

Impact of organizational culture on knowledge conversion and organizational performance in telecom sector of Balochistan

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DR. FAIZ MUHAMMAD JAFFAR PAKISTAN

DEDICATION

This study is dedicated to Prophet "Muhammad (Peace Be Upon Him)" as the last Prophet of Islam, who has remained a source of inspiration for me through-out my life. He always taught humanity to seek knowledge for getting success in life and life-hereafter.

ABSTRACT

The core rationale behind the study is explaining the impact of organizational culture on knowledge conversion and organizational performance of the companies associated with Telecom sector in Balochistan. The Impact of Knowledge Conversion processes (SECI) on Organizational performance, has also been explained in this study. Further, it aims at measuring correlation between the organizational culture and the knowledge conversion process within the selected companies, and also to measure correlation between the organizational culture and organizational performance. Thirdly, to measure the success of the Knowledge Conversion processes (SECI) affected by the organizational culture of the selected companies. Fourthly, to determine whether this success of KM Initiatives is hindered or promoted by the culture of the selected organizations. The study has strived to determine the success of initiatives of knowledge management that can be affected by the organizational culture leading to impress organizational performance as a result. The study has tried to adopt and examine a theoretical framework empirically, to know whether the organizational culture is directly correlated with the knowledge conversion process and organizational performance of the selected companies. The impact of organizational culture on knowledge conversion and the organizational performance of those companies in terms of better financial performance, better market – based performance, better service delivery to customers, better process-based performance, better system of human resourcedevelopment, and devising better futuristic vision. As a result, organizational performance is achieved in terms of creation of value, innovation, efficiency and productivity. An adopted questionnaire has been used for the collection of primary data in Quetta, Balochistan. The major companies related with the Telecom sector in Balochistan such as PTCL, Ufone, and Mobilink are selected. The study has concentrated on the opinions of 257 managers and some staff members of these companies operating in Quetta, Balochistan. Results have been compiled, from the filled questionnaires, in a tabulated form. The findings and recommendations constitute the final part of this study.

Key Words: Knowledge Management, Knowledge Conversion, SECI Model, Organizational Culture, Clan Culture, Hierarchy Culture, Adhocracy Culture, Organizational Performance, Financial Performance, Market-Customer-based

Performance, Process-based Performance, People-development-based Performance, Futuristic Performance.

TABLE OF CONTENTS

Title page	(i)
Acknowledgement	(ii)
Dedication	(iii)
Abstract	(iv-v)
Table of Contents	(vi-viii)
List of Figures	(ix)
List of Tables	(x)
List of Abbreviations	(xi-xii)

S.NO.		CHAPTERS	PAGE NO.
1.	1.	INTRODUCTION	
	1.1	Rationale of The Study	
	1.2	Statement of the Problem	
	1.3	Background	
	1.4	Research Objectives	
	1.5	Research Questions	
	1.6	Significance of The Study	
	1.6.2	Contribution towards Theory	
	1.6.3	Contribution towards Practice	
		Break-up of the Thesis	
2.	2.	REVIEW OF THE LITERATURE	
	2.1	Organizational Culture	
	2.1.1	Background of Organizational Culture	
	2.1.2	Defining Organizational Culture	
	2.1.3	Implications of the definitions of Organizational Culture	
	2.1.4	Theoretical Foundation	
	2.1.4.1	Clan Culture	
	2.1.4.2	Adhocracy Culture	
	2.1.4.3	Hierarchy Culture	
	2.1.5	Connection between Organizational Culture	
		and Knowledge Conversion Process	
	2.1.6	Organizational Culture and Organizational performance	
	2.2	Knowledge Management	
	2.2.1	Definitions of Knowledge Management	

2.2.3 SECI Model 2.2.3.1 Socialization	
2.2.3.1 Socialization	
2.2.3.2 Externalization	
2.2.3.3 Combination	
2.2.3.4 Internalization	
2.3 Organizational Performance	
2.3.1 Definitions of Organizational Performance	
2.3.2 What is Performance	
2.3.3 The Organizational Performance as a concept	
2.3.4 Perspectives on Organizational Performance (OP)	
2.3.4.1 The Accounting Literature Perspective	
2.3.4.2 The Balanced Scorecard Perspective	
2.3.4.3 The strategic Management Perspective	
2.3.4.4 The Micro-Economic Perspective	
2.3.4.5 The Entrepreneurship Perspective	
2.3.5 Measuring the construct of Organizational Performance ((OP)
2.3.6 Organizational Performance (OP)-	
As a multi-dimensional Construct	
2.3.7 Interpretation is dependent upon the observer's perspective	ve
2.3.8 Summary of Prior Research on over all	
Organizational Performance	
2.3.9 Specific Measurement of Organizational Performance (Control of Control	OP)
2.3.10 The principle to select the Construct of	
Organizational Performance	
2.3.10.1 Financial Performance	
2.3.10.2 Market-Customer-based Performance	
2.3.10.3 Process-based Performance	
2.3.10.4 People-development-based Performance	
2.3.10.5 Futuristic Performance	
2.4 Theoretical Framework	
2.5 Hypotheses of the Study	
Summary of the above cha	apter
3. RESEARCH DESIGN & METHODOLOGY	
3.1 Conceptualizing and Operationalizing the Variables	
3.2 Type of Research Study Research Paradigm	
3.3 Research Paradigm Notice of the Research Study	
3.3.2 Nature of the Research Study 3.4 Participants/ Subjects	
3.4 Participants/ Subjects 3.5 Sampling Method	
3.6 Sampling Method 3.6 Sampling Size	
3.6.1 Sampling Size 3.6.1 Instruments/Tools of Data Collection	
3.6.2 Data Processing, Analysis Techniques and interpretation	1
3.0.2 Data 110ccssing, 7 marysis 1 confiduces and interpretation	
Summary of the above Char	nter
	r

4.	4.	RESULTS OF DATA ANALYSIS	
	4.1	Demographic Analysis	
	4.2	Descriptive Statistical Analysis	
	4.3	Frequency/ Percentage Analysis-I	
	4.4	Frequency/ Percentage Analysis-II	
	4.5	Frequency/ Percentage Analysis-III	
	4.6	Scale Reliability Analysis	
	4.7	Data Normality Test	
	4.8	Correlation Analysis	
	4.8.1	Correlation between OC & SECI	
	4.8.2	Correlation between SECI & OP	
	4.8.3	Correlation between OC & OP	
	4.9	Linear Regression analysis	
	4.9.1	Linear Regression Model-I (OC & SECI)	
	4.9.2	Linear Regression Model-II (SECI & OP)	
	4.9.3	Linear Regression Model-III (OC & OP)	
	4.10	Summary of the Results	
5.	5.	DISCUSSION, RECOMMENDATIONS,	
		AND CONCLUSIONS	
	5.2.1	Discussion on the results of Hypothesis-1	
	5.2.2	Discussion on the results of Hypothesis-2. I	
	5.2.3	Discussion on the results of Hypothesis-2. II	
	5.2.4	Discussion on the results of Hypothesis-2.III	
	5.2.5	Discussion on the results of Hypothesis-2-IV	
	5.2.6	Discussion on the results of Hypothesis-2-V	
	5.2.7	Discussion on the results of Hypothesis-2	
	5.2.8	Discussion on the results of Hypothesis-3	
6.	5.3	CONCLUSIONS	
7.	5.4	RECOMMENDATIONS	
••	5.5	Limitations of the Research Study	
	5.6	Suggestion for further research in future	
		Summary of the above Chapter	
8.		REFERENCES	
9.		APPENDIX	
		Appendix A: Questionnaires	

LIST OF FIGURES

Figure No	Particulars	Page No.
1	Seven Dimensions of Strong Organizational Culture	29
2	Onion Diagram Model	33
3	Culture Web	35
4	Quadrants of Organizational Culture	40
5	SECI Model	63
6	Sub-Dimensions of Organizational Performance	88
7	Theoretical Frame-work	92

LIST OF TABLES

Table No.	Particulars Particulars	Page No.
3.1	Technical Specifications of the empirical work	95
4.1	Demographic profile of the respondents of the Study	105
4.2	Descriptive Statistics of OC, SECI & OP	107
4.3.1	Frequency (Percentage) of Organizational Culture (OC) Items	108
4.3.2	Frequency (Percentage) of Knowledge Conversion (SECI) Items	110
4.3.3	Frequency (Percentage) of Organizational Performance (OP) Items	113
4.4	Summary of the Reliability of Scale Analysis	117
4.5	Data Normality Test	118
4.6.1	Correlation Matrix OC & SECI	120
4.6.2	Correlation Matrix SECI & OP	121
4.6.3	Correlation Matrix OC & OP	122
4.7.1	Summary of the Regression Model-1	124
4.7.2	ANOVA Table Model-1	124
4.7.3	Coefficients Table Model-1	125
4.8.1	Summary of the Regression Model-II	127
4.8.2	ANOVA Table Model-II	127
4.8.3	Coefficients Table Model-II	128
4.9.1	Summary of the Regression Model-III	130
4.9.2	ANOVA Table Model-III	130
4.9.3	Coefficients Table Model-III	131
4.10	Summary of the Results	133

LIST OF ABBREVIATIONS

AC Adhocracy Culture **APQC** The American Productivity and Quality Centre ANOVA Analysis of Variance Beta-coefficient **BPR Business Process Re-Engineering Balanced Scorecard BSC** CC Clan Culture CRM **Customer Relationship Management** CVF Competing Values Framework EC **Electronic Commerce** For example e.g. **EPS Earnings Per Share ERP Enterprise Resource Planning** FP Financial Performance **GAAP** Generally Accepted Accounting Principles MP Market/Customer-based Performance **GPM Gross Production Margin HRD Human Resource Development** HC Hierarchy Culture **ICT** Information & Communications Technology i.e. That is IT Information Technology KC **Knowledge Conversion** KM Knowledge Management **KMP Knowledge Management Practices** OP Organizational Performance OLOrganizational Learning PP **Process-based Performance**

	Estimated meta-analytic population Correlation	
r	Pearson product-moment correlation coefficient	
R&D	Research and Development	
ROA	Return on Assets	
ROI	Return on Investment	
ROS	Return on Sales	
SECI	Socialization, Externalization, Combination,	
	Internalization	
SCM	Supply Chain Management	
TQM	Total Quality Management	
Vs	Versus	
WACC	Weighted Average Cost of Capital	

CHAPTER NO.1 INTRODUCTION

1. INTRODUCTION

An economic system came into being having dynamic, global and virtual industries. That has emerged by dint of Information Technology making rapid development in recent years (Han & Chang, 2004). Radical changes have occurred in the environment of business. These changes forced the businesses to deal with them successfully. As a consequence, businesses are exploring various management techniques such as Enterprise Resource Planning (ERP), Total Quality Management (TQM), Supply Chain management (SCM), Business Process Re-engineering (BPR), Electronic Commerce (EC), Customer Relationship management (CRM), and Knowledge Management (Basu & Mulls, 2003; Rahman & Bullock, 2004). The business enterprises focusing on best practices, professional knowledge, communication, rational thinking, learning and organizational Culture (Fables & Perez, 2003). According to Drucker (2001), knowledge being most important productive factor, would take the place of capital, labor, raw material, equipment, and machinery. Hence, knowledge would replace traditional bases of economic prowess soon as a critical factor of success. Thus, knowledge is going to become an asset of intangible nature to ensure competitive advantage on sustainable basis. It is an asset of core competence for businesses (Sherif et al., 2006). Availability of knowledge that is valuable to the right person at the right time is ensured by knowledge management process, rather that accessibility of knowledge is increased by the process. It helps the business to adapt itself in accordance with market conditions. There are numerous enterprises enterprises which achieved organizational agility through implementing Knowledge Management practices (Haseby & Chou, 2003). Hence, developing a framework is important to identify, capture, retain, and defuse knowledge that is valuable through a systematic and structured process within an organizational Culture that is adaptable by nature (Haseby & Chou, 2003). Although few studies are available on the influence of culture on knowledge

Conversion and organizational performance, yet the issue has always been subject to inquiry (SM Tseng, 2010). That's how this study would proceed to investigate the impact of organizational Culture on Knowledge Conversion Process and organizational performance of the Telecom Sector of Balochistan.

1.1 RATIONALE OF THE STUDY

Although Knowledge Management has been practiced in the past in different settings in different forms. Yet, it has emerged as an independent discipline in the early 1990s (Dalkir, 2017). That's why it has started leaving profound effects on the way the business organizations have been operating (Dibella,1998). Most of the researchers believe that KM Practices have established positive association with the better performance of business firms (Daniel & Simon, 2006). Every business organization in the world is faced with the problem of poor performance and seeks the most suitable and feasible solution to improve its health and performance (Wiig,1993). The emergence of KM Practices having some link with the improved performance has created a cause for concern for thinkers, researchers and practitioners (Daniel & Simon, 2006). In Pakistan many business sectors are in dire need of improving their performance. Telecom sector is the most relevant one which is undergoing a continuous growth and development. It is dependent on innovation and competitive advantage for survival (S.M. Ali et. al., 2012). Hence, developing a framework is important to identify, capture, retain, and defuse knowledge that is valuable through a systematic and structured process within an organizational culture that is adaptable by nature (Haseby & Chou, 2003). The review of telecom sector in Balochistan is highly helpful in creating awareness about the positive role being played by KM Practices to further improve the performance of telecom companies there. So, this study is a need of the hour to instill the culture of Knowledge Management to further develop the sector in Balochistan, Pakistan.

1.2 STATEMENT OF THE PROBLEM

Organizations are the places where managers work. These are the deliberate arrangement of people which strives to accomplish some specific purpose. Every organization is composed of people, has a distinct purpose, develops a deliberate structure, and carries some systems and processes to perform some specific functions to attain that specific goals or purpose. In order to enable all the above elements to collaborate with each other, a systematic system of values, norms, and principles, playing an integrative role, by connecting the knowledge conversion process with the people, the structure and purpose or performance of the organization as a whole. The system of Knowledge Management is established where a smooth flow of information and knowledge takes place within and without the organization. The Information is made available where and when it is required within the organization for decision making. This frequent exchange, flow, transfer and application of knowledge within the organization members, within a specific framework, takes the form of a permanent feature known as knowledge conversion process or SECI process which definitely leads to improvement in the performance of that organization. The Telecom sector in Pakistan, specially Balochistan, is a modern, dynamic and innovative sector which is transforming day by day through the attainment of new knowledge and information technologies. It is performing brilliantly. Its efficiency and productivity has been improving day by day in Balochistan. This is the area where the positive relationship between Organizational Culture (OC), Knowledge Conversion Process (SECI) and Organizational Performance (OP) of telecom companies has been scrutinized. To conclude, the undergoing study has strived to explain the impact of organizational culture (OC) on knowledge conversion (SECI) and organizational performance (OP) of Telecom sector companies operating in Balochistan.

1.3 BACKGROUND

As far the history of knowledge management (KM) goes, prior to late 1980s, the term KM has remained in use for so many decades. Many writers, librarians, teachers and philosophers have been using the same knowledge management (KM) techniques for long. However, some estimates consider its life is longer than the actual life term in which it has been brought in use. The knowledge management (KM) as a phrase was first brought in popular use in the late eighties (1980s). It was the time when KM appeared in conferences, books on KM started publishing, the business specific journals began using the term KM (Dalkir, 2017). Denning (2002) clearly narrates as how the village elder, being the traditional healer, and the village midwife have been performing their functions as a living repositories by preserving the distilled experience in the community's life from the times immemorial. (Dalkir, 2017). Narrative repository has been there for a longer time in some form and people have discovered various ways to share knowledge to be used as a foundation to build on it further as an earlier experience by eliminating the redundancies of costly nature, by avoiding to make repeated mistakes. For instance, the knowledge was shared in terms of seminars, workshops, mentoring sessions and town meetings. People performed knowledge sharing as a primary technology of Knowledge Transfer. The cultural legacy had stemmed from the people's migration from and to continents for the most part (Dalkir, 2017). Wells perceived well for the entire world. It can be easily applied within an organization what he thought for the World in terms of Intranet. That is new system which can be called as Knowledge Management. People have been able, by then, to install knowledge encounters which have remained virtual, interactive, face-to-face, and rich utilizing new communications technologies. It is through internet and intranet like information technologies that knit together the assets of organization of intellectual nature. These content has been organized and managed with the help

of common interest, mutual cooperation and common language. In this way, people like us are able to capture, share, disseminate knowledge in a way which was previously impossible. That all draw us nearer to Well's (1939) "Perpetual Digest and system of publication and distribution"(pp.70-71), "to an intellectual of.... human memory"(pp.86-87). It was during the early sixties(1960s) that Drucker coined the term Knowledge worker (Drucker, 1960). Senge (1990) stressed on the term of "Learning Organization" which was the one that had learned from its past experiences. The experiences were preserved within the systems of corporate memory. The case of Chapparal Steel was documented by Barton-Leonard (1995) as a success story of Knowledge Management. In 1995, Professor Nonaka and Takeuchi discussed the ways as how the knowledge was created, applied and diffused in organizations and how it led to diffusing the innovation. There are many people who perceived the value of measuring the organization 's intellectual assets. They recognized the fact that the importance of Organizational knowledge, being a competitive asset, was growing (Sveiby, 1996; Norton and Kaplan, 1996; APQC, 1996; and Edvinsson and Malone, 1997). A study was conducted across the whole industry. It was a benchmarking study which was finished in 1996. It stressed on the following Knowledge Management needs:

- I. KM as a business strategy was used.
- II. KM as best practices and Knowledge Transfer.
- III. Customer specific knowledge.
- IV. Personal Responsibility for knowledge.
- V. Managing the intellectual assets.
- VI. Innovation and knowledge creation. (APQC, 1996).

The entovation timeline identified various disciplines which blended to become Knowledge Management as a separate discipline. They include, cognitive science, linguistics and computational linguistics, organizational science, Information Technologies like knowledge-based systems, document and information management, electronic performance support systems, and database technologies. Apart from that they also consist of sociology and anthropology, Information and library science, education and training, storytelling and communication studies, technical writing and journalism, collaborative technologies such as computer supported collaborative work and groupware, as well as intranets, extranets, portals, and other web technologies. There are many theorists who made significant contributions towards the evolution of Knowledge Management. They include Thomas Stewart, Peter Senge, Peter Drucker, Hirotaka Takeuchi, and, Ikujiro Nonaka. On the contrary, another perspective on the history of Knowledge has been discussed by Milestones under the development of modern technology. The phases evolved as under;

- Industrialization began in 1800.
- Transportation technologies were introduced in 1850.
- Communications got running in 1900.
- Computerization got run in the 1950s.
- Virtualization was brought in the early 1980s.
- The early efforts at personalization and profiling technologies came in full swing in 2000 (Deloitte, Touche, and Tohmatsu,1999).

Then came the age of computer and information. Knowledge Management (KM) turned out to be the deliberate and systematic utilization of knowledge assets of the business entities. It was made possible through technologies to store and remember knowledge that was valuable thanks to corporate memory and organizational learning. That also led to the publication of knowledge which could be widely shared and transferred to all stakeholders. The evolution of

knowledge management coincided with the catalog-based retail model, with auction model, and personalization model. All that led to the rational combination and matching of user and customer needs under exchange model where in emerged a win-win situation for the firm and customers. It was in 1969, that seen the launching of ARPANET. That made it easier for the researchers and scientist to communicate with each other by exchanging data sets of larger quantity. Then the facility of language or protocol appeared which connected the desperate operating systems and computers together by centralizing the communication system. That was followed by the emergence of a messaging system which was added to the network making the transfer of data file possible. Later in 1991, the World Wide Web and the internet received the nodes. It was back in 1969, that four computers with dozens of workers were connected together. But, later on, a number of key developments occurred simultaneously in the field of information technologies which were knowledge based systems. That introduced diskette-expert systems, diskette-teacher systems, knowledge engineering systems or artificial systems which helped obtain content and translated it into machine-readable language. Knowledge engineering is described as the system which involved gathering of information, familiarization of domain, design efforts and analysis. Apart from that, knowledge was accumulated, translated, coded, refined and tested (Mc Graw & Harrison Briggs, 1989). The individual who was responsible to structure and construct an expert system, was called as knowledge engineer. The development of such knowledge specific systems has offered much to the field of knowledge management in the form of capturing, validating, and disseminating knowledge from experts through technologies. Subsequently, it was in the early nineties (1990s) that books on KM started appearing in the market. That led to take further momentum in the mid-nineties when international consortia and conferences were held in large number (Dalkir, 2017). Many KM researchers and scientists gathered in January, 2003 at the 24th

World Congress on Intellectual Capital Management and requested the academia to take up the torch of Knowledge Management as it remained limited to the KM practitioners till then. They highlighted that it was an opportune time to change knowledge management (KM) as an academic discipline, to promote doctoral research in it, and provide more formal training to future KM practitioners. As a result, there were more than 100 universities the world over in 2003 which offered courses on KM apart from many business schools with KM degree programs (Petrides & Nodine, 2003; Dalkir, 2017).

Knowledge was not important but other traditional tangible resources were more important for organizations previously. Yet, knowledge as an intellectual asset has gained and is gaining more importance and value day by day for organizations throughout the world more than other physical assets now (Stewart, 1991; Dalkir, 2017). The ideas that some knowledge is obsolete and archiving needs reconsideration from new angle. The items that are expiring on some due date may not be discarded immediately. They may be managed after a valuable cost-benefit analysis. And, content analysis may be conducted in the best available manner. Intellectual Capital is gained by calculating the difference of its book value with market value. It is often termed as a Goodwill. Thus, intellectual asset of an organization is the sum total retrieved from what all the employees of that organization know and apply that know-how (Dalkir, 2017). Intellectual Capital is nothing but involves competence, capability and technology. Competence are skills through which high level performance is gained. Capability is skills required to activate and apply competencies. Technology is methods and tools to produce the desired results. Core competencies represent tactical skills through which the organization utilizes its knowledge to perform its functions well leading to make it gain competitive advantage. Competencies may take the form of a unique process, a specialized knowledge, and a particular expertise that are rare for an organization.

