- High School Diploma
- BA/BSC
- MA/MSC
- PhD

Other (please specify)

4. Year of service in the organization

- Below 3 years
- 3-5 years
- 6-10 years
- Above 10 years

Part II. Organizational Culture Assessment

Guide:. Please indicate the extent of your agreement or disagreement with each statement about UNECA's organizational culture dimensions by selecting Strongly Disagree, Disagree, Neutral, Agree or Strongly Agree that best reflects and describes your perception regarding elements of the corporate culture.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My organization is a very personal place. It is like an extended family. People seem to share a lot about themselves.					
2. My organization is a very dynamic innovative place. People are willing to stick their necks out and take risks.					
3. My organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.					
4. My organization is a very controlled and structured place. Formal procedures generally govern what people do.					
5. The leadership in my organization is generally considered to exemplify mentoring, facilitating or nurturing.					
6. The leadership in my organization is generally considered to exemplify innovation and risk taking.					
7. The leadership in my organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.					
8. The leadership in my organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.					
9. The management style in my organization is characterized by teamwork, consensus, and participation.					
10. The management style in my organization is characterized by individual risk-taking, innovation, freedom, and uniqueness.					
11. The management style in my organization is characterized by hard-driving competitiveness, high demands, and achievement.					
12. The management style in my organization is characterized by security of employment, conformity, predictability, and stability in relationships.					

13. The glue (bond) that holds my organization together is loyalty and mutual trust. Commitment to this organization runs high.					
14. The glue (bond) that holds my organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.					
15. The glue (bond) that holds my organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and adherence to organizational mission are common themes.					
16. The glue (bond) that holds my organization together is formal rules and policies. Maintaining a smooth-running organization is important.					
17. My organization emphasizes human development. High trust, openness, and participation persist.					
18. My organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.					
19. My organization emphasizes competitive actions and achievement. Hitting stretch targets and championship in the workplace are dominant.					
20. My organization emphasizes permanence and stability. Efficiency, control and smooth operation are important.					
21. My organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.					
22. My organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.					
23. My organization defines success on the basis of organizational effectiveness. Transformational and change-oriented leadership is key.					
24. My organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling and low-cost production are critical.					

Part III. Knowledge Management Process Assessment

Guide: Please indicate the how frequent the following knowledge management activities are practiced by using Not at all, Once in a while, Sometimes, Fairly Often or Frequently, if not always that best reflects and describes your opinion.

	Not at all	Once in a while	Sometimes	Fairly Often	Frequently, if not always
1. The organization follows a systematic plan to rotate its staff across different Divisions/Offices (i.e. mobility).					
2. The organization asks its staff to report results of missions and projects and /negotiations with stakeholders and partners.					
3. The organization classifies or categorizes information mentioned in, databases, networks and reports.					
4. Staff are encouraged to participate in continuous education and to join postgraduate courses e.g. Masters or PhD.					
5. The organization supports face-to-face discussions of its staff on work related issues.					
6. The findings or final outputs of meetings, seminars, workshops, conferences and training programs conducted are documented					
7. The organization updates its databases and portals to provide up-to-date information to its staff and partners					
8. Access to outcomes or recommendations of meetings, seminars, symposiums and forums are facilitated by the organization					
9. The organization supports staff to work in cross-functional teams and encourage project staff to share their knowledge through face-to-face interaction with others.					
10. The organization issues reports to its stakeholders, partners and member states based on its accumulated experience.					
11. In order to develop its rules, procedures and decisions, the organization considers information mentioned in databases, networks, and previous reports					
12. The organization facilitates access to its databases and internet to get required information by its staff, partners and other stakeholders					
13. The organization conducts meetings, seminars, workshops to discuss updates on work related issue including work plans and accomplishments					
14. Topics of capacity building, learning & development programmes and seminars are established with the contribution of the organization qualified members and external experts (consultants)					

15. The organization uses documented information as a means of connection between its staff, between staff and with external bodies e.g. partners					
16. Meetings are organized to explain the content of policy documents, activity reports or other documents as a means of commencing input from others					
17.Informal meetings for tea, coffee, having lunch and others are fully supported and encouraged by the organization					
18. The organization documents the useful experiences and best practices of its qualified and experienced members into reports.					
19. Decisions reports issued by external bodies such as partners and stakeholders are collected, classified and the organization informs its staff accordingly					
20. Meetings are arranged by the organization to explain and analyze the relevant reports issued by development partners, member states and other stakeholder					
21. The organization encourages social activities outside the work place					
22. Qualified members and external experts are invited to speak about their beliefs, values and culture.					
23. The organization depends on the relevant published research and reports to develop its policies.					
24. Availability of relevant, timely and appropriate data and information are strongly considered as a means of shaping up the point of view and culture					

Annex D: Detail Correlation Analysis Matrix

		Clan	Adhocracy	Market	Hierarchy	Socialization	Externalization	Combination	Internalization
Clan	Pearson Correlation	1							
	Sig. (2-tailed)								
	N	156							
Adhocracy	Pearson Correlation	.740**	1						
	Sig. (2-tailed)	.000							
	N	156	156						
Market	Pearson Correlation	.612**	.688**	1					
	Sig. (2-tailed)	.000	.000						
	N	156	156	156					
Hierarchy	Pearson Correlation	.569**	.437**	.386**	1				
	Sig. (2-tailed)	.000	.000	.000					
	N	156	156	156	156				
Socialization	Pearson Correlation	.694**	.240**	-.207**	.223**	1			
	Sig. (2-tailed)	.000	.003	.009	.005				
	N	156	156	156	156	156			
Externalizatio n	Pearson Correlation	.279**	.376**	.165*	.109	.653**	1		
	Sig. (2-tailed)	.000	.000	.039	.177	.000			
	N	156	156	156	156	156	156		
Combination	Pearson Correlation	-.202*	.259**	.439**	.210**	.593**	.567**	1	
	Sig. (2-tailed)	.012	.001	.000	.008	.000	.000		
	N	156	156	156	156	156	156	156	
Internalization	Pearson Correlation	.145	.654**	.166*	.304**	.666**	.591**	.610**	1
	Sig. (2-tailed)	.071	.000	.038	.000	.000	.000	.000	
	N	156	156	156	156	156	156	156	156

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Note: (Where r-value 0-0.350- the relationship is weak, r-value is between 0.351 and 0.650- the relationship moderate and where r-value >0.650 the relationship is strong.)

Annex E: Detail of the Regression Analysis Matrix

Regression

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.858	.344		2.497	.014
	Clan	.765	.078	.662	9.756	.000
	Adhocracy	.050	.097	.036	.511	.610
	Market	-.165	.083	-.128	-1.986	.049
	Hierarchy	.003	.079	.003	.043	.966

a Dependent Variable: Socialization

R = 0.704; R square = .496 (49.6%); F(4,151) = 37.168; sig = 0.000

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	.358	.302		1.186	.237
	Clan	.048	.069	.048	.690	.491
	Adhocracy	.177	.085	.150	2.082	.039
	Market	.099	.073	.090	1.357	.177
	Hierarchy	.620	.069	.575	8.952	.000

a Dependent Variable: Externalization

R = 0.684; R square = .467 (46.7%); F(4,151) = 33.18; sig = 0.000

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.845	.337		5.481	.000
	Clan	-.227	.077	-.246	-2.955	.004
	Adhocracy	.148	.095	.134	1.559	.121
	Market	.352	.081	.343	4.328	.000
	Hierarchy	.107	.077	.106	1.383	.169

a Dependent Variable: Combination

R = 0.491; R square = .241 (24.1%); F(4,151) = 12.004; sig = 0.000

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.655	.297		5.564	.000
	Clan	.199	.068	.256	2.928	.004
	Adhocracy	-.131	.084	-.141	-1.563	.120
	Market	.200	.072	.232	2.786	.006
	Hierarchy	.197	.068	.233	2.885	.004

a Dependent Variable: Internalization

R = 0.402; R square = .161 (16.1%); F(4,151) = 7.257; sig = 0.000

Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta	B	Std. Error
1	(Constant)	1.833	.170		10.804	.000
	Socialization	.058	.037	.121	1.570	.118
	Externalization	.266	.044	.479	6.096	.000
	Combination	.048	.050	.080	.962	.338
	Internalization	-.012	.064	-.017	-.193	.847

a Dependent Variable: OC

R = 0.556; R square = .310 (31%); F(4,151) = 16.923; sig = 0.000

Annex F: UNECA's Roadmap towards Effective Knowledge-Culture