Competencies have tactical level, while, capabilities have strategic level. Capabilities relate more to what an individual knows to perform well and added to what other individuals' knowledge for doing well within an organization. The success of the competencies, capabilities and technologies depend more on the sound nature of KM Practices to be put in place (Hamel and Prahalad, 1990; Dalkir, 2017). Knowledge Management is seen from three different perspectives. These are business perspective, management perspective, and hands-on perspective. Business perspective focuses on questions such as why, how, how much, when and where the company will invest in knowledge or utilize knowledge. This includes the decisions about strategies, investments, divestments, alliances, products, services, acquisitions etc. The management perspective stresses on how to plan, organize, lead, control, assess, facilitate and monitor the knowledge concerning activities and practices to achieve the desired strategic objectives in an effective manner. Handson perspective is concerned with the application of expertise on work related tasks and activities. This work is based on the explicit knowledge. This perspective comes under the purview of Knowledge Management of a strategic nature. It fits in the tactical layer of management. It is done at the operational level also (Wiig, 1993; Dalkir, 2017). The main question arises as to why KM is important today. The major business drivers are forced to take keen interest in KM today. It falls in the areas such as Business Globalization, Corporate Amnesia, Learner Organizations and Technological Advancement. First of all, globalization of business means that today's organizations are more global, multicultural, multilingual, and multisite by nature. Corporate Amnesia means people are more mobile as workers. As a workforce they create problems for organizations such as Knowledge continuity problem. It calls for demands on workers to seek more learning. It is possible that a worker may not spend his entire life with one or the same organization for work. As far the Learner Organizations are concerned, these are organizations

which demand from their workers to keep on continuous learning, to work more, better, faster and smarter as a knowledge worker keeping in view the demands for tactful dealing with the workload and increased pace. The Technological Advancement means that people are connected. Advancement in Information and communications technology (ICT) has touched new high levels. It has made the connectivity possible among individuals, groups and organizations at unimaginable level. The connectivity is on all the time and action-reaction times takes only seconds or minutes to complete the cycle. Work environment is more of a complex nature today (Dalkir, 2017). People are required to record the increase in the number of Knowledge items of subjective nature on day to day basis. It is never easy to filter through over 200 faxes, emails, and voice mails on daily basis. All that requires extraordinary energy and power from workers to perform the tasks with full attention. Knowledge workers are under extreme pressure to handle this huge unmanageable data and information. They have little time to analyze it. It is becoming difficult for knowledge workers to manage the information and knowledge by retrieving, accessing and applying relevant knowledge based on their experience and expertise. The increased volume of activities and the diminishing turnaround time has made it difficult for knowledge workers to manage the knowledge in effective way. It is expected today from everyone to remain on all the times and respond immediately. When messages or mails are not responded to immediately, it causes annoyance among the people. KM is one of the real solutions to manage the challenge of information overloaded, complex and stressful environment of today. That's why KM is termed as the science of complexity. KM is also dealing with the explicit knowledge (Dalkir, 2017). According to Snowden (2002), people entered the third generation of KM. That is clear that it has focused on narrative, context, and content management. The first generation came up with information technologies or containers of Knowledge (O'Dell and Grayson, 1998). When the early KM

thinkers and companies realized that knowledge was their primary product, they wanted to stock it effectively. Resultantly, some knowledge management systems such as intranet and internal systems were developed under the first generation of KM. This generation dug out the buried organizational knowledge, turned it into the form of reusable best practices. Then many useful lessons were learnt (Dalkir, 2017). KM is necessary not only for individuals, but for communities also. How it is so follows suit. It provides benefits to employees who are individuals. It helps employees do their job in a better way by saving cost and time. It stimulates the employees to take effective decision and solve problems. It sensitizes the employees to establish community bonds within and across organizations. It helps the employees to keep themselves up dated about latest developments. It provides opportunities and challenges to employees to make contributions. As far the communities of practice are concerned, KM persuades the community members to develop professional skills. It stands for promoting peer-to-peer level monitoring. It facilitates to establish collaboration and networking of a more effective nature. KM proposes to develop a code of ethics of a professional standard for the community members to follow. It creates consensus on establishing and using a common language. After individuals and community of practice, comes KM's importance for organizations. It is equally relevant and important for organizations today. How is it so is explained below; KM helps the organizations to devise successful business strategies. It helps the organizations to solve their problems immediately. It encourages them to go for best practices. It makes the intellectual asset- knowledge better by utilizing the embedded knowledge in the services and products. It provides opportunities for organizations to go for innovation and cross-fertilize the ideas. It brings the organizations in a better position to face the challenge of competition in a better way. It assists the organizations to build their organizational memory (Dalkir, 2017). To state in other words what has been stated above, it is summarized that KM is not completely a new area. It is older one. That has remained in practice in the past within different settings under different forms. The information and data are not more complex. But, knowledge has remained more complex, subjective, mostly contextual and experience-based. The definition of KM is not accepted generally. Yet, most of the professionals and practitioners agree on the fact that KM deals with both types of knowledge such as explicit and tacit. These both strives to add value to the organization. KM is defined by each organization in terms of its distinct objectives. KM is nothing but to apply knowledge in novel and new situations. There are various disciplines in which KM has deep roots. The KM process under went three generations. The first generation focused on containers of knowledge. The second concentrated on communities of knowledge and the latest one stressed upon the content of knowledge which needs to be managed more effectively. These containers, communities, and content have evolved a distinct learning culture for organizations which strive for realizing their objectives in an efficient manner (Dalkir, 2017).

1.4 RESEARCH QUESTIONS

Following are the research questions of the study:

- Is the organizational culture correlated with the knowledge conversion process within the selected firms?
- Is organizational culture correlated with the organizational performance of the selected firms?
- Is knowledge conversion process correlated with the organizational performance of the selected firms?
- Is the success of initiatives of knowledge management affected by the organizational culture?

- Is this success of KM Initiatives hindered or promoted by the culture of those organizations?
- What is the impact of organizational Culture on knowledge conversion and organizational performance of the companies associated with Telecom Sector in Balochistan?

1.5 RESEARCH OBJECTIVES

Following are the research objectives which will be achieved during the study;

- i. To measure correlation between the organizational culture and the knowledge conversion process within the selected firms?
- ii. To measure correlation between the knowledge conversion process and Organizational performance of the selected firms?
- iii. To measure correlation between the organizational culture and Organizational performance of the selected firms?
- iv. To measure the success of initiatives of knowledge management affected by the organizational culture?
- v. To determine either this success of KM Initiatives hindered or promoted by the culture of those organizations.
- vi. To measure the impact of organizational Culture on knowledge conversion and organizational performance of the companies associated with Telecom Sector in Balochistan?

1.6 SIGNIFICANCE OF STUDY

In the related field of Knowledge Management, body of Knowledge has grown especially in the Telecom Sector of Balochistan, Pakistan, as an outcome of this study. Because the cultural and SECI model of Knowledge Management has been applied there. Additionally, it has contributed significantly to the basic research because the Knowledge Conversion process is dealt with in an analytical and managerial perspective. This has demonstrated that this area has rarely been addressed in the previous research studies. This proves the topic being a unique one is full with conceptual innovation. The vision of all stakeholders to this study has been broadened as it has taken the performance and culture of the related companies of Balochistan in a multidimensional view. Of course, the students, staff, subjects, researchers as well as managers have been included in the stakeholders. This has assisted all of them to develop the capacity to understand the real achievements realized by the initiatives of Knowledge Conversion raising the level of Organizational performance achieved by companies of Telecom Sector in the province of Balochistan after creating a learning environment of sound nature. The study has highlighted the issues and systemic flaws in the working of these companies. It has shown that the companies with sound learning culture and continuous Knowledge Conversion have performed far better than those which are without. Pointing out the flaws, demerits and issues, and coming out with practical solutions have made this study providing tangible policy input. It is making this study contributing significantly towards the applied research. Keeping the above in view, this study has successfully provided a policy input which is actionable and practicable. The study has, thus, come up with policy related recommendations which will lead to further improvement in the implementation of Knowledge Management initiatives, refinement of Organizational culture, and ultimately, realization of better Organizational performance, within Pakistan's Telecom related companies

and other dynamic sectors of Pakistan's economy. The study has demonstrated a great deal the methodological rigor as it has brought the working of related companies under a scientific inquiry with special focus on the impact of organizational culture on knowledge conversion (SECI) process and their organizational performance in Balochistan. Besides the above, this topic being of an attractive nature is very rich in substance because it is based on strategic, human resource, and Knowledge Management areas. The culture, Knowledge management and performance of business organizations has been an area of vital interest for years in view of researchers, managers and scholars. It has been remained so even for states, governments, and businesses as well. All that confirms that the companies with viable organizational culture and sound knowledge conversion process, perform efficiently. That if taken as true has proven that those companies treaded on the path of progress, financial independence, and prosperity by dint of these characteristics. Taking into account these characteristics of the organizations, this study has turned out to be recognized as a great milestone in practice as well as theory.

1.6.1 Socio-Economic Importance/Benefits

This study has brought about the following benefits;

- Knowledge management is an emerging discipline. Research in this area is required and important for developing countries like Pakistan. This study has attracted the attention of future researchers to conduct more robust studies in the coming times which will contribute to basic and applied research.
- It has created an awareness among the industries, services, production, construction, banking, public sector organizations and other businesses to resort to sound knowledge management strategy and practices to enhance their performance.

- It has stressed to introduce knowledge as a valuable resource in Pakistan. It has helped the
 businesses and public sector organizations to develop knowledge economy in Pakistan. It
 will increase economic advancement over there.
- It has encouraged long-term understanding and investment in the establishment of a formal knowledge based economy in Pakistan in the coming years.
- It has made an effort to lead Pakistan as the country to create a viable culture to modernize, innovate, transform and apply its knowledge especially in the information and communication technology leaving a far-reaching effect on its overall micro and macro level advancement and development.

1.6.2 Contribution towards Theory

This adds to the body of Knowledge in the area of organizational management, organizational behavior and knowledge management. It provides an insight to the students, practitioners, scientists, and theorists of management as to how the performance of the organization may be improved through creation of favorable organizational culture and the application of best processes of knowledge conversion i.e. SECI processes. To know what factors are necessary to be taken into account. To determine what implications may have resulted as an outcome of the utilization of knowledge assets. It has generated debate as why applying SECI model as a vital KM strategy is the best. This study aims at generating a feeling among the telecom companies to develop a sound understanding of Knowledge Management Culture, knowledge conversion process, its importance, its best utilization and subsequent improvement in the

performance that has been achieved with the help of those endeavors. This has sensitized other sectors of Pakistani economy such as construction, industries, IT etc.

1.6.3 Contribution towards Practice

Pakistan being a developing country strives to turn itself into a developed one. Telecom sector which is growing day by day attracts the policy makers' attention. Specially, it has to take full advantages from market in Balochistan. The provision of modern technologies, skilled manpower, customer-friendly policies, managers and staff are the prime requirements of the telecom sector. There is growing need of each company for more and more training, wider exchange of knowledge, capacity development, skill enhancement of the company-members, innovation and competitive advantage to remain successful in the market. Hence, The study has been offering much to the companies of telecom sector in Balochistan, Pakistan to gain excellence in performance by creating and choosing the best organizational culture through application of best knowledge conversion processes such as SECI processes, being part of best knowledge management practices.

Break-up of the Thesis

This thesis is divided in five chapters. **Chapter one** deals in detail with the introduction, background, research objectives and research questions relating to the research topic. **Chapter two** comprises detailed review of literature dealing with the three main constructs of the research study. The main constructs include Organizational Culture (OC), Knowledge Conversion (SECI Model), and Organizational Performance (OP). The three sub-constructs of Organizational culture such as Clan Culture, Hierarchy Culture, and Adhocracy Culture, are dealt with in detail. SECI Model comprises the main four sub-constructs or elements such as Socialization, Externalization,

Combination, and Internalization. These are also called as Knowledge Conversion Processes or practices. These are among the best knowledge management practices. Similarly, there are five sub-constructs of Organizational performance (Financial, Market- Customer- based, Processbased, People-Development- based, and Futuristic Performance) are also discussed in detail. This chapter presents extensive kind of literature of the prior studies with their main findings on the relevant issue. These studies were carried out in different parts of the world. **Chapter three** deals with research methodology that has been adopted for this study. This chapter has sub-divisions such as sampling technique, method of data collection, as well as analysis of the data to measure the hypotheses of the study which have been proposed. **Chapter four** shows the findings procured from the analyses of the statistical data. The findings serve to analyze the relationship of OC, and SECI according to the organizational performance indicators. Apart from it, the results derived from each hypothesis have also been discussed in this relevant chapter. The sample characteristics have been studied through the application of frequency percentage analysis based on descriptive statistics. The association in between the three main constructs of this research study has been examined by the application of Pearson's Correlation analysis. Linear regression analysis containing ANOVA, summary of regression model, and parameter estimates, with respect to independent as well as dependent variables forms the main part of the chapter. Chapter five offers thorough discussion on the results of every hypothesis that has been developed by this study. That chapter, being the last one, is closed after a comprehensive conclusion of the current research study, followed by recommendations, and limitations parts. Suggestions for future research on the area brings this chapter to end.

Chapter No.2 REVIEW OF THE LITERATURE

2. REVIEW OF THE LITERATURE

The review of prior literature on the main constructs and their sub-constructs is presented ahead. First of all, organizational culture is taken as the most important main construct of the study. Others follow suit.

2.1 ORGANIZATIONAL CULTURE (OC)

As the soil, however rich it may be, cannot be productive without cultivation, so the mind without culture can never produce good fruit.

Seneca (Roman Senator, c. 60 b.c.—c. a.d. 37)

Every individual is having a unique personality influencing the manner in which he acts and interacts with other people. When someone is described as shy, warm, relaxed, or open, that is traits of his personality are described. Same is true of organizations. An organization can also have a personality. The personality of that organization is its culture. That culture determines how it's employees act or interact with each other and other people. The main question arises what this personality or culture of the organization means. It is defined below.

2.1.1 BACKGROUND OF ORGANIZATIONAL CULTURE

It is not easy to define organizational culture. However, there seems a general agreement over it being one of the broad constructs, and having the same components. Yet, considerable disagreement has been found over the main questions like, what are the main constituents of Organizational culture, can the culture of a particular organization ever be described adequately, can it be managed effectively, if it can be, what management strategies are successful (Willcoxson, L., & Millett, B., 2000). To find right or simple answers to the questions has never been easy, despite the claims made by some authors. Rather, it is dependent on the manager's choice or the understanding of the change agent in which context he looks at the rganizational

culture. Actually, it is his conception of Organizational culture that enables him to manage it (Willcoxson, L., & Millett, B., 2000). Organizational culture emanates from a culture that is national or social in context, and is therefore, broadest in sense. Culture integrates different groups on the basis of certain assumptions through which each group is perceived as well perceives itself to share similar ways to interact and see the inanimate, animate as well as the spiritual world (Benedict 1934; Kluckhohn & Strodtbeck 1961; Trompenaars 1993). For example, Australian culture is arguably having more similarity with the culture of USA, compared to the Malaysian culture (Willcoxson, L., & Millett, B., 2000). The basis of culture lies in history. Cultures get developed with the passage of time, as a special pattern of belief and behavior as established by the groups within these cultures. These groups through these beliefs and behaviors and their interpretations, interact with their surrounding world. They find the belief and behavior effective within that world. For instance, the behavior of 'mateship' by early white male settlers of Australia helped and served them a lot in sparsely populated and harsh world, compared to the mentality of hierarchical class distinctions from which they had historically come out. From the new adaptive patterns of behavior, new beliefs such as belief in egalitarianism got birth. These new beliefs turned into new values and behaviors which got combined with associated symbols, myths and rituals, that helped them get together over the time to establish and reinforce the core or main assumptions of their culture (Willcoxson, L., & Millett, B., 2000). Cultures guide behaviors and channel emotions (Trice & Beyer 1993). Culture breaks down the chain of the individual's intrinsic kind of isolation and also provides the people sense of belonging with the help of collective identity. It defines the differences that arise between the groups. Additionally, particular groups, their differences or similarities are also defined by the culture. (Willcoxson, L., & Millett, B., 2000). Cultures are described as dynamic in nature. These are dynamic to some

extent, to the extent to which the changing circumstances allow them to adapt new patterns of behaviour or beliefs to add to the already existing core assumptions. Thus, it is culture which exhibits seemingly complex paradoxes or ambiguities (Trice & Beyer 1993). These paradoxes remain till the time new belief system or new set of core assumptions is developed by the new behavioral adaptations. This can be realized, for example, in the case of egalitarianism. This is a value that stands with the core assumption that life should not be lived competitively, rather, it should be cooperatively lived. That's why egalitarianism is proclaimed as Australian value by most of the Australians after the great urbanization took place under the changed circumstances over there. National culture is taken under delineations of a wider nature, while organizational culture is taken in a bit narrower sense. It is nothing but may be described as a set of beliefs, principles, norms, and the ways of behaving, which awards a distinctive kind of character to each organization (Brown 1995). Organizational culture, like national culture, is formed as well as transformed with the passage of time. Broader agreement exists among writers over the fact that the organization in its inception responds to the characteristics of industry such as customer demands, competitive environment, the values which are held by its employees as a community, the values of its early leaders or its founders(e.g. Schein, 1985; Ott,1989; Gordon 1991). However, the debate starts after some years of the inception are passed. It is the time in the life of the organization when two separate camps emerge, one of culture writers, and, the other of the change-agents, on the basis of two perspectives or paradigms that are distinct of each other. (Willcoxson, L., & Millett, B., 2000).

2.1.2 DEFINING ORGANIZATIONAL CULTURE

In order to develop robust understanding of the construct *organizational culture (OC)*, following definitions are worth-mentioning:

- "The culture of an organization is defined as the principles, shared values, and ways in which things are done by the members of organization. These are the factors which influence the actions of organizational members. The practices and shared values like these, being evolved over periods of time, influence the ways in which things are being done within the organization" (Robbins S & Coulter, M., 2003).
- Numerous definitions of organizational culture have been given historically in the literature in which it has been defined in so many different ways. The most commonly used definition, in this regard, is perhaps, "organizational culture is nothing but the way of doing things around the organization" (Lundy & Cowling, 1996).
- Every person as individual has different behavior, style, characteristics, and unique personality. Same is true for business entities or organizations that have their unique kind of cultures influencing the operations of the organizations greatly (Chang & Lee, 2007).
- Culture, is no doubt, one of the key factors within the organization, one of the stable factors, which plays critical role in the every-day operations of the organization (Shili Sun, 2008). At times, the focus of the literature on culture remained on *organizational culture* as a set of basic assumptions which is shared throughout the organization (Schein, 1985). The culture of an organization is nothing but *metaphors in organizations* (Morgan, 1986, 1997), understanding and measuring these metaphors is not easier (Shili Sun, 2008).

- Organizational culture is those beliefs and values which are deep-rooted and widely shared by the personnel of an organization. This definition has now widely been accepted. It lies manifested within organization's typical characteristics. Hence, organizational culture is regarded as the right manner or way in which problems of the organization are understood, or in which things are done over there (Shili Sun, 2008).
- According to Ogbonna (1992), "Organizational cultures are the beliefs, norms, customs,
 and values that are held by an individual in common with the group's other members,
 and '(organizational cultures are the outcomes of) interweaving an individual into a
 community as well as the collective programming of the mind that distinguishes
 members" (Shili Sun, 2008).

• Organizational culture is a system of 'what is important (shared values) and how things work (beliefs), that interacts with organization members, control systems, and structures of the organization to generate norms of behavior, that provide a better way of doing things within the organization (Bro Uttal , 1983).

- Organizational culture is considered as 'software' and organization as 'hardware'. So, the managers are bound to study and comprehend carefully the software (culture), develop know-how of the working of each element of the software (culture) on the basis of that operational hardware (organization) will operate. The software operates on the basis of the hardware (Shili Sun, 2008).
- According to Ferraro (1998), "Organizational culture is nothing but what people, being members of the society of their own, think, have, and do". This is the fundamental criteria of integrated action and social behavior. The character of an organization is represented by this culture. The every day work-relationship of its employees is directed by it. That is the way by which they are guided how to behave with one another, and, communicate with each other. That also demonstrates as how to build the hierarchy of the organization (SM Tseng, 2010; Ribiere & Sitar, 2003).
- Organizational culture, generally, is taken as the "set theory" containing beliefs, values, and understandings, which are commonly shared by the organization members. This is the culture which is providing better or best ways of feeling, thinking and reacting thereby helping managers to take decisions and arrange organizational activities. Every successful organization should establish strong culture and keep on maintaining it. Because, strong culture attracts, holds, and rewards people for better performance of the roles as well as achievement of the goals. Strong culture is characterized by cooperation and dedication in serving the common values. Hence, it is recognized that

how much an employee is involved in performing best for his organization (Shili Sun, 2008).

- The culture of an organization is referred to as the pattern of those values, learned ways of coping with experience, and beliefs, which have evolved through the course of Organizational history, that tend to manifest, later on, in the behavior of organization members as well as in the material arrangements of the organization (Andrew Brown,1995;1998).
- Every organization has got a pattern of basic assumptions which is shared, that is learnt by a group. This comes to resolve the problems of internal integration as well as external adaptation in a reasonable manner, which has proved to have worked well enough being valid, and, which is to be shown and taught to new organization members as an authentic and correct way of thinking, feeling, and perceiving the problems of the organization (Schein,1985).
- "The meaning of the term of Organizational culture is nothing but the collective programming of the mind that distinguishes or separates the members of one group of humans or people from another one" (Hofstede, 1984).

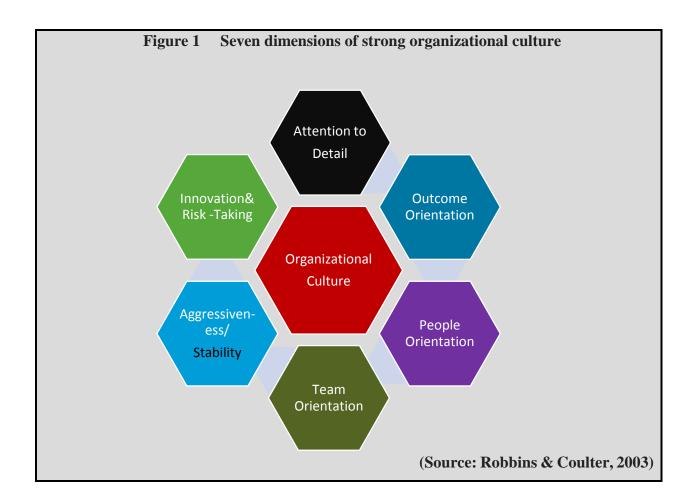
2.1.3 Implications of Organizational Culture Definitions

Now, the question remains as how do we define organizational culture. It depends on how it is examined and studied. Different interpretations are introduced by different authorities in

literature. As a matter of practice, an organization is required to have culture of its own, no matter of what nature or size it is. Every organization culture has its unique comprehension, interpretation and, context within a specific environment. However, the aforementioned definitions come forward with *considerable implications* which are worth noting.

- The first definition implies three points. One; *culture is a Perception*. It is something which is perceived by the employees of the organization based on their experience there. It can not be seen or touched physically. Two; *culture is descriptive by nature*. It is something that is described or perceived by the organization's members in the way they like or not. Its perception has already been developed. Three; *culture is shared*. It is described in similar terms by organizational members despite having different backgrounds, and different levels of work. The organizational culture is based on shared beliefs, and values.
- There are seven dimensions of strong organizational culture that have been suggested by the research. These demonstrate the typical or high quality or strong cultures. These seven dimensions include Attention to details (degree to which employees are expected to exhibit precision, analysis, and attention to detail), stability (degree to which organizational decisions and actions emphasize on maintaining the status quo), aggressiveness (degree to which employees are aggressive and competitive rather than cooperative), innovation or risk taking (degree to which employees are encouraged to be innovative and to take risks), people orientation (degree to which management decisions take into account the effects on people in the organization), team orientation (degree to which work is organized around teams rather than individuals), and outcome orientation (degree to which managers focus on results or outcomes rather than on how these outcomes are

achieved). These offer a composite portrait of organizational culture. All of these are not emphasized in all organizations. In some organizations, one of them is stressed, while, others keep emphasis on other dimensions (Robbins S & Coulter, M., 2003). These shape the personality of the organization as well as the way members of the organization work (see the following figure 1).



• *The strong culture* of the organization means the organization holds the key or main values together intensely and shares these widely. These values have great influence on Organizational employees. On the contrary, the organization with loose holding and

sharing of the main values with minimal influence is described as the organization with weak culture.

- The culture of an organization has been regarded as a glue which welds or holds organizations connected or together (Goffee & Jones, 1996). It may be taken not as one aspect of the whole game, rather the game as a whole (Gerstner Jr., L.V., 2002). The association between adoption of technology and growth of an organization is supported by the organizational culture (Chatman, J. A., & Jehn, K. A., 1994). As a success element of critical nature in the manufacturing related strategy, culture can not be ignored (Bates et al., 1995). In case of acquisitions and mergers, crucial role is played by the culture to determine their failure or success (Weber, Y. et al., 1996; Javidan, M., 2001). The relationship of a significant kind has been established by the researchers between the existing organizational culture, the combination of employees, and important kinds of organizational outcomes like turnover or job commitment, focusing at more micro-level studies (O'Reilly, C., 1989).
- Hofstede focused on the newly discovered four areas on work related value-differences at that time such as masculinity/femininity, individualism/collectivism, uncertainty avoidance, and, power distance. However, he referred to cultural and social phenomena as "practices". He used this term in 1992. According to him, the values that are deeply held by the members of the organization, may be located in the center of the organizational culture. These values, for some organizations, may be so deeply held, that changing them will be almost impossible, in reality.
- There are *four main themes* through which organizational culture has been identified, specially by the British authors (Maull, Brown, Cliffe, 2001). First of all, *culture is*

basically regarded as a learned entity. It means culture is "the way we do things around here or the way we think about things around here" (Williams et al, 1994). Looking at the definition of culture, managers should be able to grasp the general trend of organizational employees' thinking and their behaviors. Since, the primary essence of the definition of organizational culture is to deal with the way employees of the organization think or act. Additionally, this theme indicates that culture is taken as the correct way for newly inducted employees to behave in a certain way. That shows it is culture which perpetuates the growth and survival of the organization. This is a unique feature of the theme (refer to the definition given by Schein, 1985).

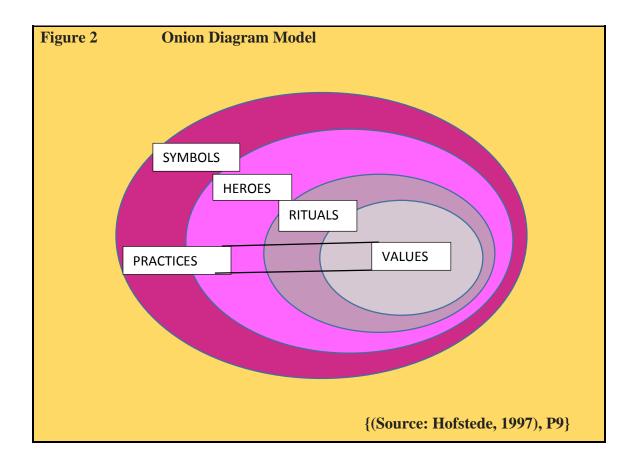
- Second theme views *Organizational culture as a belief system*. For instance, culture is defined by Davis (1984) as: "The set pattern of beliefs and values that are shared, gives meaning to members of an institution, and also provides them with the behavior rules while remaining within that institution."
- Further to understand this theme fully, Organizational culture is divided by three English authors into *daily beliefs* and *fundamental guiding beliefs*. They argue that the fundamental beliefs bring about context for daily beliefs of practical life. That shows daily beliefs get direction from guiding beliefs. Guiding beliefs change very rarely, being lying in the realm of universal truth, as a fundamental precept. On the contrary, daily beliefs, being part of the organization 's culture, are described as the feelings or rules of the

behavior of organization members every day. Yet, these are situational and dynamic in nature, often change in order to match the relevant context.

• Third theme looks at *Organizational culture as strategy*. Bate (1995), after finishing a wide-range analysis, refutes the distinction of culture from strategy. Rather, supports the view that *culture*, *being a strategic phenomenon*, *is same as strategy*. That demonstrates two fold implications. One, every kind of strategy formulation is cultural function or activity. For instance, strategy development is actually a cultural development activity. Two, every cultural change is viewed as strategic change. As a matter of fact, every cultural program within an organization is not carried out in isolation, because every change in the culture program takes place always within the confines of strategic planning process either informal or formal in nature.

• The fourth theme considers *the organization culture as mental programming*. One of the main advocates of this view is *Hofstede* (1980). According to him, *culture is "collective programming of the mind, which distinguishes the members of one category of people from another."* He divided organizational culture into four layers or elements like, *symbols, heroes, rituals and values*. It is important for managers to focus their research on these four layers of organizational culture as these can affect the operation and business

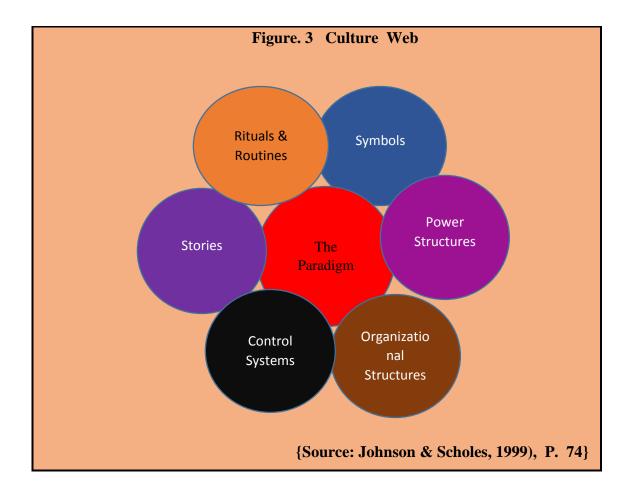
of an organization at different levels, degrees, and so many ways. There is a model called "Onion Diagram Model" for Organizational culture developed by Hofstede et al (1997) has been presented below for further understanding:



of organizational culture. These are found at the organization's deepest level, being associated with the ethical and moral codes intimately (Brown, 1988). The values actually determine what should people think or do. They decide 'likes and dislikes' for organization 's employees as well as employers. After the core layer of values within the center of culture, rituals take the second layer. It is nothing but the collective activities within the organization, deemed socially important and essential. These activities or actions are named as rituals. These are followed by the next layer of culture or Onion where some

people of the organization are labeled as Heroes. Actually, these are those prominent persons who possess special characteristics and are prized highly due to the features. They always come forward as winners for the new entrants of an organization. New entrants take inspiration from the Heroes. The Heroes are great motivators, the magicians, and the personages every one depends on when there are tougher things or circumstances in the organization (Deal and Kennedy, 1982). After Heroes, next layer comprises symbols. These mostly overt kind of elements of organizational culture. Symbols are actually the words, acts, objects, and gestures which signify something in a different way from other things. Or these provide a wider meaning to something, or these may come with a specific meaning for a group or sometimes for individual within an organization (Shilli Sun, 2008).

• On similar lines, a cultural web (see figure 3)was presented by Johnson and Scholes (1999), for the complete understanding of organizational culture. It is, indeed, one of the useful and ideal tools to establish association with the structural, political, and symbolic aspects of an organization. It is also useful in providing guidance in the function of strategy development. So, this is a useful tool for the identification of the culture of an organization (look at the below diagram).



The above mentioned *Cultural Web* shows that seven main elements are inter-connected within an organization. The center of the web carries *the paradigm* (values and beliefs of the organization which are commonly held). Around the paradigm of Organizational culture, seven important constituents exist. These include *the Organizational structure*, *power Structures, control systems, symbols, stories, rituals, and routines.* These elements or constituents are developed at different times through the evolution of an organization. As a matter of practice, the values, beliefs and assumptions are constructed by the organization leaders. These are the stable, deep, broad and powerful forces or factors to provide a clear direction to an organization. These set behaviors which provides guidance to the organization employees. It through these lenses the employees see what is

regarded as appropriate or inappropriate behaviors within the organization. (Shilli Sun, 2008).

• The organizational features new and old both played crucial role to form and articulate culture of a business enterprise (Langfield-Smith, 1995). The strong impact of routines, operational norms, organizational structures, command and control expectations is very important. Principles of conduct, rules, and practices that are acknowledged form the main part of organizational culture. The general beliefs and rationales also constitute culture (Bailey, 1995). Hence, the group of people working together as a team for a certain time period, are intertwined closely by the organizational culture (SM Tseng, 2010).

2.1.4 THEORETICAL FOUNDATION

A Competing Value Framework (CVF) has been developed by Quinn (1988). It has two dimensions which explore organizational culture. First one is based on conrol orientation, and, the second dimension focuses on external/ internal functions of the organization. The former suggests the extent to which an organization exercise control, while, the later shows the extent to which an organization focuses on its functions either external or internal. Four quadrants are derived from these two dimensions. These are hierarchy, clan, market, and adhocracy. Each of them portray a different organizational culture. Firstly, hierarchy culture creates a workplace which is full of structured and formalized procedures. People are governed through these procedures. Secondly, a friendly workplace is created under clan culture. This leads to the general sharing of knowledge among the people. Thirdly, market culture makes a workplace which is full of competitiveness of hard-driving nature. An organization of result-oriented kind is created which is led by demanding and tough leaders. These leaders come in the shape of producers,

hard-drivers, and tough competitors. Fourthly, **adhocracy culture** gives birth to a workplace which is creative, dynamic, and entrepreneural in nature. This culture encourages the initiative taken by the individual. It gives freedom to people who are ready to take risks (SM Tseng, 2010).

These cultures deal with their internal information in different ways (Martinsons and Davison, 2007). The study takes into view the concepts of hierarchy, clan, and adocracy only to make the analysis simple. Here market is incorporated in adhocracy culture (SM Tseng, 2009) Hence, organizational culture consits of the following three components or dimensions; hierarchy culture, clan culture, and adhocracy culture. An attempt has been made to establish the link of organizational culture with organizational outcomes including individual outcomes. These outcomes must be consistent with the knowledge management tenets and the process of organizational learning (Balthazard & Cook, 2004).

2.1.4.1 Clan Culture

It is one of the most important types of organizational culture. It is a culture based on friendly and warm workplace where the organization members share and exchange their knowledge freely among each other. This culture shows the situation in the form of statements such as the organization workers support one another highly, the organization members strongly believe in each other, a good place is provided by the organization to its members to share information or knowledge with each other as a family members (SM Tseng, 2010). A good place is provided by company to share things among the members like a family. It is a culture where the participation of every worker is respected, and his team spirit is encouraged. Hence, the environment of work is harmonious and open for workers. They support each other highly, and believe in each other to a great extent (Quinn, 1988; Park et al, 2004).

2.1.4.2 Adhocracy Culture

It is also an important type of organizational culture. It creates a workplace which is creative, entrepreneurial, and dynamic in nature. In this culture, individual initiatives are encouraged. People are free here to take risks, and make decisions, after taking into view alternate choices. Market culture is also linked with this culture. Market culture provides a workplace full with competitiveness of a hard-driving kind. It encourages to create organization which is resultoriented. The leaders of this organization are competitors, producers, and hard drivers. They are demanding as well as tough leaders within market culture, being part of adhocracy-culture. This culture is represented by the statements like, the organization has an harmonious working environment, the organization has, to a certain extent, an open environment, the organization members have conservative attitude, the organization members are risk-averse or risk-prone, the working attitude of the workers has been found more conservative compared to those of other companies, they are more revolutions-averse, compared to the members of other organizations, the organization is not willing to take risks of higher scale, the organization is not ready to accept higher scale changes or revolutions (SM Tseng, 2010). The attitude of the workers, under this culture, is more conservative. They are normally no willing to take risks, and are averse to undertake revolutions. They are, comparatively, prone to remain attached with the status quo. They always prefer stability than change. However, the creativity of every worker is respected, and uniqueness of each worker is challenged as well as respected under this kind of culture. The company always keeps its focus on controlling aspect of management, means attention remains on cost and performance control. The end results are also controlled there. Hence, this culture is characterized with trust and support of high level, mistakes and risks are tolerated there. The

company takes risks of high level, and undertakes revolutions on huge level, due to its extremely open environment of work (Park et al, 2004; Quinn, 1988).

2.1.4.3 Hierarchy Culture

It is also significant one. It is a unique culture which establishes a workplace having structured and formalized procedures. These procedures govern the behavior or actions of organization members. This culture deals with the some specific points such as the organization has formal or informal structure, whether or not the structure is highly formalized, the organization has a skeleton or framework which is intensely structurized, the tasks of organization members are managed through some specific procedures, the conduct of the organization members is cautious, stable, or more mature, whether or not the organization is more responsible, respectful and caring (SM Tseng, 2010). The structure of company, under this culture, is extremely formal and structured. The company manages the tasks of its workers through well-established and prescribed procedures. The workers are usually averse in undertaking high level revolutions, and risks. Hence, the behavior and conduct of the workers is more mature, stable, and cautious.(Quinn, 1988; Park et al, 2004). The figure given below illustrates the phenomena further.



2.1.5 Connection between Organizational Culture and Knowledge Conversion Process

Numerous studies, investigating knowledge management initiatives, have failed to establish that organizational culture is one of the key barriers in the way of organizational success (Gold et al., 2001; Yang, 2007). The main factors of organizational culture, in the context of knowledge sharing, includes, tolerance of mistakes, common cultures, broad ideas of productive work, frames of reference, trust, meeting times and venues, vocabularies, rewards and status not going in favour of the owners of knowledge, recepient's absorptive capacity, and belief in the principle that knowledge may not be considered as the privilege of a particular group (Davenport and Prusak, 1998). Hence, the underlying culture must be fostered in supporting the activities of knowledge sharing. It is assumed by Davenport and Prusak (1998) that culture is of many kinds which interrupts or stops conversion of knowledge, possibly, results in loss of knowledge of some kind during conversion process (SM Tseng, 2010). The behavior and attitude of organization's employees is expressed by the organizational culture in connection with the sharing of knowledge.

Because employee's attributes and their work are reflected by the organization's culture. Similarly, practices and policies of the organization are also taken into account by the culture (Shin, 2004). Thus, it is required that the organization must reform its culture as well as reward-system in order to encourage its employees to share their knowledge and experience with other employees of the organization, while, simultaneously and continously accumulate new knowledge as an asset of the organization (Chua and Lam, 2005; Xu and Quaddus, 2005). The process of knowledge sharing will be very limited and difficult in an organization which is not having an appropriate or strong culture. Knowledge can be provided actively in an organization by the people only. An organization can go through a constant learning and reforms on the basis of its employees only (Zhou and Fink, 2003). The role of organizational culture is, therefore, considered important in the process of conversion of knowledge. Similarly, it is important to look at knowledge conversion or knowledge management in strong association with the organizational culture (SM Tseng, 2010).

• H1. Organizational Culture has significant effect on knowledge conversion process.

2.1.6 Organizational Culture and Organizational performance

There is a group of people which has worked together for longer time period within the organization. This specific group has established a tight connection with the organizational culture over there (Linn, 2008). Actually this is the group within the organization which is shaping the behavior of the whole organization as the most crucial factor (SM Tseng, 2010). The contribution made by culture culminates in providing support to self-managed work teams as well as producing improved organizational performance (Hooijberg & Petrock, 1993). Developing learning culture and following effective knowledge management strategies are vital to enhance corporate performance of a business enterprise. This enhanced performance is kept as long as the enterprise

is innovative in techniques, technologies, products and processes (Robinson et al., 2005). Organizational culture can be understood and taken as an important knowledge resource, as it enables the organizational members the acquisition, creation, sharing, utilization and management of knowledge within a certain context. The role played by organizational culture is closely connected to the competitive performance of the business firm. Numerous leaders know that performance is achieved through behavior that is interdependent in nature. This interdependence means mutual trust, assistance, cooperation, knowledge exchange (Jones et al., 2006). The creation of competitive advantage is realized with the help and support of organizational culture. This competitive advantage is created after determination of boundaries which make individual interaction easy and define the scope of information processing at levels that are relevant (Krefting & Frost, 1985).

To sum up, business organizations must go for fostering the underneath culture which provides necessary support to the business and collaborative needs of knowledge workers, in order to boost knowledge sharing functions within and across organizations. As is evident, the most influential character of organizational culture is established, understanding the association between the organizational culture and corporate performance is also very important. It is very crucial for the development of a theory that ensures the corporate performance to improve (SM Tseng, 2010).

2.2 KNOWLEDGE MANAGEMENT

Organizational management, in a conventional way, has no more remained a viable approach for businesses in the mass-markets which are extensively competitive. As a result, firms seek to compete for their survival through continuous advancement and innovation to capture new market opportunities. Businesses require creativeness for continual existence and success. Disagreement

to creativeness is no more an option for the business firms in the present times (Leavy, 1998). This is achieved through flourishing application of knowledge. The generation of decisive ideas and innovation lead to enrichment of organizational processes which, in turn, increases employees' abilities, coming out as enhanced organizational productivity (Drucker, 1967). The literature in management and organization shows an extensive relationship between knowledge and organizational success (Drucker, 1967). Following the increase in knowledge base of organizations, their success depends on knowledge employees who help in boosting the productive decision making and making advancements. There is increasing realization among researchers and practitioners to comprehend first, what is knowledge, second, what is the value of knowledge, third, how to manage knowledge. When this will be formalized it is regarded as Knowledge Management (KM), as well as when made informal, that is called as Learning Organization (DiBella et al.,1996). Rather it is also called as organizational memory (Weick, 1979). Focus on the importance of knowledge has shifted from knowledge distribution to knowledge application as it is shifted to communities from personal spirit (Wenger, et al., 2002). The learning aims at improving employees' knowledge application and utilization abilities in the present information era (Harvey et al., 2004). There are three forms of tools used in knowledge management that have been recommended for tracing the knowledge movements in organizations. They include, longevity of knowledge, compliment with regard to aberrant certitudes, manifesting the embryonic prototype, new grounds appraising's, and the newly held considerations or conception (Ruggles, 1997). The main endeavor of those organizations, which are engrossed in knowledge management, is to originate knowledge, sustain knowledge, and utilize knowledge at individual as well as organizational level. That also stresses upon the acquisition of correct knowledge to right people at correct time (Snowden, 2002). Provide assistance to people to share knowledge, translate the

knowledge in the form of practical action within disciplines which prone to improve organizational performance (Dixon, 2000; O'Dell & Grayson, 1998). Knowledge is considered to be a capital, of a strategic nature, which assists the concerned organization to remain firm to the competitive position within a turbulent environment which it has already attained. Organizational learning aptitudes and knowledge-based inventories are vital for creative actions of the firms. Knowledge management supports employees to collaborate, innovate, develop and update brighter alternatives in an effective manner. It encourages function performed by employees relying on the knowledgebase which is of high quality (June, 2005). To make it simple, knowledge has been regarded as nothing but the best resource for organizations which has effectual nature (Choe, 2004). Management practices are under pressure. Main global pressure on management practices, today, remains the identification, creation, innovation, dissemination, and development of knowledge as the talent-building process. The norms of competition are changed recently due to the emergence of the phenomena like globalization, the spread of information and communications technology, the reach of information to all, and, ever-changing nature of forms and structures of organizations. The economy of today is labelled to be a knowledge-based economy. Similarly, it is also called as knowledge economy. Here participants buy and sell knowledge, conduct research, generate innovative ideas and look for seeking other ways of knowledge creation (Islam, 2006). In an uncertain economy, the real way to get the lasting competitive advantage is through management of knowledge in an improved manner (Nonaka, 1994).

Many categories of knowledge have been mentioned by researchers of various disciplines, yet in academic sense, the literature highlights knowledge based on two perspectives, the points of views of the cognitive class and the constructionist class. Alternatively, other classification is the Ontological Dimension such as Individual and Collective knowledge, and the Epistemological

Dimension such as Tacit as well as Explicit types of knowledge (Saeed et al., 2010). According to Standards Australia (2003) Knowledge Management (KM) is defined in the terms like, "The design, review and implementation of both social and technological processes to improve the application of knowledge, in the collective interest of stake holders" (Saeed et al., 2010). According to Professor Nonaka (2007), "knowledge management may be called as Knowledge-Based Management, connecting people to people and people to information to create competitive advantage. Knowledge management is a human resource management exercise than a technology based discipline. It is not merely state of the art technology used to improve efficiency of the knowledge. Rather it is an exercise about how people can be motivated, best utilize their knowledge, experiences and enhance the creativity by using state of the art technology." Information and communication technologies (ICT) have emerged as potent enablers for knowledge processes of the organizations. It is argued by the most knowledge-based literature that it is necessary to build an appropriate ICT system as an integral part of a knowledge management system that has been made successful (Andreeva & Kianto, 2012). The systems of Knowledge Management must comprise technology based information systems containing components of software, hardware, and processes, which are utilized by organizations to facilitate information and communication processing. These are crucially vital to gain and maintain competitive advantage that is sustainable (Adams & Lamont, 2003; Andreeva & Kianto, 2012).

Knowledge has been universal. Asymmetric geographic places do not cause the altercation in the complexities and features of knowledge (Singh et al., 2008). The question as how the organizations grow, depends heavily on the accelerating learning by their individuals and themselves. The real focus for organizations is learning in order to achieve competitive advantage (S.M. Ali et al., 2012). The commercialization of knowledge has been concentrated by knowledge

intensive organizations (Starbuck, 1992; Gibbons et al., 1999). They also resort to creation and inventiveness (Gerlach & Lincoln, 2000; Brown Duguid, 2000). They may concentrate on the job of professionals (Albert & Bradley, 1997). Daniel and Simon (2006) demonstrated the favorable results were obtained by the organizations with knowledge management practices, over their rivals, which were without (S.M. Ali et al, 2012). The prologue of knowledge management practices goes in favor of the assumption of emerging knowledge which will be having positive effect on the conception of new instincts and psychology (Dibella & Nevis, 1998). The give-andtake of knowledge takes place as knowledge-related inventories are accumulated to be further utilized (Ranft & Lord, 2002). The organization, which is devoted to the knowledge acquisition, growth and exchange, authorizes its employees to gain as well as apply knowledge as early and elaborate as possible (Szulanski, 1996). The idea that knowledge as a foundational component for the businesses to build competitive advantages has been circulated among the firms which go for innovation on consistent basis (Decarolis & Deeds, 1999). Firestone (2001) introduced a newly comprehended conception to rationalize a relationship between knowledge management, corporate-related endeavors, and organizational achievements. He suggested a model which was named as Benefit Global estimation. It was a constructivist model (S.M. Ali et al., 2012). A judgmental perspective is needed to match KM practices and business firm performance in order to have an examination of corporate ambitions and business approaches. Knowledge management assists those business approaches which enable businesses to achieve their planned targets (Firestone, 2001). Increased actions of knowledge management affect intervening variables such as project performance assessments, designations of employee aptitude to associate vacant activities with the acquisition as well as application of knowledge leading to consequent emergence of innovative ideas and thoughts (Davenport, 1999). Decarolis and Deeds conducted

an investigation on the charge of organizational knowledge upon the performance of the firm (S.M. Ali, 2012). Sensationalization of knowledge applied by the organization will be done via commodities and streaming of knowledge processes (Dierickx & Cool, 1989). The intrinsic knowledge resources of the organization will be gathered by knowledge reserve. Streaming of knowledge denotes the mechanism which alters the reserves of knowledge in a proficient manner. Analyzing organizational knowledge streams, knowledge reserves and their relationship with the performance of the business firm is an interesting way of knowledge creation (S.M. Ali et al., 2012). Organizational learning is a practice of gaining, sharing, formation, transformation and application of knowledge within one organization and across many organizations (Neilson, 1997). The management of knowledge, being a systematic process, is actual combination of important elements for the attainment of organizational creativeness. Organizations gain financial and tactical benefits from KM practices through the use of creativeness within organization, in a successful and effective way (Lee & Choi, 2003). The organization is said having managerial potential which has expertise, knowledge, awareness, and familiarity for managing the complicated and complex responsibilities in management of opportunities as well as creation of opportunities (Choi & Shepherd, 2004). The practices of knowledge management and Organizational performance both are considered necessary for the achievements of the organization. Various literature results demonstrate that knowledge management practices (KMP) influence the organizational performance (OP) positively. The view that KM practices influence organizational performance through organizational learning has been supported by practical facts also. Knowledge management practices have positive relationship with organizational performance which suggests the organization having more KM practices creates capability within itself to enhance its performance (Liao & Wu, 2009). Performance of the organization is nothing

but an indication which evaluates the fact how healthy an enterprise has been or how a firm achieves its goals (Venkatraman & Ramanujam,1986; Hamon, 2003). The evaluation of performance of an organization is done on the basis of organizations competence and success of attainment of goal (Robbins & Coutler, 2002). The actual idea about success is a proposition, which means two inter-related things are required for assessing the organizational effectiveness, resources and return on resources (Andersen, 2006). The organizational effectiveness is conceived as a realization of organizational purposes which are profitability as well as goal- achievement (Andersen, 2006). Organizational performance denotes the brilliance and aptitude of single individuals as well as team accomplishments (Schermerhorn et al., 2002). The organizational performance has been used interchangeably with the terms such as efficiency and effectiveness (Hancott, 2005). The KM practices do influence organizational performance. However, there is further need for the examination of KM practices impact on the organizational performance (S.M. Ali et al., 2012).

2.2.1 DEFINITIONS OF KNOWLEDGE MANAGEMENT

After it has been established that KM is a new emerging discipline and has a vast potential for brighter future. It is very necessary to define KM. That must be followed by the KM theory or different perspectives on KM in terms of theoretical foundation. Then comes the occasion to turn focus on the KM Practices. To begin with the definition of KM. It is as difficult to define KM as defining knowledge itself (Earl, 2001, P. 215; Lloria, 2008). However, it is easier to note that what is generally understood by Knowledge Management. The primary idea gets start from the word "management". It denotes the activities that compose it, detailing the processes and procedures of creating, transferring and exchanging knowledge. That has led to the appearance of literature concerning Knowledge Management which contains more ideas and definitions on KM

compared to those on knowledge (Lloria, 2008). However, the definitions given below carry enough material to clarify the term KM.

- Knowledge management 'is the process of continually managing knowledge of all kinds to meet existing and emerging needs, to identify and exploit existing and acquired knowledge assets and to develop new opportunities' (Quintas et al., 1997, p. 387).
- KM is the continuous process of all kinds of knowledge management which requires a strategy which is company-wide containing the implementation, evaluation, and monitoring of policy of making the knowledge available where it is needed. Knowledge may be obtained through internal as well as external sources. These activities have management-related implications at all levels of organization. Processes, functions, people, culture and technology all have to be taken into view. Knowledge may be seen as a product of power relations. Knowledge management consists intellectual capital, communication, information, human resources, brands etc. (Quintas et., al., 1997).
- The formulation of organization-wide strategic policy for the acquisition, development and application of knowledge; the implementation of knowledge strategies with the assistance of all concerned parties, within an organization or a network of organizations; the attainment of daily improvement of the processes of business within an organization with stress on knowledge use and development; the consistent monitoring and evaluation of the achievements of the assets of knowledge; and the monitoring and evaluation of management activities in knowledge terms (Quintas et. al., 1997).

- The goal-specific activities in the process of knowledge management, as follows. Disclosing the knowledge (Learned lessons and best practices) to all organization members to make them understand their organizational roles. Ensuring the availability of knowledge for decision making when needed. Stimulating the development of new knowledge in efficient and effective manner such as R&D Functions, learning based on historical record. Encouraging the getting of knowledge from external sources and raising the capacity to accumulate and apply that knowledge. Ensuring the transfer of knowledge to those who need new knowledge for the performance of their functions. Making every member of the organization to know where knowledge is available in the organization or networking of organizations. These actions have management implications at all levels of the organization. That means all the KM Programs must be in coherence in terms of dimensions such as Culture, People, technology, processes and organizational culture (Quintas et. al., 1997).
- Business firms seek new knowledge from external sources continuously in order to innovate effectively. Acquiring new knowledge is an active exercise in which business firms commit resources to their management. For instance, much is spent on R&D based on extracting knowledge from external environment (Allen, 1977; Cohen & Levinthal, 1989; Mowery& Rosenberg, 1989; Quintas et. al., 1997).
- KM is the process that facilitates the flows of knowledge and sharing of knowledge to increase the employee productivity as well as that of the business enterprise (Guns & Va¨likangas, 1998, p. 287).

- KM seeks to understand the strategy of the organization through which knowledge is developed, exploited and benefited from, to comprehend the kind and content of knowledge, and to know the technological background which sustains the architecture of knowledge within the organization (Martı'n & Casadesu' s, 1999, p. 73) from Zack (1999).
- Knowledge management process makes sure the application and development of knowledge of all kind which pertains to a business firm, with the aim of enhancing its capacity to solve problems, and, thereafter, increasing its competitive advantages in an orderly manner (Andreu & Sieber, 1999, p. 68).
- KM is a process of dynamic nature which turns un-reflexive practice into a reflective one through the elucidation of its guiding rules for the performance of that practice, where a particular shape is given to the collective understanding and where the appearance of heuristic kind of knowledge is facilitated (Tsoukas & Vladimirou, 2001, p. 973).
- KM has been classified among developing, creating, transferring and retaining the new and existing knowledge (Argote at al., 2003).
- KM is referred to as the planning organizing, leading, scheduling, deploying and monitoring of processes, people, environment and technology, in a systematic way, setting reasonable targets as well as feedback systems, under the supervision of public or private

business concern, aim at facilitating specifically and explicitly the environment to create, retain, share, identify, acquire, utilize and measure the new ideas and information to achieve the aims of strategic nature such as improvement in competitiveness, improvement in performance, within the constraints of legal, political, technical, resource, financial, societal and cultural nature (Lehaney et, al., 2004).

- KM is an area in which the knowledge management related activities are dealt with. These activities include creating and developing knowledge, organizing and sharing knowledge, and utilizing knowledge so that value may be created for an organization. Knowledge, being an urgent cornerstone for business entities, has been promoted in order to gain competitive advantage of sustainable nature, and to attain the level of excellence in the market being a level playing field (Yew & Aspinwall, 2004, P. 44).
- The effective KM makes those in the firm to get more out of the available resources including knowledge being there as a resource. Moreover, KM has a supportive function to play to provide a coordinating mechanism to increase the potential of converting the resources into capabilities of many kinds (Darroch, 2005).
- Knowledge management is considered as a coordinating mechanism that makes the resources able to be converted into capabilities. The coordinating mechanism (KM Behaviors & Practices) requires people to know their jobs, as well as, interpret the information and respond to information flowing into the organization. Effective knowledge

management as a capability is critical to the long-term survival of the firm (Nelson & Winter, 1982; Darroch, 2005).

- The skills and experiences of an employee make up his/ her knowledge. The ability to absorb new knowledge also provides basis for knowledge creation. Being a resource on its own, knowledge is important. The way it is managed and utilized, it affects the service-rendering quality of firm's each resource. Therefore, supportive role is played by KM within the firm (Darroch, 2005).
- Despite the fact that the importance of effective process of KM has been established, it is a disappointing state that guidance is still little in the existing literature about what is really meant by effective knowledge and its measurable outcomes. This incomplete treatment of knowledge can be countered once knowledge and KM are clearly identified and measured. Currently, both are difficult to be identified and measured because much of knowledge is tacit and KM has tacit component (Nonaka & Takeuchi, 1995; Darroch, 2005)
- KM, being a young discipline, has promised to enhance, to a maximum level, the competitive advantage and innovation of organizations which continue practicing acquisition, documentation, retrieval and re-application, sharing, transfer and creation of its knowledge resources as assets, in a measurable manner, which have already been integrated in business processes and operations (Dayan & Evans, 2006, P. 69).

- KM is an area which is developing within research and business practice. This may be considered as the embodiment of critical organizational issues being faced within their broad based processes of acquisition, retention, sharing, retiring and utilization of expertise and knowledge. It being vital for the competitiveness, adaptation and survival of the organization in view of the increasing, discontinued and rapid change. KM has been seen as an essential development, creation, and maintenance of people, systems, Information Technology Support as a synergistic combination (Aston Business School Knowledge Management Group, 2006).
- KM is the leveraging of intellectual resources and assets to get enhancement in organizational performance (Stankosky, 2008).
- KM establishes processes and systems for the acquisition and sharing of intellectual assets. It generates meaningful, useful and actionable information and increases team and individual learning. Moreover, it maximizes the value of the intellectual base of an organization throughout disparate places and diverse activities. Knowledge Management ensures the businesses keep their state as a collection of distinctive knowledge based, not of products. That key intellectual capital gives the business firm the fruit in the form of Competitive advantage with its potential customers. KM strives to collect intellectual capital which creates core competencies of unique form, leading to superior results (Rigby, 2009).

2.2.2 KNOWLEDGE CONVERSION PROCESS

According to Professor Nonaka (1994), knowledge is converted, and can be so. This knowledge conversion takes place through a systematic process of four stages known as SECI Model. SECI stands for Socialization, Externalization, Combination, and Internalization. According to Nonaka and Takeuchi (1995), the process of knowledge conversion is spiral in nature, meaning that transformation of tacit into explicit, and re-transformation from explicit into tacit takes place. Tacit knowledge is codified or explicated on the basis of end result produced by spiral of knowledge conversion. The interactions between explicit knowledge and tacit knowledge give birth to that spiral. The knowledge conversion is a process which comprises four main modes such as Socialization (to convert tacit into new tacit knowledge), Externalization (to convert tacit into explicit knowledge), Combination (to convert explicit into more systematic and complex explicit knowledge), and Internalization (to convert explicit into tacit knowledge; SM Tseng, 2010).

New knowledge is generated by the organization by converting individual's personal knowledge into tacit knowledge. These individuals have the capacity to produce insights of creative nature. Then, that knowledge is further converted from tacit into explicit knowledge, being shared through-out organization. It is this knowledge through which the organization goes for innovations and initiation of new products (Lemon and Sahota, 2004). The explicit knowledge that has been created is being shared by the organization as a whole, and that explicit is coverted again into tacit kind of knowledge specifically for those individuals of the organization. That process is known as "learning by doing process". The dynamic process of knowledge conversion gets start at individual level, reaches out to organizational boundaries after expanding and moving

through departmental, sectional boundaries, and communities of interaction through-out the whole organization. This process, therefore, trigers to create new spirals of knowledge across organizations through horizontal and vertical expansion. This process is characterised by continuity and self-upgradation (SM Tseng, 2010).

• H2. Knowledge Conversion has significant effect on Organizational Performance.

2.2.3 SECI MODEL

There is no doubt that SECI model is among the mostly published and cited models of knowledge management. It is an original model presented by Nonaka and Takeuchi in 1995. It basically shows the creation, conversion, and exchange of knowledge within organizations (Martín-de-Castro et al., 2008). It is Nonaka's theory on creation of knowledge of organizations which addresses the question of how knowledge is converted within an organization (Byosiere & Luethge, 2008). It is through these (SECI) functions that knowledge conversion process takes place (Andreeva and Ikhilchik, 2009; Choo and Bontis, 2002; Easterby-Smith and Lyles, 2003; Pauleen et al., 2007; Rice and Rice, 2005). This model is very significant as it has attained acceptance as a widely applicable within the knowledge management practice (Von Krogh et al., 2000). For efficient and effective functioning within an organization, the four main constituents of SECI model must work together in an inter-connected way. This model is based on holistic kind of construction which is an original contribution (Jelavic & Ogilvie, 2010). It was Nonaka who asserted that knowledge can be converted and created. He postulated that knowledge conversion takes place in four stages called SECI. According to Nonaka and Takeuchi (1995), The knowledge conversion process is like a spiral in which tacit knowledge is transformed into explicit knowledge, subsequently, explicit knowledge is converted again into tacit one. It was demonstrated by the authors that tacit knowledge is codified. This codification takes the basis from end result of knowledge conversion spiral. It is derived, actually, from the interaction in between tacit and explicit types of knowledge (SM Tseng, 2010). These constituents of knowledge conversion process are explained below.

2.2.3.1 Socialization

Socialization is a process to convert tacit knowledge into new tacit knowledge (SM Tseng, 2010). It is conversion of tacit knowledge to tacit knowledge (Byosiere & Luethge, 2008). As a process of knowledge creation and conversion, Socialization has been defined as a process to bring tacit knowledge from individuals to an organization's utilization with the help of collective kind of endeavors or activity. It is basically a process of knowledge creation and then conversion (Schreiber, 2001). This is a process in which tacit knowledge is being shared with others through means such as apprentice-ship, discussion, and mentoring (Armit, 2001). It is tacit knowledge sharing process where the use of technologies remains of great help specially in the technological age of present times in the context of virtual environments (Hemetsberger and Reinhardt, 2004). The day to day knowledge-sharing takes place between organization members where access is provided to key individuals (Asleema, 2010). The purpose behind utilizing technologies in the socialization process is common; that is to construct a sharing and collaborative platform for the exchange of tacit knowledge (Fadhilah et al., 2010). Socialization is a process where tacit knowledge is converted again into tacit knowledge (Byosiere & Luethge, 2008). Socialization has the characteristics such as face-to-face interactions, or joint activities by the organization members. For instance, Managing By Walking Around (MBWA), extended shadowing, or long-term interaction with supplier etc, are parts of these activities (Byosiere & Luethge, 2008). Socialization includes wandering inside and outside, transfer of tacit to tacit knowledge, accumulation of tacit knowledge (Byosiere & Luethge, 2008). Socialization is a process through which interaction takes

place between groups or individuals. This interaction results in knowledge exchange or knowledge sharing between them by means of mental models and shared experiences. Here, tacit knowledge which is experience-based is exchanged which creates new tacit knowledge, as a result of the sharing (Jelavic & Ogilvie, 2010). A junction or a point where a person is connected with his culture, tacit knowledge is embodied there (Polanyi, 1966). This process is associated with interpretive strategy as well as personalization, therefore, the process highly depends on the motivation of the participant to share the knowledge. That knowledge is influenced greatly by cultural factors and trust motive (Chang, 2007; Chen, 2007; De Long and Fahey, 2000; Fink et al., 2007; Müller et al., 2005). Two types of processes of socialization such as mentoring and informal activities, have been identified. Socialization through mentoring is among the original concepts introduced by Nonaka and Takeuchi (1995). Socialization was originally dependent on Japanese conception of personal organizational commitment, and, communication network of personal kind where tacit knowledge was being shared (Glisby and Holden, 2003; Jelavic & Ogilvie, 2010). Service and long-term commitment to an organization influence highly all of these elements. This influence is exerted through avoidance of uncertainty, and long term orientation. It is a kind of tacit communication in between the groups in collectivistic form, on individualist-collectivist lines. So, one is individualism-collectivism index. Second is long-term-orientation index. And, third is uncertainty-avoidance index. The Japanese national culture is collectivist mildly on the first index, while, it has very higher scores on second and third indexes. Hence, relationships of Japanese business are nurtured under the guidance of trust-based and long term relationships (Ibata-Arens, 2004).

• H2.1. Knowledge Socialization significantly affects organizational performance.

2.2.3.2 Externalization

Externalization is another constituent of SECI model. It is a knowledge conversion process where tacit knowledge is articulated or converted into explicit knowledge. Externalization is a process of bringing the intuitive of knowledge into an understandable form which is understood by others clearly. Dialogues, metaphors, and analogies are used to carry out this task. It is aimed at enabling others to easily understand what is not easier to translate otherwise (Nonaka and Konno, 1998). Externalization includes conducting dialogue, using metaphors and analogies during the process of knowledge conversion (Byosiere & Luethge, 2008). Externalization is the conversion of tacit into explicit knowledge. Here, knowledge conversion takes place externally as it is done through a dialogue process which transforms tacit kind of knowledge into explicit knowledge. Many useful and effective technologies, such as VoIP, Weblog, Wiki, and Instant Messaging, are used to carry out effective knowledge conversion (Becerra-Fernandez, 2004). Externalization is the conversion of tacit into explicit knowledge. In this process, information regarding knowledge is captured and retained. This is the fundamental activity to transform the individual knowledge into an organizational knowledge by means of codification. The conversion of tacit knowledge into explicit knowledge taking place within setting of an organization, may possibly vary across different national cultures (Bhardwaj and Monin, 2006). The knowledge is said to be 'crystallised', when tacit knowledge is turned into explicit knowledge (Nonaka et al., 2000). Externalization has evolved under the influence of group-orientation, and Japanese concept of 'communitarianism' (Hampden-Turner and Trompenaars, 1997). Cultural elements associated with tacit knowledge are captured and transformed into explicit knowledge under Externalization. The process may face difficulty to maintain the real and true meaning of the tacit knowledge where cultural histories are left un-codified (Glisby and Holden, 2003). It may be very difficult to transfer the cultural elements, which are embedded with the tacit knowledge, into explicit form.

Because, tacit form of knowledge is strongly tied with the individuals. To take cross-cultural environment into view, knowledge includes socio-cultural values, information, and personal elements (Liew, 2007). The flow of knowledge among members of the organization is constrained by the low level of trust in the organization (De Long and Fahey, 2000).

• H2.2. Knowledge Externalization significantly affects organizational performance.

2.2.3.3 Combination

Combination is a process of converting explicit kind of knowledge into explicit knowledge. The knowledge is classified as well as coded here to be shared in future in a better way, or to be retrieved fully in an easier way (Kakabadse et al., 2001). These four modes or processes form the main constituents of knowledge conversion process (Nonaka et al., 1994; Nonaka et al., 2001). Combination includes acquisition and collection of required data, the dessimination of the information and data, the editing of data, the synthesis of data and information (Byosiere & Luethge, 2008). Combination is a process where explicit knowledge of different kinds is combined, after capturing the knowledge (Rice and Rice, 2002). It is materialized through the application of modern technologies such as RSS. Because, it makes the sharing of resources easy across different networks. Right knowledge is directed towards right people. It collects contents from different parts and sources to a single point and space for personal benefit of learners. For example, the collective intelligence such as, reviews, feedback, people's expertise support, individual digital reputation evaluation, and filtering techniques (Liu et al.; Ayobami & Rabi'u, 2012). This is a process where existing knowledge is combined with the newly created knowledge. The explicit knowledge is transformed into new explicit knowledge that is more sophisticated. Research endeavors as well as studies in a traditional university are clear examples of this process,

despite the presence of tacit knowledge elements in the form of written works over there. Access to knowledge in an organization is required by the combination in order to combine that knowledge with the newly discovered knowledge (Byosiere & Luethge, 2008). Owing to its basis on the information processing and informatics, this explicit-to-explicit combination highly relies on the capabilities of effective ICTs, their applications, and their quality information. This all is part of the codification process. That is given the name as the functionalist perspective from knowledge management point of view. An open, participatory, and holistic management style is suitable for combination process to get succeed (Glisby and Holden, 2003). For example, in Japanese context, this is associated with a higher level of uncertainty avoidance. This avoidance has had a great learning towards group-level decisions, non-competition, and consultative kind of management, among members of the organization. This is a type of Japanese style of management, where, the permanent workers are part of of the organization core with the management playing a supportive role (Glisby and Holden, 2003; Hofstede, 1993).

• H2.3. Knowledge combination significantly affects organizational performance.

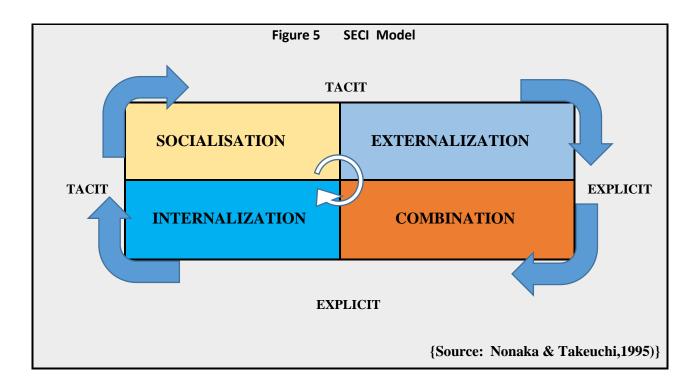
2.2.3.4 Internalization

Internalization is a process of converting explicit into tacit kind of knowledge. It is required under this process that one may learn the requisite knowledge to that point where in it has turned into a "learning by doing" or a second nature (Nonaka, 1994; Nonaka and Konno, 1998). It is done normally as in simulations or training programs (Byosiere &Luethge, 2008). Internalization incorporates simulation, demonstration of the knowledge, taking help from personal practical experience (Byosiere & Luethge, 2008). Internalization is a process of converting explicit knowledge into tacit knowledge, 'learning by doing' is also part of it. This

occurs when Socialization, Combination, and Externalization, being modes of previous knowledge, are internalized in people 's minds as a tacit form of knowledge (Becerra-Fernandez, 2004; Tse et al., 2010). The learners are brought together equally with a view to build collaborative, competitive, and cooperative relationships by using multi-user and multi-player simulations. These offer them the potential of learning from a social experience of a new form (Tse et al., 2010). One of the core assumptions of the SECI model is the continuous knowledge flow among groups, individuals, and organizations, a value or knowledge value, is created through the means of the synergies that are found among the different knowledge-holders within an organization's context which is developmental as well as supportive in nature (Ayobami & Rabi'u, 2012). Internalization is nothing but the understanding of existing knowledge with its contextual comprehension. This, in turn, goes to transform information into knowledge through the process of interpretation. Explicit knowledge is embodied through this process. The members of the organization take benefit from this knowledge, and, thereby, enrich and enhance their base of tacit form of knowledge (Nonaka et al., 2000). This enables them to internalize their experiences, which they have gained through other means of knowledge creation, into the repository of tacit knowledge of individuals (Byosiere and Luethge, 2008; Nonaka and Takeuchi, 1995). Internalization is basically associated with or assisted by the function of 'learning by doing '(Nonaka and Takeuchi, 1995; Nonaka et al., 2000). It involves a kind of commitment on the part of organization members for working well across and within groups. That includes feminine and collectivistic in-group traits. As it is a continuous spiral of SECI, it keeps touching the socialization level, that is higher, as well as continuing (Fink et al., 2007).

• H2.4. Knowledge internalization significantly affects organizational performance.

To sum up, it is clarified that SECI is a credible knowledge conversion process. According to SECI model, knowledge is created and converted on continuous basis. Because, the knowledge, that is discovered, is being used by users through constant learning and practice. This happens in a cyclical way and order. That paves the way for effective, dynamic, result-oriented, and decisive knowledge management within an organization (Ayobami & Rabi'u, 2012). New knowledge is generated by an organization through these conversions which turns from tacit knowledge or personal knowledge of individuals into an explicit knowledge of the organization. It is the shared knowledge through which the organization goes for innovation and initiates new products (Lemon & Sahota, 2004). This explicit knowledge is shared by the organization as a whole, it is, then, converted into tacit form for individuals. It is a process called as "learning by doing". This dynamic knowledge conversion process takes start at individual level, keeps on expanding as moving through organizational, divisional, or sectional boundaries, reaches out to interacting communities. The below given diagram makes the process further clear.



Hence, new spirals of creation of knowledge emerge which expand across organizations vertically as well as horizontally. This makes the process as a self-upgrading one on continuous basis. It gets complete within the afore-mentioned main four modes as a process (SM Tseng, 2010).

2.3 ORGANIZATIONAL PERFORMANCE

Organizational Performance or Corporate Performance has five sub-dimensions (sub-constructs) i.e, financial performance, process, future, people development, and customer/market. Prior to mentioning these sub-constructs, it is necessary to define organizational performance.

2.3.1 DEFINITIONS OF ORGANIZATIONAL PERFORMANCE (OP)

Defining Organizational Performance (OP) is open question surprisingly. There are studies, few in number, which have used its consistent definitions and measures to gauge it (Kirby, 2005). The use of performance is a common phenomenon in research of management. The definition as well as structure of OP are rarely justifiable or explicitly so, despite its appropriateness. It does not matter what form it has assumed without any question (March & Sutton, 1997). Generally, the following is meant by organizational performance; improvement in activities, tasks, and processes of the organization, capacity building and skill enhancement in employees of the organization, creation of competences within the business organization, consistent learning by the organization members, production of Quality products, provision of Quality services, efficiency and increased productivity, increase in earnings and profits, gaining competitive advantage, introducing innovation. To be more specific, the measurable aspects of

organizational performance include capital profitability, growth, operational & financial efficiency, stakeholder satisfaction and competitive position (Daniel & Simon, 2006).

Yet, following are some of *the formal definitions of organizational performance*.

- There are three frameworks used to conceptualize organizational performance (Ford & Schellenberg, 1982).
- Organizational performance is the attainment of explicit goals that have been implied from the behavior of members of the organization. This definition is based on the goal approach (Etzioni, 1964).
- The assessment based on the main internal and external factors, on which the
 organization is dependent for survival, is called as organizational performance. This
 is the definition based on the systems resource approach (Yuchtman & Seashore,
 1967).
- The organization is said to be assessing its performance when it is assessing the fulfillment of its constituent needs. In this way, the organization gets benefits from its internal and external constituencies, many in number. This definition is based on the constituency approach (Thompson, 1967).
- The performance of a small organization is dependent upon the ability of the management of that organization to use the planning very well (Schollhammer & kurilof, 1979).
- Performance is equated with word success here in small organizations. The word success itself is not specifically defined. The empirical studies, in majority, that examined the association of strategic management practices with organizational

- performance of small business organizations, have used the words success and failure as the main measure of performance (Trow, 1961).
- Organizational performance is one of the indicators that is measuring the position
 of a business firm as how well it achieves its objectives (Venkatraman &
 Ramanujam, 1986; Hamon, 2003).
- Organizational performance is assessed through efficiency and the effectiveness of an organization in terms of its goal attainment (Robbins & Coulter, 2002).
- The idea of effectiveness denotes a ratio which means that two entities are sought to define and measure effectiveness that is return on assets. Effectiveness is conceived to be further conceptualized as reaching at a degree of goal achievement. That means the status of an enterprise to reach at the level where the profitability goals are fully achieved (Andersen, 2006).
- The performance has been referred to as the quantity and quality of group or individual work achievement (Schermerhorn et. al., 2002).
- Efficiency, effectiveness and organizational performance are terms which have recently been used interchangeably. Different indicators have been in use to measure organizational performance since the mid of 1900. These are Profit Growth Rate, Net or Total Assets Growth Rate, return on Sales, Shareholder Return, Growth in Market Share, Number of New Products, Return on Net Assets, ETC. Return on Net Assets and Return on Capital have been used in 1900 in the measurement of organizational performance (Hancott, 2005).

- However, different studies have come up with different ways to measure organizational performance (Schiuma and Lerro, 2008; Garnet et al., 2008; Green & Inman, 2007; Chung & Lo, 2007).
- Seventeen (17) organizational effectiveness models, been reviewed which integrated the measurement of organizational performance from various studies, generalized it from three perspectives. These include organizational effectiveness, business performance and financial performance (Steer, 1975).
- Two ways have been suggested by Delaney and Huselid (1996) to evaluate performance. These are market performance and organizational performance. Market performance is related with marketing ability of organization, total growth in sales, and total profitability. While, the organizational performance is related with service/ product quality, Service/ product innovation, employee retention, employee attraction, customer satisfaction, employee-employer relation, and management-employee relation. According to Tippins and Sohi (2003), OP may be measured on four dimensions such as relative profitability, return on investment, customer retention, and total sales growth (Li-An-Ho, 2008).

2.3.2 WHAT IS PERFORMANCE

A contextual concept which is related to a phenomenon under study is termed as performance (Hofer, 1983). If taken in financial context, it is called financial performance of the organization. It is a measure of change in the financial state of the organization. It denotes to those financial kind of outcomes that have been derived as a result of management decisions. These decisions are executed by the members of the organization.

These outcomes may be perceived within a particular context. Since the perception or understanding of those outcomes is contextual, the measures which represent performance are chosen on the basis of the particular circumstances of the organization or organizations which are being studied or observed. These selected measures represent those outcomes which are achieved. These outcomes may be either bad or good. Management research has focused mostly on the determinants or elements of performance. For example, Kunkel (1991) presented that the new venture performance had been proved as a function of new venture strategy as well as that of industry structure. The formula was used to express that in terms of P = f(VS, IS). The relationship was tested by Kunkel between independent variables, being two in number, and dependent variable, being single in number. That dependent variable was the performance of the new venture. The independent variables are termed as those determinants which cause changes in the dependent variables. Those changes within the dependent measures often represent performance. This performance is caused by the variations of the independent measures. The critical point to be noted here is that as a concept, performance is something which involves the effects of the actions of the organization (Carton, 2004).

2.3.3 THE ORGANIZATIONAL PERFORMANCE (OP) AS A CONCEPT

Generally, the organizational performance as a concept takes its foundation from a very basic idea. That is the idea that every organization, being a voluntary association of assets of productive nature, strives to achieve a shared purpose. These productive assets include capital, physical and human resources to be utilized to attain that shared purpose or objective (Alchian & Demsetz, 1972; Jensen & Meckling, 1976; Simon, 1976; Barney, 2001). Those who provide the assets commit them to the organization only. They do that

as long as they are satisfied that their value is received according to their expectations. That value is received by them in exchange of those assets which are used in different uses. As a result, performance is nothing but the creation of value as its essence. Hence, it may be noted that, if the value created by these assets utilization is greater or equal to the cost or price of those assets, the assets will be in continuous demand of the organization. When the organization continues their utilization, it will continue to exist in the business. It is, therefore, recognized by the resource providers that the value creation is the essential performance criteria, of an overall nature, for every organization to survive and succeed (Carton, 2004).

2.3.4 PERSPECTIVES OF ORGANIZATIONAL PERFORMANCE (OP)

In order to develop robust understanding of the concept of overall organizational performance described in prior research and theory, it is necessary to understand different perspectives on the construct of organizational performance. These perspectives greatly help in the explanation and measurement of the phenomenon of OP. These perspectives are five in number which have already been examined in previous studies. These include Accounting Perspective on OP, Balanced Scorecard Perspective on OP, Strategic Management Perspective on OP, Micro-economic Perspective, and, Entrepreneurship Perspective. These are discussed below.

2.3.4.1 THE ACCOUNTING LITERATURE PERSPECTIVE

If organizational performance is looked at from the accounting scholars' perspective, the attention is focused on the financial statements prepared by the business organization with measures. Accounting professionals use the financial statements of an organization to measure its performance with the past. They use the information contained

in these statements and their measures. Because, the accounting profession is duty bound to present the past performance of a business organization in a consistent and fair manner. That's why, a great volume of accounting procedures and rules are used by the accountants to prepare the financial statements of the business entity. That is done in order to make the information provided in the financial statements more meaningful and authentic to reflect the performance of the organization. It is also aimed at making the information of the statements more comparable across organizations and over time. The accounting literature has come up with the content of information on the earnings. That means how much earnings the business organization is making over time. That feature has been used as dominant factor having direct link with the valuation of business organizations (Ball and Brown 1968; Beaver 1968; Lev 1989). In this way, the accounting research has shifted its focus from corporate processes and policies to earnings related Information of the business organizations to measure the performance (Lev, 1989). The intention is not to focus the relationship of financial statements with the equity security returns, rather correlation is more important. As a result, the researchers who look for finding proxies to shareholders' value creation get direct benefit from this approach on earning. Hence, if the correlation between accounting information and the equity security returns, there emerges more proxies for the value creation of shareholders from the information of accounting statements. These proxies may act as a basis to measure value creation of shareholders from the companies that are publicly traded. Two decades of the Research on accounting has been reviewed by Lev (1989). That means the accounting information must present the performance of the organization taking the multi-constituency as well as multi-dimensional view of the performance (Carton, 2004).

2.3.4.2 THE BALANCED SCORECARD PERSPECTIVE

In order to fill the gap between practice and theory, Kaplan introduced Balanced Scorecard in 1984. He proposed that this measure should be used to gauge organizational performance of effective nature. It was also suggested that the measurement of organizational performance required non-financial measures also, besides the financial ones. That was so because there were a number of financial indicators that were emerging as an outcome of operational measures of critical kind. For instance, the accounting measures demonstrated the past performance of a business organization. While, future opportunities related with the investment were ignored. It was, therefore, necessary to combine financial as well as non-financial measures to measure the overall organizational performance in an effective way. (Carton, 2004). It is clear that Balanced Scorecard contain a number of measures. These include quality, customer satisfaction, productivity, market share, product innovation, changes within intangible assets like HR abilities and skills or patents, and performance of stakeholders. These measures seek primary information and data from the business management. That data, in turn, is used to assess their own performance. That raises the validity questions over the responses. It is primarily advantageous to use operational measures in association with the financial measures of performance. Because, these offer information regarding the created opportunities which are yet to be financially realized to their full potential. Since, GAAP doesn't take into account the value of new discoveries and their expected value, Till the actual realization of their value, accounting measures miss this kind of information on the performance of the organization. (Carton, 2004).

2.3.4.3 THE STRATEGIC MANAGEMENT PERSPECTIVE

The understanding of the objectives and goals of an organization is fundamental to undertake the study of management. Those processes that take the accomplishments of the organization for measurement are also of critical importance to the study of management (Drucker 1954; Ansoff 1965; Hofer and Schendel 1978; Schendel and Hofer 1979; Andrews 1987). However, if empirical articles that are published in the areas of strategic management and entrepreneurship are examined, it is concluded that there is no foundation available, which may be declared as agreed upon, to measure organizational performance. However, many conceptualizations have been existing regarding the explanation of organizational performance within the literature of strategic management, over the years. There is nothing but two aspects of the organization's performance which are critical in nature. One aspect shows constituencies for which the business organization is performing. Second demonstrates the dimensions of performance which are required to be measured.

Following are some of the perspectives on the two aspects taken out from the literature of strategic management:

• Barnard (1938) described organizational effectiveness as nothing but the achievement of the purposes of the organization. While, efficiency has been defined by him as that degree or extent to which the motives of individuals are satisfied. He argued further that there is no measure to judge an efficient and effective organization but the capacity of that organization to survive. He clarified that perspective of organizational performance which is uni-dimensional as well as multi- constituency-based.

- Survival has been taken as an ultimate measure of organization's performance (Drucker, 1954). The eight dimensions were identified by Drucker, included, i). Market Standing (it is relative to the existing and future market potential). Ii). Productivity. Iii). Innovation. Iv). Performance and development of manager. V). Financial and physical resources. Vi). Profitability (which is sufficient for covering the risk premium to remain successful in business). Vii). Attitude and Performance of worker. Viii). Responsibility towards public. Drucker considered these dimensions very necessary for the organization's survival in the long term, being the real test of organizational performance as a last resort. It clear that his perspective is multi- dimensional as well as multi-constituency-based.
- Ansoff suggested ROI (return on investment) as ultimate measure to quantify organizational performance. He argued that the objectives of individual shareholders put constraints on the aim of the organization. That aim measured through ROI is financial, but, due to the constraints, the organization must be having non-economic objectives also. These objectives leading to the state where the return on investment are maximized. Yet, the flexibility of the organization is constrained by these limitations which are caused by individual stakeholder constraints.

Thus, it is fairly concluded that organization performance is presented as a multidimensional and multi constituent construct under the perspective of the strategic management authors (Carton, 2004).

2.3.4.4 THE MICRO-ECONOMIC PERSPECTIVE

When the created value is lesser than the expected value (required return), the owners of the productive assets will take back their support from the organization. Then these assets are put by them to other alternative uses, where the required return can be achieved from. It is argued by Barney (2002) that the link between the expected value and the actual current value (created through the use of these assets) is termed as organizational performance. According to Transactional theory of macroeconomics, the value which has been created by the firm must be sufficient in meeting the resource providers' demands, under perfect competition conditions. Generally, losses and profits of economic nature occur due to the existence of not perfect competition among business firms. Resultantly, organizations with economic losses remain with competitive disadvantage. While, those with economic profits experience, take competitive advantage. It goes without saying that the organizations with normal returns have competitive parity with their industry 's other organizations. The resource owners usually take their assets out of the organizations with lesser than acceptable level of returns. These organizations cease to exist, if all these resources are withdrawn. On the contrary, the organizations which earn more than acceptable level of returns normally attract more resources that are additional. These aim at meeting the newly emerged increased demand which has emanated from the competitive advantage of the organizations earning more than the acceptable level of returns (Carton, 2004).

2.3.4.5 THE ENTREPRENEURSHIP PERSPECTIVE

This perspective suffers from the same ailments from which the strategic management perspective suffers. Both are faced with the same problems. It is argued that

the goals of organization are actually those which were set by the founding entrepreneurs. This is a uni-dimensional view of organizational performance (Bracker and Pearson 1986; Chandler and Jansen 1992; Slevin and Covin 1995). Yet, researchers in entrepreneurship assess other performance based perspectives of stakeholders too. These include, perspectives of owners of family business, venture capitalists, and other investors like angel investors. Like researchers of strategic management, the researchers of entrepreneurship adopt multi-dimensional perspective of organizational performance. They recognize the tradeoffs internally found between issues like profitability and growth (Gartner 1990; Chandler and Hanks 1993; Chandler and Hanks 1994; Murphy, Trailer et al. 1996). As a consequence, it is deduced that the entrepreneurship perspective of organizational performance is multi-dimensional as well as multi constituency (Carton, 2004).

2.3.5 MEASURING THE CONSTRUCT OF ORGANIZATIONAL PERFORMANCE (OP)

Before measuring organizational performance in terms of value creation, it is incumbent on every researcher to select samples out of those organizations which have homogenous understanding of the concept of value. The term value may be taken as financial or operational, intangible or tangible. For example, all those public companies which are traded on recognized stock exchanges, often go for seeking to create shareholder value. That tantamount to increases in dividends paid and market value both as their ultimate goal or objective (Blyth, Friskey, & Rappaport, 1986; Copeland, Koller, & Murrin 2000; Porter, 1987; Rappaport, 1986; Scott, 1998; Stewart, 1991; de Waal, 2001). Similarly, the private sector companies pursue creation of value with a combination of both

objectives. That are non-financial as well as financial objectives. Value creation in case of shareholders include the form of non-financial outcomes mostly, when, the material owners are the managers of the company at the same time (Jensen & Meckling, 1976). These costs are treated by public companies as agency costs, while, these prove as a component of return to shareholders in case the owners are also the managers (Carton, 2004). Nonfinancial returns include benefits of life style such as work duration, work location, ego, and social interactions. Other non-financial returns may be in the form of constituency benefits like helping people with special needs, or, providing income to family and friends. The example is Goodwill Industries. Similarly, to provide employment to community which has been remained depressed. All that means the private companies have financial as well as non-financial targets as their specific objectives. While, the public organizations have their non-financial targets, but not, as their specific objectives. These just show up as agency costs. Rather, these are just the costs of doing business. Therefore, these do not form as a positive constituent of organizational performance (Carton, 2004). After the examination of the concept of organizational effectiveness for six years, Cameron (1986) has concluded that there is no comprehensive conceptualization of organizational effectiveness. Therefore, like Hofer (1983), Cameron has again concluded that performance is not a theory- driven construct, rather, it is a problem-driven construct (Carton, 2004).

2.3.6 ORGANIZATIONAL PERFORMANCE (OP)- AS A MULTI-DIMENSIONAL CONSTRUCT

Generally speaking, the term Organizational Performance is interchangeably used with the terms such as Business Firm's performance or venture performance or

company performance. Organizational Performance is a multi-dimensional concept even in case of homogenous sampling by the similar organizations. It allows for the value to be created from different perspectives (Cameron, 1986; Dess & Robinson, 1984; Murphy, Trailor, & Hill, 1996; Steers, 1975). Conceiving multiple measures used for the value created is also possible. This is substantiated and supported by numerous dependent measures of different kind that have been utilized to measure the organizational or firm's performance in different research studies (Brush and Vander Werf, 1992; Murphy et al., 1996). Organizational performance has many dimensions. In one dimension, a positive performance may be turned into negative performance in other dimension. For example, if profitability and resource accumulation are taken as two different dimensions of organizational performance under the same model, the results will be different. If resources in the form of equity are added, it will lower the risk adjusted on investment return as a result. This implies that the organization or company performed well in terms of resource accumulation, while, performed bad in terms of profitability. It demonstrates that the organization or a new venture is effective, if it resorts to resource accumulation and keeps on building market share, even, at the cost of profitability. On the contrary, a mature organization is the one which increases profitability and productivity with stable resources and market share. The conclusions will be different if each dimension is examined separately without considering the other one. These conclusions will be different from those ones reached at through examining the two dimensions and their effects simultaneously. Here a measure is required which may co-vary with each of the dimensions, so that these levels of performance may be equated (Carton, 2004).

2.3.7 INTERPRETATION IS DEPENDENT UPON THE OBSERVER'S PERSPECTIVE

Value is what the eye of the beholder sees. It being an example, is taken for further understanding. Every one of the organizational stakeholders has a different perspective of what is value or valuable. That is based on the purpose for which that has been associated or related to the organization. Active investors perceive value differently than the way it is perceived by passive investors. Creditors perceive value created as the ability of the organization to generate cash flow that is positive as well as perceive the worth or value of collateral. On the other hand, value is perceived by company investors in the sense to expend the resources of the company to create opportunities in future. Even, it is so at the expense of cash flow as well as short term tangible assets of the same company. Each group of the stakeholders has a different view of organizational performance. Due to that, it is incumbent on the researcher to choose that perspective of organizational performance that has conformity with the phenomenon of interest. To put it in other words, a perspective which coincides with the purpose of the research being sought, may be selected by the researcher. It is necessary for the researcher to match his appropriate kind of organizational performance model with the relevant existing circumstances (Carton, 2004).

2.3.8 SUMMARY OF PRIOR RESEARCH ON OVERALL ORGANIZATIONAL PERFORMANCE

The review of the prior empirical studies makes it clear that no consistency has been found in the use of measures representing the construct of performance of organization taking as an overall snapshot. These studies are available being a prominent part of the Research on entrepreneurship, and, strategic management. It has been found in the prior

research that organizational performance has multiple dimensions as a construct (Carton, 2004) Yet, it was Robinson (1995) who found the return to shareholders as the aspect of most powerful performance of individual kind. He found it with special reference to the performance of the companies that experienced initial public offerings. However, the findings of these studies are not generalizable in a reasonable manner to other studies, which use samples of different kinds. To cut it short, the absence of conclusive research which goes to identify one best measure which can represent an overall organizational performance continues to prevail. Similarly, a measurement model which can give accurate representation to the construct of Organizational Performance is also missing. That implies that it has also not been developed so far. It has been shown by the prior research that the different variables measure different dimensions of organizational performance. These dimensions are distinct from statistical point of view and different in nature. Further, there has not appeared any single measure to gauge the construct of Organizational Performance. Nor has there been a group of measures to stand for the measurement of overall organizational performance. It is so but not without reasons. It is so because no unidimensional construct of performance is developed or devised so far. Or there may be another reason, that the dimensions on which the construct of Organizational Performance is based have not adequately been identified or defined by someone (Carton, 2004). As a consequence, the claims of incremental advances in building of the theory based on prior works, made by some authors, seem doubtful. Because, prior works have not been applying the same measures to represent the overall organizational performance (Carton, 2004).

2.3.9 SPECIFIC MEASUREMENT OF ORGANISATIONAL PERFORMANCE (OP)

In order to measure the organizational performance as a construct, different measures have been used in different research studies. Some have used comparative measures, while, others used internally reflective performance measures. For example, comparing the company with the industry, xyz company is more profitable than others. Similarly, this company is more profitable now than it was five years ago. These measures have been found used in the studies such as those of Deshpande' et al. (1993), Avlonitis and Gounaris (1999), Jaworski and Kohli (1993), and Va'zquez et al. (2001). These measures are both financial and non-financial in form. Financial measures are used in case of profitability. Non-financial measures are used in case of sales growth and market share (Jenny, D., 2005). OP not only takes the form of financial performance, but also it shows up in terms of operational performance. Six items were used to measure operational performance. These were adopted from Bowersox et al. (2000). Final scales used to measure OP include performance metrics such as cost management, productivity, quality, asset management, and, customer service. The metrics to measure financial performance were used previously by Claycomb et al. (1999). Inman et al. (2011) measured financial performance by using the similar items which demonstrate average profit, average return on sales, profit growth, and average return on investment (Wang, Z. and Wang, N., 2012). When the relationship between KM and OP is being assessed, the results always depend on the research methodology being used. OP can be gauged in numerous different ways, taking into view the non-financial and financial indicators. There are numerous approaches to the measurement of organizational performance. That include different perspectives of

the stakeholders. In some cases, the Balanced Scorecard (BSC) is used to measure whether the companies small scale operational activities are aligned with the major objectives of that company in the form of strategy and vision. These include the perspectives such as customer, innovation, learning, and internal processes (Rašula, J. et al., 2012). It is also examined under financial perspective whether the company's strategy execution and implementation has contributed to bring about bottom line improvement. There are some measures commonly used to denote financial performance. These include net operating income, revenue growth, cash flow, economic value added, profit margins, and Costs etc. The customer perspective is based on value proposition. That means the organization has to make its customers satisfied through more sales to the customer groups that are mostly desired (Rašula, J. et al., 2012). These measures incorporate the value being delivered to customers as well as others such as quality, time, service and outcomes like market share and customer satisfaction. The internal processes perspective means the company is focusing on those processes and activities of providing value to customers according to their expectations. There are clusters of internal processes perspective such as operations management, innovation, customers' management, and regulatory and social connections. The operations management includes supply chain management, and asset utilization The innovation contains new products and services. The customer improvement. management includes deepening and expanding relations. And, the regulatory and social connections involve good relations established with the stakeholders who are external. The learning and innovation perspective stresses on the importance of organizations' internal capabilities and skills as well as its intangible assets. All that are required to enhance the organizations' capacity of value creation through internal processes. In addition, another

perspective is added by some studies. That is the perspective of the supplier. It is also necessary to be taken into account while assessing firm performance, specially, the nonfinancial performance (Rašula, J. et al., 2012). In order to relate the Organizational Culture (OC), Knowledge Conversion (SECI) with the Organizational Performance (OP) within the existing model, three measurement scales have been used on the basis of Churchill (1979) and DeVellis (1991). These scales have been developed through a generic procedure. Measurement scales have been attained through the utilization of a Delphi study under which various Knowledge Management experts have been consulted who belong to business and academic backgrounds. In addition, these measurement scales have been obtained through a pre-test as well as a due validation process. This validation was based on factorial analysis of a confirmatory form. All the socio- metric properties have been measured. These are reliability, dimensionality, and validity. These have been checked and found valid for the three scales such as OC, SECI, and OP as their measurement is necessary in social sciences (SM Tseng, 2010). It is very important to verify that the measurement scales have been useful in collection of information about the constructs, before the causal relationship between OC and SECI, OC and OP, as well as SECI and OP, is proposed to be established. It must also be verified beforehand that the information is obtained through a procedure which is possibly most accurate and true to life. The following three requirements are necessary for the instrument to be accurate, faithful and useful. These are reliability, dimensionality and validity. The reliability consists of stability as well as the internal consistency of scales of measurement. It is equal to test the equality of the instruments used. It denotes that the structure of the scales must be designed correctly. The measurement must be free from errors or distortions. The reliability has been

achieved through the utilization of a Delphi method as well as the pre-test procedure. It is called as a refinement process which minimizes the effect of errors and ensures reliability. The main constructs of the study (OC, SECI, OP) have been found reliable. The dimensionality means the analysis conducted to verify the existence of dimensions being proposed in the given theoretical model. The Sub-constucts of OC (Clan Culture, Adhocracy Culture, Hierarchy Culture), of SECI (Socialisation, Externalization, Combination, Internalization), and, of OP (Financial Performance, Market-Productbased Performance, Process- based Performance, People-development-based **Performance**, and Futuristic Performance) have been verified. The fit indices have been found statistically significant. Hence, it has been assumed that the model which measures OC, SECI, and OP is correct from dimensionality point of view. All that are based on Competing Value Framework (CVF) of the firm, has proved that human dimension is relevant to the development of an effective knowledge management program or strategy (SM Tseng, 2010). As far the validity of scales is concerned, the measurement validity refers to the degree to which the process of measurement is free from errors. These errors may be random and systematic. There are three fundamental types of validity. These are content validity, convergent validity and discriminant validity. The content validity demonstrates that the measurement instrument is developed through an adequate procedure (Nunnally, 1978). However, the verification of content validity of a scale is not easier but difficult. Because, no objective criterion exists to evaluate this validity. Yet, the mostly used procedure is to verify if the development of scale is fit with the criteria set in the literature or methodology or the techniques or the used co-efficients. The culture of Knowledge Management boosting the firm performance has been found valid through the

use of the methodology which was recommended by Churchill (1979). The techniques, scales and co-efficients were developed with the instruments used by a wide range of authors including Churchill (1979) as well as with the aid of Delphi methodology (Daniel and Simon, 2006). After content validity, comes the convergent validity. It is said to exist as and when the measurement is positively as well as strongly interlinked or associated with the other measurements of the same construct (Churchill, 1979). The last is discriminant validity. It shows to what extent two measurements of the constructs are related, despite these constructs are similar, but, these are conceptually different from each other (Bearden et al., 1993). Hence, it has been demonstrated that the three scales for main constructs (OC, SECI, OP), and the twelve scales for sub-constructs fulfill socio-metric requirements which are always required for scales in social science subjects (SM Tseng, 2010).

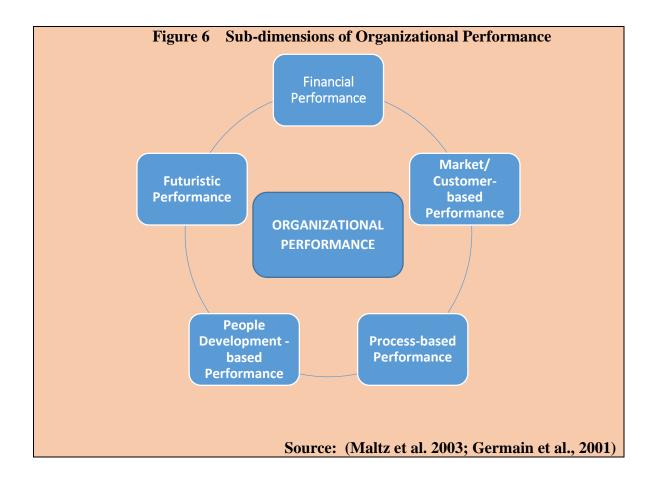
As stated earlier, the organizational performance is measured in terms of **Financial Performance, Market-customer-based Performance, Process- based Performance, People-development-based Performance, and Futuristic Performance** (SM Tseng, 2010). Financial Performance is represented by Return on Assets (ROA), Return on Investment (ROI), Return on Sales (ROS), and Gross Production Margin (GPM) on average basis (Daniel & Smith, 2006). Market-customer-based Performance is represented in the form of annual growth in sales, on local and regional level, growth in market share during the last few years, whether positive or negative in previous years. Whether or not the sales targets are achieved (Daniel & Simon, 2006). Process- based Performance has been represented in terms of financial solvency, financial liquidity, labor productivity and cost efficiency, and also includes operational and financial efficiency. Customer based

performance is expressed as increase in the total wealth of the business concern, satisfied customers, and positive business environment image within a particular country or region. By market-based performance is meant the position of the company vis-a-vis its competitors based on a locality, country, area and region. The prices of company products may be compared with that of competitors (Daniel & Smith, 2006). People development based performance is represented by satisfied, trained, skilled, and learning oriented employees. Futiristic performance is represented by the availability of a well-thought-out future plan on potential growth, development, expansion, and a clearer vision (SM Tseng, 2010). All the fit indices of this model are statistically significant. Hence, it is concluded from the results that there is positive and strong relationship between the main and succonstructs been found to have existed (SM Tseng, 2010). Additionally, The BSC or Balanced Scorecards implementation has attracted the attention of researchers to wider perspectives of organizational effectiveness through-out management research. BSC include, in an explicit form, measures of customer outcomes, financial performance, internal processes and innovation. It is so despite the fact BSC is basically used to keep internal control and management processes (Kaplan & Norton, 1996). However, Organizational Performance (OP) is not a uni-dimensional phenomenon or construct despite its narrower domain. Nor it is likely to be recognized as a single measure or operational measure. Though performance is recognized as a multi-dimensional phenomenon in finance (Henri, 2004) and accounting (Callen, 1991) as well as it has widely been discussed in the literature of management theoretically (Venkatraman & Ramanujam, 1986), yet, there is lack of consistency and lack of researchers' uniformity in measuring Organizational Performance (OP) empirically (Richard et al., 2009).

2.3.10 The principle to select the Construct of Organizational Performance

According to Churchill's methodology (1979) to design and validate the construct of Organizational Performance which has been used widely in literature on the measurement of Organizational Performance (OP). First is to specify domain of the construct. Secondly to generate a sample of items to operationalize the construct. Thirdly, to collect data. Fourthly to purify measures. Fifthly to collect new data. Sixthly to assess reliability. Seventhly to assess validity. And, eighthly to develop norms. Keeping the above in view, a perception-based measurement has been selected due to two reasons: First, some of the benefits accrued from Knowledge Management are intangible or qualitative in nature which, therefore, are not available as objective measures. Secondly, there are perceptual measures which are widely used in all management and behavioral business disciplines. These perceptions have been found to be a good proxy for OP. The utilization of perception based measurement offers some opportunities to take insights into intangible benefits from these business processes which are quality-based (Mahmood and Soon, 1991; Tallon et al.,2000; Sethi and King, 1994; Zhuang and Lederer, 2003; M.Z. Elbashir et al., 2008). High correlation and convergence, have been reported by prior studies also, between objective performance measures and perceptual data which was obtained from the senior executives and lower managers (Venkatraman and Ramanujam, 1987; Ray et al., 2005; M.Z. Elbashir et al.,2008). After going through the study of previous literature on Organizational Performance, the main constructs of OP include capital profitability (financial performance; profits, return on assets, return on investment, etc.), product market performance and growth (sales, market share, etc.), shareholder return (total shareholder return, economic value added, etc.), Customer Satisfaction, Stakeholder Satisfaction,

Financial and operational efficiency (Cost reduction and productivity enhancement), improvement in competitive position (Competitive Advantage), effectiveness. (organizational effectiveness), improvement in business processes, improvement in organizational structure, attainment of organizational objectives (strategic and management objectives), Perceptions of Senior Executives, mid-level managers, and employees of the Organization (as a perception-based measurement of OP), return on assets (ROA) and earnings-per-share (EPS), profitability, product margins, customer satisfaction, and liquidity, improvement in activities, tasks, and processes of the organization, capacity building and skill enhancement in employees of the organization, creation of competences within the business organization, and, production of Quality products. Hence, taking into account the limitations of this study such as incomplete information from the selected companies, the budget, time, and space constraints, only perceived constructs of organizational performance have been selected. In-order-to be more specific, following constructs have been selected for this study. The main perceived construct, Organizational Performance or Corporate Performance, has five sub-dimensions (subconstructs) i.e, financial performance, process, future, people development, and customer/ market, which are selected for this study. The following diagram (Figure 6) is clarifying them further.



2.3.10.1 Financial Performance

It is the first sub-construct of organizational performance which depicts the position of the business organization in terms of profitability. Basically, financial performance is represented by Return on Assets (ROA), Return on Investment (ROI), Return on Sales (ROS), and Gross Production Margin (GPM) on average basis (Daniel & Smith, 2006). The increase of net income, profit margin, cost-reduction, savings, and revenues, indicate the financial position of the business firm. This is that aspect of the performance which involves questions such as whether or not an integral improvement has been seen in the sales of the company, whether or not an integral improvement has

been seen in the profits of the company, whether or not an integral improvement has been seen in the return on investment of the company (SM Tseng, 2010).

2.3.10.2 Market-Customer-based Performance

It, being the second sub-construct of the organizational performance, shows the position of the business organization in the market or vis-à-vis its competitors. While, customer-based performance is related with the implementation of the effective business strategy which is customer-oriented, suits with the customer choices, makes the customer satisfied with the value and utility of the product and services. The related questions with this performance remain whether or not an integral improvement in the relationship between an organization and its customers, whether or not, an integral improvement has been noted in the relationship between the company and its customers retention rates, whether or not an integral improvement has been noted in the relationship between the company and its customers retention rates, whether or not an integral improvement has been noted in the relationship between the company and its customers satisfaction (SM Tseng, 2010).

2.3.10.3 Process-based Performance

It is organizational performance which is related with the efficiency, productivity, and effectiveness of the organization in ensuring smooth operations to meet its organizational goals. An insight is generated into the inter-connectivity, coherence, systematic relation-ship in the fuctions of the organization. It involves questions such as whether or not an integral improvement has been noticed in the overall efficiency and effectiveness of the organization, whether or not new products and services are launched by the company on right time, whether or not the company has launched and is managing

quality control projects timely, whether or not there are established procedures for the development of new products (SM Tseng, 2010).

2.3.10.4 People-development-based Performance

It is another sub-construct of organizational performance specefically related with the peoples perpective of an organization. It deals with the human resource part of the system. Employees of the organization receives primary importance in this area. The retention of employees, their rewards and punishments, their wages, their perks and privelliges, their turn-over, statisfaction, motivation, and capacity enhancement is brought into view. The skill enhancement, the capacity building, human resource development, promotions, efficiency in outputs of the trained and skilled employees are shed light on under this performance. It involves questions such as whether or not an integral improvement has been seen in the overall resource development of the company, whether or not an integral improvement has been seen in the skills of the company employees, whether or not an integral improvement has been seen in the company 's commitment to the technology, whether or not an integral improvement has been seen in the company 's commitment to the technological leadership, whether or not an integral improvement has been seen in the company's endeavors to ensure personnel development (SM Tseng, 2010).

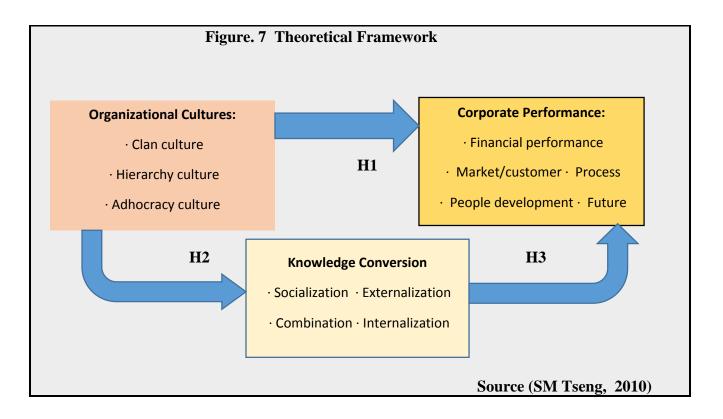
2.3.10.5 Futuristic Performance

It is an integral part of organizational performance dealing with the areas such as a vision of the organization to prepare for future challenges, the quality of strategic planning, the depth of strategic goals, partnership indicators, future alliances, and preparing for future environmental challenges. This element involves questions like, whether or not an integral improvement has been noticed in the company preparing for the future, whether or not an integral improvement has been seen in the quality of strategic planning of the company, whether or not an integral improvement has been noticed in the depth of the strategic planning of the company, whether or not an integral improvement has been seen in the partnership indicators of the company, whether or not an integral improvement has been noticed in the alliances indicators of the company, whether or not an integral improvement has been noticed in the company's preparations for environmental changes and their anticipation (SM Tseng, 2010).

• H3. Organizational Culture has significant effect on Organizational Performance.

2.4 THEORETICAL FRAMEWORK

The study has been evolved, based on the theoretical model, developed by Shu-Mei Tseng (2010), wherein three main constructs have been developed for the study; Organizational Culture, Knowledge Conversion (SECI Model), and Organizational Performance. Organizational Culture has three sub-constructs such as clan culture, hierarchy culture, and adhocracy culture. Knowledge Conversion has four dimensions (sub-constructs) like socialization, externalization, combination, and, internalization. Organizational Performance or Corporate Performance has five sub-dimensions (sub-constructs) i.e, financial performance, process, future, people development, and customer/ market. The model is adopted one as depicted below:



2.5 HYPOTHESES

On the basis of above mentioned conceptual framework, following hypotheses have been developed for the study:

- H1. Organizational Culture has significant effect on knowledge conversion process.
- H2. Knowledge Conversion has significant effect on Organizational Performance.
- H2.1. Knowledge Socialization significantly affects Organizational performance.
- H2.2. Knowledge Externalization significantly affects Organizational performance.
- H2.3. Knowledge combination significantly affects Organizational performance.
- H2.4. Knowledge internalization significantly affects Organizational performance.
- H3. Organizational Culture has significant effect on Organizational Performance.

SUMMARY OF THE CHAPTER

This chapter covered a literature review in detail on organizational culture (OC), knowledge conversion process (SECI model), and organizational performance (OP) as the main constructs of the study. The review also included the sub-constructs of OC (Clan, Adhocracy, Hierarchy cultures), SECI (Socialisation, Externalisation, Combination, Internalisation), and OP (Financial Performance, Market-customer-based Performance, Process-based Performance, People-development-based Performance, Futuristic Performance). The prior research dealing with these constructs and sub-constructs has been reproduced. Hypotheses have been developed for this study on the basis of previous studies, that have been tested in this research study. All the main constructs are reflected in diagrams. The relevant models and theories are also mentioned where needed. The positive role has been played by organizational culture in making the knowledge conversion a smooth and continuous process, leading the business organizations to perform better as a result, has been discussed in great details in the chapter.

Chapter No.3 RESEARCH DESIGN/ METHODOLOGY

Chapter 3. Methodology

The instant research study is conducted but not without a well thought-out design which is explained below:

Table-3.1 Technical Specifications of the empirical work

Sample	Employees of Telecom Companies of Balochistan
Scope	PTCL, Mobilink, and, Ufone Companies selected.
Sample Size	257 (employees of the selected companies).
Research Tool	Questionnaire (administered by hand).
Software	SPSS Version 21.
Fieldwork	January- February, 2020.

3.1 Conceptualizing and Operationalizing the Variables

3.1.1 Definition of Variables: The Variables are defined below:

- Organizational Culture (OC) "The culture of an organization is defined as the principles, shared values, and ways in which things are done by the members of organization. These are the factors which influence the actions of organizational members. The practices and shared values like these, being evolved over periods of time, influence the ways in which things are being done within the organization (Robbins S & Coulter, M., 2003).
- **Knowledge Management (KM):** The process under which knowledge of all kinds is managed continually in order to meet emerging and existing needs, by exploiting the acquired and existing assets of knowledge and for developing opportunities that are new, is called Knowledge Management (Quintas et al., 1997, p. 387).
- Knowledge Management Practices (KMP): A coordinating mechanism which makes
 the resources convertible into capabilities. These are actually knowledge
 management practices and behaviors that create this coordinating system. It is through this

system that people within the organization know about their jobs, they go for interpretation of information, and, come up with a response to the in-flowing information in the organization. Long term survival of the business organization is critically dependent upon knowledge management capability of the organization which must be effective (Nelson & Winter, 1982; Darroch, 2005).

- Knowledge Conversion Process (SECI Model) According to Professor Nonaka (1994), knowledge is converted, and can be so. This knowledge conversion takes place through a systematic process of four stages known as SECI Model. SECI stands for Socialization, Externalization, Combination, and Internalization. According to Nonaka and Takeuchi (1995), the process of knowledge conversion is spiral in nature, meaning that transformation of tacit into explicit, and re-transformation from explicit into tacit takes place. Tacit knowledge is codified or explicated on the basis of end result produced by spiral of knowledge conversion. The interactions between explicit knowledge and tacit knowledge give birth to that spiral. The knowledge conversion is a process which comprises four main modes such as Socialization (to convert tacit into new tacit knowledge), Externalization (to convert tacit into explicit knowledge), Combination (to convert explicit into more systematic and complex explicit knowledge), and Internalization (to convert explicit into tacit knowledge). It is a systematic process (SM Tseng, 2010).
- Organizational Performance (OP): Three framework are normally applied to conceptualize the term Organizational Performance (Ford & Schellenberg, 1982). OP is the attainment of those organizational goals which are explicit that emanated from organizational members behavior. This definition stresses on goal approach (Etzioni, 1964). OP is the main external and internal factors assessment on which the business

organization depends for its survival. This definition is focused on Systems-Resource Approach (Yuchtman & Seashore, 1967). OP or corporate performance is based on the main five elements such as financial performance (FP), Market/ Customer specific performance (Market/ Customer), Performance based on organizational efficiency and effectiveness (Process), Performance based on Human Resource Development (People Development), and, Performance based on futuristic vision (Future).

3.1.2 Operationalization of the Variables: the main variables used in this study are organizational culture (OC), knowledge conversion process (SECI Model), and organizational performance (OP). OC has further three sub-constructs i.e. Clan culture Hierarchy culture, and Adhocracy culture. Knowledge Conversion comprises main four sub-constructs such as Socialization, Externalization, Combination, and Internalization. OP has five further sub-constructs like financial performance (FP), Market/ Customer specific performance (Market/Customer), Performance based on organizational efficiency and effectiveness (Process), Performance based on Human Resource Development (People Development), Performance based on futuristic vision (Future).

These main constructs and their sub-constructs are measured on the basis of their different dimensions. The dimensions are definitely applied in the previous studies by different researchers and scholars.

For measurement of organizational culture (**OC**) of selected Telecom companies, 17 item scale used by Tseng, SM. (2010) has practically been adopted. All the 17 items represented clan, hirarchy, and adhocracy types of (perceived) organizational culture.

Similarly, 16 items that represented **Knowledge Conversion process**, including **Socialization, Externalization, Combination, and, Internalization**. The values derived from the **Cronbach Alpha** showed that all constructs and sub-constructs (**OC**; **0.83**, **KCP**; **0.86**, **OP**; **0.82**) represented favorable score. That demonstrated the internal consistency of the instrument is proven.

For measuring Organizational Performance (OP), 22 Items scale was utilized to represent the overall (perceived) corporate performance. Out of these 22, only 3 items represented Financial Performance, 4 items for Market/ Customer specific performance, 4 items for Performance based on organizational efficiency and effectiveness, 5 items for Performance based on Human Resource Development, 6 items represented the Performance based on futuristic vision. The answers obtained from five likert-scale have been applied from 1-5, starting from Strongly Dis-agree to Strongly Agree (1. Strongly disagree, 2. Disagree, 3. Neutral, 4. Agree, and 5. Strongly agree).

3.2 Type of Research Study

The data from the respondents was collected by conducting **quantitative research**, being of a structured kind, to go for formulation of facts.

3.3 Research Paradigm

The study is based on **positivistic philosophy**. Because, the figures and facts of this study are based on factual knowledge that has been taken from the existing literature available on the topic through a systematic review of the literature. The measurement of knowledge is done on the basis of response obtained from the respondents through the questionnaire dully filled in by them.

Thus, these selected respondents form the crucial part of targetted audience for this study. The reason to adopt this approach is clear and simple. The role of researcher in such type of studies is confined to the collection and analysis of the data only. The researcher tries to remain as much ojective as possible. He comes up with findings that are measurable, quantifiable as well as observable. In positivistic kind of study, deductive approach has normally been adopted, because, its focus moves from general information to specific area of the study. This kind of study starts from a broader spectrum to more specific area of special interest. Initially, extensive literature is reviewed and existing theories are studied in great details, the focus of the study gets narrowing down till it gets fixed on a specific topic at a lower level.

3.3.1 Justification based on deductive Reasoning

The study is undertaken on the basis of deductive reasoning as the findings of this study have moved from general information towards a more specific area of attraction. This is the telecom sector companies in Balochistan, Pakistan whose organizational culture, knowledge conversion, and organizational performance has been brought under consideration. Other than this, other sectors of Pakistani economy such as Information Technology, Construction, Industries, Manufacturing, Agriculture, and Production Services etc.

3.3.2 Nature of the Research Study

The nature of this study is explanatory. The data has been collected through cross-sectional design. The relationship between the independent variables(OC, SECI) and dependent variables (OP), and, their patterns, which is existing, has been investigated through developed hypotheses for this study. The research in this study is predictive and explanatory in nature.

3.4 Participants/ Subjects

This study has brought the employees of the major telecom companies of Balochistan as its target population. Pakistan Telecommunications Ltd (PTCL), Ufone, and Mobilink are the selected companies which operate in Balochistan, Pakistan.

3.5 Sampling Method

As employees of the selected companies are working in small number through-out Balochistan, a list of employees working in the companies was obtained through main head office in Quetta city. From that list a sampling frame was drawn as the population was known. Keeping in view the three companies with equal representation, the method used for sampling was "stratified random sampling". The reason for selecting this sampling method is, one, the population as a whole (employees of all the three companies) is heterogeneous, but, each stratum (employees of each company) is homogenous. Second, it is used for increasing the statistical efficiency of the sample. Third, each stratum is represented in the sample equally. Fourth, to analyze various strata, it has provided adequate data. The elements taken from each stratum constitute the sample which has been numbered serially. A table of random numbers was developed. The data was collected from respondents from all three selected telecom companies (PTCL, Ufone and Mobilink) at Ouetta.

3.6 Sampling Size

300 employees from the selected companies form the sample size who worked on top, mid, and lower managerial and staff level there, were selected on the basis of stratified sampling method which gives each stratum an equal chance of representation in the sample. The sample size is calculated through the following formula;

- (Number of items in the questionnaire $\times 10$) = $10 \times 10 = 100$ (for each stratum).
- 100+100+100=300 (Adding up)
- Sample Size = 300 respondents.

 (the calculated one)
- Questionnaires invalid or not received back = 43 (300-43= 257)
- Hence, N = 257 (actual sample size).

3.6.1 Instruments/Tools of Data Collection

For this study, an adopted questionnaire was applied. This tool has been taken from the study of Tseng, SM (2010). The tool carried close-ended questions on respondents' demographics, organizational culture; clan, hierarchy, and adhocracy culture (OC), Knowledge Conversion (SECI), and organizational performance (OP). OP comprises items on financial performance (FP), Market/Customer specific performance (Market/Customer), Performance based on organizational efficiency and effectiveness (Process), Performance based on Human Resource Development (People Development), Performance based on futuristic vision (Future), as already applied by Tseng, SM (2010). All the dimensions are perceptual in nature. The validity of items scale has been established by Tseng, SM (2010). To answer the question of why this tool is selected, lies in the fact that this tool or questionnaire is easiest and most popular among the respondents. It has had a good record of better results within the available constraints of cost and time.

3.6.2 Data Processing, Analysis Techniques and Interpretation

Questionnaires of final survey received back after respondents filled them in. After checking them for errors and ommisions, the forms were rectified after removing the errors. The data was processed into SPSS Software, version 21. Frequency distribution was generated for nominal scale data. The values of mean and standard deviation were obtained after conducting statistical descriptive analysis. After checking, the relations between the variables was identified by applying analysis of Pearson's correlations coefficient. To examine and check the impact of OC on SECI and OP, linear regression was applied. Similarly, examining the impact of SECI on OP, an other linear regression model was run to perform the analysis.

Summary of the above Chapter

This chapter is about the research design and methodology adopted for this study. This shows how data collection and subsequent analysis was carried out for meeting the research objectives of this study. This chapter has 9 sub-chapters or sections to shed light on the design of the study. Section 3.1 shows the conceptualization and operationalization of variables of this study. Section 3.2 shows the type of research of this study. Section 3.3.1 is about the paradigm of research study. Section 3.3.2 explains nature of the study. Section 3.4 discusses participants and subjects of the study. Section 3.5 deals with the sampling techniques. 3.6 shows sample size of the study. Section 3.6.1 shows data collection instruments. Section 3.6.2 demonstrates the data processing, analysis and interpretation. In the last part section 3.7 describes summary of the chapter.

Chapter No.4 RESULTS FROM DATA-ANALYSIS

4 RESULTS OF DATA ANALYSIS

Overall this chapter number 4 is dealing with the results obtained from the analysis of the data based on the questionnaires. At first, the results of demographic analysis is discussed, the statistics of the respondents is mentioned in detail there in section 4.1. The descriptive analysis is following the demographic one. The descriptive statistics comprising the frequency and percentage related to the main constructs of the study (OC, SECI, and OP) are noted under separate tables in section 4.2,4.3, 4.4, and 4.5. After the above mentioned analysis results, Section 4.6 details the results of reliability analysis on the basis of Cronbach's Alpha values, where the reliability of the scale is discussed. Similarly, the results of data normality test are described under section 4.7. Additionally, the results of Correlation Analysis are given in section 4.8 of the chapter. Multiple regression analysis results given in section 4.9.1, 4.9.2, and 4.9.3 clarify that model significance has been recognized with the ANOVA performance for each regression model like 1, 2 and 3. Here the percentage of variations has been explained by the independent variables by calculating the value of adjusted R² within the models. At the end, the results of regression models are described falling under the Section 4.9 of the Chapter, which is followed by the summary of the results.

4.1 Demographic Analysis

This research study has the instrument the title of which has carried the demographic questions like gender, name, age, experience, qualification, job status etc. The demographic profile of the subjects or respondents of the study is fully mentioned in Table 4.1. These respondents are the employees working in the selected companies.

Table-4.1 Demographic profile of the respondents of the Study

Category		Frequency	Percentage
Gender	Male	212	82.49
	Female	45	17.50
Age	18-30 Years	109	42.41
	31-40 Years	68	26.45
	41-50 years	55	21.40
	Above 50 Years	25	9.72
Qualification	Bachelor	150	58.36
	Master	78	30.35
	Special Education	29	11.28
Work Experience	1-2 years	48	18.67
(Yrs.)	3-4 Years	98	38.13
	5-6 Years	89	34.63
	7 Years & Above	22	8.56
Job Status	Working	257	100
N= 257			

It is pointed out that only those employees who worked on managerial, supervisory, and financial positions, were accessed, being posted in Quetta city headquarters. Due to space, cost and time constraints, and convenience, they were given full focus. They were given questionnaires by hand with the help of main offices in Quetta. They returned the questionnaires, after fully filling in, from different locations of the city. The percentage of female respondents is lower than their

male counterparts due to peculiar culture and traditional society in Balochistan. The number of female respondents is 45 compared to males being 212 in number, This the percentage of female respondents is 17.50% vis-à-vis that of males which is 82.49% of the sample size (as shown by the table 4.1 above).

Similarly, the age-group of the respondents remained 18-30 years (109), 31-40 years (68), 41-50 years (55), and 7 years and above(25) respectively. It is demonstrated by the results in Table 4.1 above, that most respondents have bachelors as qualification (58.36%), masters (30.35%), Special education (11.28%) respectively. While, working experience of the respondents is mostly 3-4 years (38.13%), being 98 in number, and 5-6 years (34.63%), being 89 in number respectively. Yet, 1-2 year experience holders are 48 in number forming (18.67%). The respondents with 7 years and above experience have been 22 in number, (being 8.56%) of the sample size (as described by Table 4.1).

4.2 Descriptive Analysis

The analysis which takes into consideration the physical characteristics of working environment of the selected companies or organizations is called descriptive analysis. It is based on the statistics obtained through the frequency and percentage frequency of the responses of the respondents against each question given in the questionnaires. This is an analysis of the recorded responses within the questionnaires. This approach shows the percentage frequency and simple frequency of responses. That is followed by a detailed discussion on each question and its subsequent response. There are statements for each item of the constructs given in the questionnaire, which are duly marked by each of the respondents within the respective questionnaire. Following are the results of descriptive analysis of this study.

Table 4.2 Descriptive Statistics of OC, SECI & OP (N=257)

CONSTRUCT	MEAN	STD. DEVIATION
Organizational Culture	4.7667	0.688
Knowledge Conversion Process:		
Socialization process	3.7956	0.567
Externalization process	3.0891	0.942
Combination process	3.8123	0.663
Internalization process	3.057	0.944
Organizational Performance:		
Financial Performance	4.3263	0.534
Market-Customer	4.0126	0.712
Process	3.0017	0.905
People Development	3.024	0.838
Future	3.0266	0.992

Table 4.2 shows that most of the respondents agreed that organizational culture, and, knowledge conversion, affect organizational performance. They also agree that these constructs exist to make the organization a successful entity. The mean and standard deviation values suggest that most of the respondents expressed their interest and opinion in favour of the main constructs of the study existing within the selected companies of Telecom sector in Balochistan. the results of the Table 4.2 clarifies that the percentage of disagreed respondents is minimal or negligible to deny the existence of these constructs within the companies.

4.3 Frequency/ Percentage Analysis of OC Items

The frequency/percentage analysis in respect of Organizational Culture (OC) items is discussed below through the help of following table:

 Table 4.3
 Frequency (Percentage) of Organizational Culture (OC) Items

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
	f (% f)				
OCQ1: The working environment of the					
company has been harmonious to some extent.	22 (8.56)	28(10.89)	52 (20.23)	66(25.68)	89 (34.63)
OCQ2:The company has an open					
environment to a certain extent	57 (22.18)	59(22.96)	34(16.73)	64(24.90)	43 (16.73)
OCQ3: The workers of the company support					
each other highly	35 (13.62)	41(15.95)	52(20.23)	66(25.68)	63 (24.52)
OCQ4: The workers of the company believe					
in one another strongly	36 (14.00)	55(21.40)	22 (8.56)	89(34.63)	55 (21.40)
OCQ5:The company offers a good place					
to share things with others as a family.	33(12.84)	22(8.56)	35 (13.62)	87(33.85)	80 (31.13)
OCQ6:The company shows respect					
for participation of every worker.	34(13.23)	23 (8.95)	31(12.06)	103(40.08)	66 (25.68)
OCQ 7: The company respects					
team spirit always.	36 (14.00)	22(8.56)	55(21.40)	55(21.40)	89 (34.63)
OCQ 8:The working attitude of the					
workers has been found more conservative					
compared to those of other companies.	6 (2.33)	22 (8.56)	74(28.79)	66(25.68)	89 (34.63)
OCQ 9: The workers attitude here is more					
averse to revolutions and changes					
in comparison of other companies workers.	6 (2.1)	13(4.6)	65 (22.9)	133(46.8)	67 (23.6)
OCQ 10: The workers attitude here is more					
averse to revolutions and changes in					
comparison of other companies workers.	89(34.63)	66 (25.68)	22(8.56)	52(20.23)	28(10.89)
OCQ 11: The company has extremely					
formalized structure.	23 (8.95)	28 (10.89)	31(12.06)	101(39.30)	74 (28.79)
OCQ 12: The company has intensely					
structurized framework or skeleton.	34 (13.23)	46 (17.90)	42(16.34)	80(31.13)	55(21.40)
OCQ 13: The company manages the					
tasks of its workers on the basis of					
certain procedures.	31 (12.06)	66(25.68)	23(8.95)	34(13.23)	103(40.08)
OCQ 14: The company workers conduct					

remains more stable, mature and cautious.	16(6.23)	20(7.82)	20 (7.82)	40(15.56)	161(62.65)
OCQ 15: R&The company conduct is more					
caring, respectful, and responsible.	45(17.51)	41(15.95)	66(25.68)	70(27.24)	35(13.62)
OCQ 16: The company is unwilling to					
take high risks.	52 (20.23)	23(8.95)	66 (25.68)	74(28.79)	2(16.34)
OCQ 17: The company is also not willing to					
accept revolutions or changes of higher scale.	22(8.56)	52(20.23)	28(10.89)	66(25.68)	89(34.63)

It is clear from the above (table 4.3) that 60.31% respondents knew that the working environment of the company had been harmonious to some extent under OCQ1. Similarly, 41.63 % endorsed that the company had open environment to a certain extent in OCO2. Further 50.2 % agreed that the workers of the company supported each other highly under OCQ3. There are 56.05 % respondents under OCQ4 who recognized that the workers of the company believed in one another strongly. Under OCQ5, most of the subjects 64.98 % made it clear that the company offered a good place to share things with others as a family. Those who responded in positive to OCO6 that the company showed respect for participation of every worker, were 65.76%. Those who agreed with OCQ7: The company respected team spirit always, formed 56.03% of the respondents. Under OCQ 8: The working attitude of the workers had been found more conservative compared to those of other companies, the percentage of the respondents remained 60.31. Additionally, under OCQ 9: The workers attitude was not averse to revolutions and changes, 70.4 % knew about it. 60.30% respondents had knowledge that the workers attitude in the company was more averse to revolutions and changes in comparison of other companies workers under OCQ10. Under OCQ11, 68.09% showed agreement that the company had extremely formalized structure. In response to OCQ 12: The company had intensely structurized framework or skeleton, 52.53% endorsed the statement. Almost 53.31% agreed to OCQ13 that the company managed the tasks of its workers on the basis of certain procedures. Out of all respondents 78.21% agreed that conduct of the workers of the company remained more stable, mature, and cautious under OCQ14. In OCQ 15, 33.46% respondents disagreed with the statement that the company conduct was more caring, respectful, and responsible, while, 40.86 % agreed and endorsed the statement. In second last question, 45.13 % saw eye to eye with OCQ 16, that the company was unwilling to take high risks. At last, 60.31% accepted the statement that the company was also not willing to accept revolutions or changes of higher scale. Hence, overall results from the responses of the respondents demonstrated that almost 60% endorsed that organizational culture had significant impact over the company performance (as shown in Table 4.3).

4.4 Frequency/ Percentage Analysis of SECI Items

The frequency/percentage analysis in respect of Knowledge Conversion (SECI) items is given below with the help of following table:

Table 4.4 Frequency (Percentage) of Knowledge Conversion (SECI) Items

	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
	f (% f)	f (% f)	f (% f)	f (% f)	f (% f)
KCQ1: Workers of this company are always					
willing to share their personal					
emotions with others.	34 (13.23)	23 (8.95)	31(12.06)	103(40.08)	66(25.68)
KCQ2: This company workers are willing to					
share their personal feelings with others.	36(14.00)	22(8.56)	55(21.40)	55(21.40)	89(34.63)
KCQ3:The workers of this company are					
always ready to share their personal					
experiences with others.	6(2.33)	22 (8.56)	74(28.79)	66(25.68)	89(34.63)
KCQ4: The company workers are willing					
to express their personal Knowledge					
through spoken language.	89(34.63)	66 (25.68)	22(8.56)	52(20.23)	28 (10.89)
KCQ5: The workers of the company are					
always willing to Express their personal					
Knowledge through written language.	6 (2.1)	13 (4.6)	65 (22.9)	133(46.8)	67(23.6)

KCQ6: Workers express their					
Knowledge, which is in-communicable,					
through analogies.	89 (34.63)	66 (25.68)	52 (20.23)	22(8.56)	28(10.89)
KCQ7: The company workers Express					
their in-communicable knowledge					
through the help of examples.	43(16.73)	64(24.90)	34 (13.23)	59(22.96)	57(22.18)
KCQ8: The workers can communicate					
, combine and exchange					
Knowledge through documents.	35 (13.62)	41 (15.95)	52(20.23)	66(25.68)	63(24.52)
KCQ 9: The workers can communicate,					
combine and exchange					
Knowledge through telephones.	36(14.00)	55(21.40)	22(8.56)	89(34.63)	55(21.40)
KCQ10:The workers can communicate,					
combine and exchange Knowledge					
through computer networks.	33(12.84)	22 (8.56)	35(13.62)	87(33.85)	80(31.13)
KCQ11: The workers can communicate,					
combine and exchange Knowledge					
through computer internet	66 (25.68)	52(20.23)	22 (8.56)	89 (34.63)	28(10.89)
KCQ12: This The workers can					
communicate, combine and					
exchange Knowledge					
through computer intranet.	33 (12.84)	35 (13.62)	22(8.56)	80 (31.13)	87 (33.85)
KCQ 13: The company workers can					
re-classify and re-combine the existing					
information in order to create					
new Knowledge.	52 (20.23)	23 (8.95)	66 (25.68)	74 (28.79)	42 (16.34)
KCQ 14: Knowledge in this					
company is always communicated					
to the workers verbally.	22 (8.56)	35 (13.62)	15 (5.84)	103(40.08)	82 (31.91)
KCQ 15: Knowledge to the workers					
is communicable through stories.	42 (16.34)	46 (17.90)	34 (13.23)	55 (21.40)	80 (31.13)
KCQ 16: Knowledge is gathered					
and arranged in a manual to provide					
excellent training for cultivating					
workers Knowledge.	45 (17.51)	41(15.95)	35 (13.62)	70 (27.24)	66 (25.68)

The above given table shows clearly that 65.76 % respondents endorsed the statement under KCQ1, that workers of the company were always willing to share their personal emotions with others. Secondly, 56.03 % accepted KCQ2 which stated that the company workers were willing to share their personal feelings with others. Under KCQ3, 56.03 % knew that the workers of this company were always ready to share their personal experiences with others. In KCQ4, which stated that the company workers were willing to express their personal knowledge through spoken language, 31.12 % agreed. Under KCQ5, 70.4% showed agreement that the workers of the company were always willing to express their personal knowledge through written language. Further, in response to KCQ6: workers expressed their knowledge, which was in-communicable, through analogies, 19.45% respondents confirmed the statement. As far the statement under KCQ7: The company workers expressed their in-communicable knowledge through the help of examples, 45.14 % agreed. Under KCQ8: The workers could communicate, combine and exchange knowledge through documents, 50.2% endorsed the statement. In case of KCQ9 which stated that the workers could communicate, combine and exchange knowledge through telephones, the percentage of agreed responses remained 56.03. Under KCQ10: 64.98% respondents accepted that workers could communicate, combine and exchange knowledge through computer networks. As far KCQ11: The workers could communicate, combine and exchange knowledge through computer internet, the agreed respondents formed 45.52%. Under KCQ12, 64.98% endorsed that the company workers could communicate, combine and exchange knowledge through computer intranet. In KCQ 13: The company workers could re-classify and re-combine the existing information in order to create new knowledge 45.13% showed agreement. In response to KCQ 14: Knowledge in the company was always communicated to the workers verbally, most respondents (71.99%) confirmed and verified the statement. In KCQ 15, which stated that

knowledge to the workers was communicable through stories, the percentage of agreed respondents was reported as 52.53%. In response to KCQ 16 (knowledge is gathered and arranged in a manual to provide excellent training for cultivating workers knowledge), 52.92% confirmed and endorsed the statement. As a consequence, the percentage of agreed respondents is more than 50% in total 257 respondents (as is clear in Table 4.4)

4.5 Frequency/ Percentage Analysis of OP Items

The frequency/percentage analysis in respect of Organizational Performance (OP) items is reproduced below.

Table 4.5 Frequency (Percentage) of Organizational Performance (OP) Items

Strongly	Disagree	Neutral	Agree	Strongly
Disagree				Agree
f (% f)	f (% f)	f (% f)	f (% f)	f (% f)
31(12.06)	28 (10.89)	23 (8.95)	101 (39.30)	74(28.79)
66 (25.68)	5(1.95)	3(1.17)	103(40.08)	80(31.13)
17(6.61)	20(7.78)	21 (8.17)	36(14.00)	163 (63.42)
51 (19.84)	41(15.95)	54(21.01)	56 (27.78)	55(21.40)
20(7.78)	24(9.34)	43(16.73)	19(7.39)	151 (58.75)
55(21.40)	46(17.90)	42 (16.34)	80(31.13)	34(13.23)
	Disagree f (% f) 31(12.06) 66 (25.68) 17(6.61) 51 (19.84)	Disagree f (% f) 31(12.06) 28 (10.89) 66 (25.68) 5(1.95) 17(6.61) 20(7.78) 41(15.95) 20(7.78)	Disagree f (% f) f (Disagree f (% f) f (% f) f (% f) 31(12.06) 28 (10.89) 23 (8.95) 101 (39.30) 66 (25.68) 5(1.95) 3(1.17) 103(40.08) 17(6.61) 20(7.78) 21 (8.17) 36(14.00) 51 (19.84) 41(15.95) 54(21.01) 56 (27.78) 20(7.78) 24(9.34) 43(16.73) 19(7.39)

company and its customers satisfaction.	35(13.62)	41(15.95)	52(20.23)	66(25.68)	63(24.52)
OPQ8: An integral improvement has been					
noticed in the overall efficiency and					
effectiveness of the company.	34(13.23)	23(8.95)	25(9.73)	101(39.30)	74(28.79)
OPQ9: New products and services are					
launched by the company					
on right time.	22(8.56)	35(13.62)	15 (5.84)	103 (40.08)	82(31.91)
OPQ10: The company has launched					
and is managing quality control					
projects timely.	27(10.51)	43(16.73)	22 (8.56)	87(33.85)	78(30.35)
OPQ11: There are established					
procedures for the development					
of new products.	20 (7.78)	23 (8.95)	89 (34.63)	74 (28.79)	51(19.84)
OPQ12: An integral improvement has					
been seen in the overall resource					
development of the company.	35 (13.62)	41 (15.95)	52 (20.23)	66(25.68)	63(24.52)
OPQ13: An integral improvement has					
been seen in the skills of the					
company employees	87(33.85)	78(30.35)	22 (8.56)	43 (16.73)	27(10.51)
OPQ14: An integral improvement has					
been seen in the company 's					
commitment to the technology.	34(13.23)	23(8.95)	25(9.73)	101 (39.30)	74 (28.79)
OPQ15: An integral improvement has					
been seen in the company 's					
commitment to the					
technological leadership.	22(8.56)	35 (13.62)	15(5.84)	103(40.08)	82 (31.91)
OPQ16: An integral improvement has					
been seen in the company 's					
endeavors to ensure					
Personnel development.	55(21.40)	46 (17.90)	42(16.34)	80(31.13)	34(13.23)
OPQ17:An integral improvement has					
been noticed in the company					
preparing for the future.	20 (7.78)	24(9.34)	19(7.39)	151(58.75)	43(16.73)
OPQ18: An integral improvement has					
been seen in the quality of					
strategic planning of the company.	54(21.01)	41(15.95)	51 (19.84)	55(21.40)	56(27.78)
OPQ19: An integral improvement has					

been noticed in the depth of the					
strategic planning of the company.	17(6.61)	20(7.78)	21 (8.17)	36(14.00)	163(63.42)
OPQ20: An integral improvement has					
been seen in the partnership					
indicators of the company.	103(40.08)	80(31.13)	66 (25.68)	5(1.95)	3(1.17)
OPQ21: An integral improvement has					
been noticed in the alliances					
indicators of the company.	74(28.79)	101(39.30)	28 (10.89)	23(8.95)	31(12.06)
OPQ22: An integral improvement has					
been noticed in the company's					
preparations for environmental					
changes and their anticipation.	17(6.61)	23(9.00)	14 (5.4)	54(21.00)	149(58.00)

Table 4.5 has clearly shown 68.09% of respondents endorsed OPQ1, which stated that an integral improvement had been seen in the sales of the company. Under OPQ2: An integral improvement had been seen in the profits of the company, the respondents who agreed was 71.21%. In OPQ3: An integral improvement had been seen in the return on investment of the company, was confirmed by 77.42% respondents. Similarly, 49.18 % expressed agreement with OPQ4: An integral improvement in the relationship between an organization and its customers had been noticed. In response to OPQ5: An integral improvement had been noted in the relationship between an organization and market share of the company, the agreed respondents constituted 66.14%. In OPO6: An integral improvement had been noted in the relationship between the company and its customers retention rates, the percentage remained at 44.36%. As far as OPQ7 is concerned, 50.2% respondents agreed that an integral improvement had been noted in the relationship between the company and its customers satisfaction. Further, under OPQ8, 68.09% endorsed the statement that an integral improvement had been noticed in the overall efficiency and effectiveness of the company. In response to OPQ9 (new products and services were launched by the company on right time) 71.99% showed agreement. Under OPQ10, which stated that the company has launched and is managing quality control projects timely, 64.2 % responded in positive. In response to OPQ11, 48.63% verified that there were established procedures for the development of new products. To answer OPQ12, 50.2% agreed that an integral improvement had been seen in the overall resource development of the company. While, responding to OPQ13 (an integral improvement had been seen in the skills of the company employees), 27.24% endorsed the statement. Further more, under OPQ14, 68.09% accepted that an integral improvement had been seen in the company's commitment to the technology. Replying to OPQ15, which stated that an integral improvement had been seen in the company's commitment to the technological leadership, 71.99% endorsed the statement. In OPQ16, 44.36% agreed that an integral improvement had been seen in the company's endeavors to ensure personnel development. In response to OPQ17 (an integral improvement had been noticed in the company preparing for the future), 75.48% verified the statement in positive. Under OPO18, which stated that an integral improvement had been seen in the quality of strategic planning of the company, 49.18% endorsed the statement. In response to OPQ19: an integral improvement had been noticed in the depth of the strategic planning of the company, was confirmed by 77.42% respondents. Under OPQ20, 3.12% agreed that an integral improvement had been seen in the partnership indicators of the company. In response to OPQ21 (an integral improvement had been noticed in the alliances indicators of the company), 21.01 % of the respondents reported agreed response. Lastly, in OPQ22 which stated that an integral improvement had been noticed in the company's preparations for environmental changes and their anticipation, 79.00% respondents endorsed the statement. Hence, the overall picture of the results from the responses of the respondents made it clear that most of the respondents 67% endorsed the statement that OC, SECI, and OP really existed within the selected companies (See Tables 4.3, 4.4, and 4.5).

4.6 Analysis of the Reliability of the Scale

The results of analysis of the reliability of scales are presented below:

Table-4.6 Summary of the Reliability of Scale Analysis

CONSTRUCT	NO. OF ITEMS	CRONBACH'S ALPHA
Organizational Culture (OC):	17	0.82
Clan Culture	6	0.634
Hierarchy Culture	5	0.734
Adhocracy Culture	6	0.773
Knowledge Conversion (SECI):	16	0. 81
Socialization process	3	0.691
Externalization process	4	0.624
Combination process	5	0.731
Internalization process	4	0.772
Organizational Performance (OP)	22	0.87
Financial Performance	3	0.811
Market-Customer	4	0.741
Process	4	0.832
People Development	5	0.821
Future	6	0.762

Under the Table 4.6, the reliability tests were carried out in respect of all the three main and sub-constructs of the study. The measurement of consistency relating to all the scales of the study has been executed. Test was performed for each of the variables separately. The value of Cronbach 'a Alpha for each individual variable had been obtained as noted in the above table. The values of the main constructs like Organizational Culture (17 items scale), Knowledge Conversion (16 items scale), and Organizational Performance (22 items scale) was recorded as 0.82, 0.81, and

0.87 respectively. It is established by the tests that the scale used in the instrument has been suitable to measure the constructs given in this study. It is clarified by the results that the Cronbach Alpha Coefficient values of all the three constructs remained above 0.80.

In order to check the reliability of the constructs of the study and their internal consistency, Cronbach's Alpha has been applied. Table 4.6 above has been showing the Cronbach's Alpha values for the sample. 257 questionnaires have been returned by the respondents out of 300. The questionnaires not received back were 43. The response rate remained 0.85 % overall.

4.7 Normality Test of the Data

The results of data normality test are reproduced below.

Table-4.7 Data Normality Test

	Kolmogorov-Smirnov ^a					
CONSTRUCTS	Statistic	df	Sig.			
Organizational Culture (OC)	.050	257	.201			
Knowledge Conversion (SECI)	.051	257	.200			
Organizational Performance (OP)	.054	257	.057			

The Table 4.7 shows the results of K-S test (one-one sample) which was applied to determine the data normality. It is demonstrated by the results that OC (Organizational Culture) Scale was 0.201 where P is greater than 0.05. Similarly, the value of Knowledge Conversion (SECI) scale was 0.200 (P is again more than 0.05). On similar lines, the value of OP (Organizational

Performance) scale was recorded as 0.057. Here P is again greater than 0.05. Hence, all three values are greater than 0.05 which means these are significant. All that demonstrates the normal distribution of the data.

4.8 Results of Correlations Analysis

To find out the relationship among the variables, correlation analysis was performed to measure the inter-relationship of the variables of the study.

4.8.1 Correlation Analysis between OC and SECI

Table 4.8.1 given below shows the relationship between OC (organizational culture) and SECI (knowledge conversion process) as the main constructs of the study, their level of significance (p) as well as Pearson's correlation coefficient (r). For r, minimum and maximum value required was between 1 and -1. The results showed that no variable could get the value of r equal to 1 or more than 1. It is, therefore, established that no multi-collinearity was found to exist among the variables during the correlation analysis.

Table-4.8.1 Correlation Matrix OC & SECI (N= 257)

		Knowledge Conversion (SECI)	Clan Culture	Hierarchy Culture	Adhocracy Culture
Knowledge Conversion (SECI)	Pearson Correlation Sig. (2-tailed)	1			
	N	257			
Clan Culture	Pearson Correlation	.813**	1		
Culture	Sig. (2-tailed)	.000			
	N	257	257		
Hierarchy Culture	Pearson Correlation	.826**	.845**	1	
Culture	Sig. (2-tailed)	.000	.000		
	N	257	257	257	
Adhocracy Culture	Pearson Correlation	.801**	.810**	.839**	1
Cultule	Sig. (2-tailed)	.000	.000	.000	
	N	257	257	257	257

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

4.8.2 Correlation Analysis between SECI and OP

Similarly, another correlation analysis was conducted to check the relationship between Knowledge Conversion (SECI) and Organizational Performance (OP) of the selected companies. Table 4.8.2 shows the relationsip with the level of significance (p) as well as Pearson's correlation coefficient (r) values for these variables. For Pearson's correlation coefficient (r), the minimum-maximum value range is the same (between 1 and -1). Therefore, the result is crystal-clear with no

variable having value equal to 1 or more than 1. Hence, no multi-collinearity was seen at the time of correlation analysis was being carried out (see Table 4.8.2)

Table-4.8.2 Correlation Matrix SECI & OP (N= 257)

		Organizational Performance	Socialization	Externalization	Combination	Internalization
Organizational Performance	Pearson Correlation Sig. (2-tailed)	1				
	N	257				
Socialization	Pearson Correlation	.829**	1			
	Sig. (2-tailed)	.000				
	N	257	257			
Externalization	Pearson Correlation	.768**	.626**	1		
	Sig. (2-tailed)	.000	.000			
	N	257	257	257		
Combination	Pearson Correlation	.811**	.813**	.842**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	257	257	257	257	
Internalization	Pearson Correlation	.796**	.626**	.687**	.558**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	257	257	257	257	257
**						

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

4.8.3 Correlation Analysis between OC and OP

On similar lines, one more correlation analysis was conducted to check the relationship between Organizational Culture (OC) and Organizational Performance (OP) of the selected companies. Table 4.10 shows the relationsip with the level of significance (p) as well as Pearson's correlation coefficient (r) values for these variables. For Pearson's correlation coefficient (r), the

minimum-maximum value range is the same (between 1 and -1). Therefore, the result shows that no variable having value equal to 1 or more than 1 (see Table 4.8.3).

Table-4.8.3 Correlation Matrix OC & OP (N= 257)

		Organizational Performance	Clan Culture	Hierarchy Culture	Adhocracy Culture
Organizational Performance	Pearson Correlation	1			
	Sig. (2-tailed)	257			
Clan Culture	Pearson Correlation	.796**	1		
Culture	Sig. (2-tailed)	.000			
	N	257	257		
Hierarchy Culture	Pearson Correlation	.836**	.865**	1	
	Sig. (2-tailed)	.000	.000		
	N	257	257	257	
Adhocracy Culture	Pearson Correlation	.811**	.813**	.842**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	257	257	257	257

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

It is clarified by Tables 4.8.1, 4.8.2, and 4.8.3 that positive correlation was found to exist between OC and SECI, SECI and OP, and OC and OP. Here the p-value is lesser than 0.01 (p < 0.01). Hence, the above matrices confirm that there is direct relationship between the variables, the more the robust OC (organizational culture), the better the knowledge conversion, and improved OP (organizational performance) will follow, and, the more the knowledge conversion process implemented, the more the improved performance (OP) will emanate, from the

organizations. The telecom sector of Balochistan may get even better performance within smooth knowledge conversion processes which keep more focus on learning culture.

4.9 Linear Regression Analysis Results:

Linear regression is conducted to analyze the impact which independent variable has exerted over the dependent variable. This is done on individual basis. The details follow which is given below:

4.9.1 Regression Model-I

Linear regression analysis was carried out under Model-1 to determine and analyze the impact of independent variable (OC) on dependent variable (SECI) on one-one sample basis.

4.9.1.1 Regression Model-I developed for Organizational Culture (OC)

Linear regression Model-1 has been developed for dependent variable (SECI) by using Three sub-constructs of Organizational Culture (Clan, Hierarchy, Adhocracy Cultures). Similarly, ANOVA has been performed to determine the Coefficient and analyze the model significance. The percentage of variations which has been explained by the independent variable (OC), in the model-1 has been obtained through the adjusted value of R².

4.9.1.2 Regression Analysis of SECI.

In order to measure and verify the association between the independent variable (OC) and the dependent variable (SECI), linear regression analysis is simply carried out. Under regression Model-1, SECI has been taken as a dependent variable, and OC, being the independent variable. The relationship has been clarified by the following table.

Table.4.9.1 Summary of the model

				Std. Error
Model	R	R Square	Adjusted R	of
			Square	the
				Estimate
1	.469a	.220	.216	.81250

Predictors: (Constant), Clan-culture, Hierarchy-culture, Adhocracy-culture.

Table- 4.9.1 makes it clear that more focus may be placed on the values of R and R^2 . Correlation of high degree has been noticed as the value of R (0.469). The value of R^2 shows how much variation is caused by independent variable (OC), in the dependent variable (OP) and what is its degree. Here the value of R^2 is 0.220 and the value of Adjusted R^2 is 0.216 (21.6% variation is being explained).

Table-4.9.1.1 ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151.917	3	47.796	266.219	.000 ^b
	Residual	35.332	285	.772		
	Total	187.249	288			

- a. Dependent Variable: Knowledge Conversion (SECI)
- b. Predictors: (Constant), clan-culture, Hierarchy-culture, Adhocracy-culture

Table-4.9.1.1 is called ANOVA Table which shows that the regression equation in respect of Model-1 has been found fully compatible with the data. The dependent variable (SECI) has been predicted well by the regression Model-1 which is significant. Because the P-value has been reported as 0.000. It shows the p value is lesser than 0.05 (p < 0.05). The outcome variable has been statistically and significantly predicted by the regression Model-1 (see Table 4.9.1.2).

The Coefficient Table makes the situation further clear.

Table-4.9.1.2 Coefficients^a

	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
Model					
1 (Constant)	8.387	.049		3.719	.000
Clan Culture	.271	.038	.110	2.370	.001
Hierarchy Culture	.215	.030	.142	3.276	.001
Adhocracy Culture	.586	.022	.289	4.631	.000

a. Dependent Variable: Knowledge Conversion (SECI)

Table-4.9.1.1 has provided values which successfully predicted SECI from OC. It has clearly demonstrated that OC statistically as well as significantly contributed towards SECI. It is suggested by the results of the above Table (4.9.1.2) that the values of t = (2.370 + 3.276 + 4.631 = 10.277), $B = (0.271 + 0.215 + 0.586 = 1.072 \div 3 = 0.357)$, and p = 0.000. The results indicate that one unit increase in OC causes 0.357 units increase in SECI. Thus, the hypothesis which states that OC has significant impact on SECI, is correct. Positive relationship has been seen between the main two variables (OC & SECI). Following regression equation is developed for model-1 on the basis of above contention:

Table-4.9.1, and, 4.9.1.1 show favorable results have been obtained by applying usual and diagnostic statistics. The value of Adjusted R² has clearly indicated this which remained as 21.6 %. It has demonstrated that 21. 6 % variation is caused in dependent variable (SECI) due to variation in independent variable (OC). Secondly, F-value reported as (266.219) is higher than the value of Adjusted R² (26.6 %). The value of adjusted R² is critical. The veracity of the model has been proven. The significance of the model-1 has been estimated, established, and verified. Hence, the model is statistically accepted and empirically approved. The regression analysis results have proven that direct and positive relationship existed between OC and SECI, as the value of coefficients is equal to 0. 357 (that significant level is 0.01).

4.9.2 Regression Model-II

Linear regression analysis was carried out under Model-2 to determine and analyze the impact of independent variable (SECI) on dependent variable (OP) on one-one sample basis.

4.9.2.1 Regression Model-II developed for SECI.

Linear regression Model-2 has been developed for dependent variable (OP) by using four sub-constructs of Knowledge Conversion process (Socialization, Externalization, Combination, and, Internalization) called SECI model. ANOVA has been performed to determine the Coefficient and analyze the model significance. The percentage of variations which has been explained by the independent variable (SECI), in model-2 has been obtained through the adjusted value of R².

4.9.2.2 Regression Analysis of OP.

In order to measure and verify the association between the independent variable (SECI) and the dependent variable (OP), linear regression analysis is simply carried out. Under regression

Model-2, OP has been taken as a dependent variable, while, SECI being the independent variable. Table below further clarifies the relationship.

Table-4.9.2 Summary of the model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.914a	.836	.833	.34280

a. Predictors: (Constant), Socialization - externalization, Combination internalization.

Table-4.9.2 makes it clear that more focus may be placed on the values of R and R^2 . Correlation of high degree has been noticed with the value of R (0.914). The value of R^2 shows how much variation is caused by independent variable (SECI) in the dependent variable (OP) and what is its degree. Here the value of R^2 is 0.836 and the value of Adjusted R^2 is 0.833 (83.3% variation is being explained).

Table-4.9.2.1 ANOVAb

Model		Sum of Squares	df	Mean Square	F	Sig.
2	Regression	176.133	4	35.227	299.766	.000 ^b
	Residual	34.666	265	.118		
	Total	210.799	269			

- a. Dependent Variable: Organizational Performance
- b. Predictors: (Constant), Socialization -externalization, Combination-internalization.

Table-4.9.2.1 is called ANOVA Table which shows that the regression equation in respect of Model-2 has been found fully compatible with the data. The dependent variable (OP) has been predicted well by the regression Model-2 which is significant. Because the P-value has been reported as 0.000. It shows the p value is lesser than 0.05 (p<0.05). The outcome variable has been statistically and significantly predicted by the regression Model-2 (see Table 4.9.2.2). The Coefficient Table makes the results further clear.

Table-4.9.2.2 Coefficients^a

	Unstandardized Coefficients		Standardized Coefficients		
Model	В	Std. Error	Beta	T	Sig.
2 (Constant)	.286	.075		3.820	.000
Socialization	.159	.047	.188	3.382	.001
Externalization	.122	.054	.132	2.277	.024
Combination	.295	.030	.332	9.902	.000
Internalization	.105	.044	.118	2.377	.018

a. Dependent Variable: Organizational Performance (OP)

Table-4.9.2 has provided values which successfully predicted OP from SECI. It has clearly demonstrated that SECI statistically as well as significantly contributed towards OP. It is suggested by the results of the above Table (4.9.2.2) that the values of t=4.484, B=0.170, and p=0.000. The results indicate that one unit increase in SECI causes 0.170 units increase in OP. Thus, the hypothesis which states that SECI has significant impact on OP, is correct. Positive relationship has been seen between the main two variables (SECI & OP). Following regression equation is developed for model-2 on the basis of above argument:

OP= .286+.170 (SECI)

Tables 4.9.2 and 4.9.2.1 show favorable results have been obtained by applying usual and diagnostic statistics. The value of Adjusted R² has clearly indicated this which remained as 83.3%. It has demonstrated that 83.3 % variation is caused in dependent variable (OP) due to variation in independent variable (SECI). Secondly, F-value reported as (299.7) is higher than the value of Adjusted R² (83.3%). The value of adjusted R² is critical. The logic of the model has been proven. The significance of the model-2 has been estimated, established, and verified. Hence, the model is statistically accepted and empirically approved. The regression analysis results have proven that direct and positive relationship existed between SECI and OP, as the value of coefficients is equal to 0.170 (that significant level is 0.01).

4.9.3 Regression Model-III

Linear regression analysis was carried out under Model-3 to determine and analyze the impact of independent variable (OC) on dependent variable (OP) on one-one sample basis.

4.9.3.1 Regression Model-III developed for OC.

In the third model, OP (organizational performance) is the dependent variable, while, OC (organizational culture) being the independent variable. The linear regression model is developed for dependent variable (OP) by using three independent sub-variables of OC (Clan Culture, Hierarchy Culture, and Adhocracy Culture). ANOVA was performed to determine the Coefficient and analyze the significance of the model. Adjusted R² value was calculated for obtaining the percentage of variations which were explained by the independent variable (OC) in the model.

4.9.3.2 Regression Analysis of OP.

In order to measure and verify the relationship between independent variable (OC) and dependent variable (OP), linear regression analysis was run. Under the OC model, which is based

on Clan Culture, Hierarchy Culture, and Adhocracy Culture, OP functioned as dependent variable.

Table 4.9.3 given below clarified the results further.

Table.4.9.3 Summary of the model

				Std. Error
Model	R	R Square	Adjusted R	of
			Square	the
				Estimate
3	.480a	.231	.227	.83161

Predictors: (Constant), Clan-culture, Hierarchy-culture, Adhocracy-culture.

The values of R and R² are important to be noted as given in Table 4.9.3 above. The value of R suggested high degree of correlation existed between OC and OP. It is simple kind of correlation the value of R was noted as .480. The value of R² is .231. It shows how much variation in dependent variable (OP) will be caused by a given variation of independent variable (OC). Here the value of R² shows 22.7 % variation is explained. Following Table 4.9.3.1 depicts the picture of ANOVA.

Table-4.9.3.1 ANOVAb

Mod	lel	Sum of Squares	df	Mean Square	F	Sig.
3	Regression	52.828	3	52.828	76.388	.000 ^b
	Residual	176.352	255	.692		
	Total	229.18	258			

- a. Dependent Variable: Organizational Performance
- b. Predictors: (Constant), clan-culture, Hierarchy-culture, Adhocracy-culture

The ANOVA table (4.9.3.1) reports that the regression equation is reasonably fit within the data of the model-3. The dependent variable (OP) has been predicted well by the regression model in a significant way; as the P-value is noted as 0.000, being lesser than 0.05 (p<0.05). Hence, the outcome variable has been predicted significantly as well as statistically. Table 4.9.3.2 is about the coefficients of the model-3.

Table-4.9.3.2 Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
Model						
3	(Constant)	6.534	.350		18.676	.000
	Clan Culture	.591	.068	.480	8.740	.000
	Hierarchy Culture	.295	.030	.332	9.902	.000
	Adhocracy Culture	.224	.040	.269	5.531	.000

a. Dependent Variable: Organizational Performance (OP)

The values given in the Tables 4.9.3, and 4.9.3.1 above predict OP from OC. It has clarified that OC contributed significantly as well as statically towards the model-3. As results above (table 4.9.3.2) suggest the values of B = 0.960 (0.591 + 0.295 + 0.224/3), E = 0.057 (0.591 + 0.295 + 0.224/3), E = 0.057

To keep in view the usual and diagnostic kind of statistics, reasonable and favorable results have been derived from the regression analysis under model-3 which is proven from the

value of adjusted R² (see Table 4.9.3). It indicates that 22.7% variation is calculated in the dependent variable (OP) in response to variation in independent variable (OC). F-value is observed as 76.3 which is higher that critical value (22.7%). This has established the significance of the model-3 which stands verified fully. Hence, the model stands accepted and empirically approved. The regression analysis has proven the positive relationship has been existing between OC and OP. It is also varified by the value of coefficient which stands at 0.960 that is significant at the level of 0.01% (level of significance).

To conclude, the results, mentioned above, establish that linear relationship exists among Clan culture, Hierarchy culture, and Adhocracy culture (OC) and Knowledge Conversion (SECI). Similarly, direct linear relationship has been noticed among Knowledge Conversion process (SECI) and Organizational Performance (OP). Additionally, direct linear relationship has been verified between Organizational Culture (Clan culture, Hierarchy culture, and Adhocracy culture; (OC)), and Organizational performance (OP). Of Course, OP includes the main five subconstructs such as Financial performance (FP), Market/ Customer specific performance (Market/ Customer), Performance based on organizational efficiency and effectiveness (Process), Performance based on Human Resource Development (People Development), Performance based on futuristic vision (Future). Hence, the relationship has been found significant.

4.10 Summary of the Results

In order to summarize the results, summary table is presented below:

Table 4.10 Summary of the Results

Hypotheses	Statistical Test applied	Results
H1. Organizational culture (OC) has significant effect on Knowledge Conversion (SECI).	Linear regression analysis including • Parameter estimates & ANOVA	Supported for P<0.05
H2. Knowledge conversion (SECI) has significant effect on Organizational Performance (OP).	Linear regression analysis including • Parameter estimates & ANOVA	Supported for P<0.05
H2.i. Knowledge Socialization (S) significantly affects Organizational Performance (OP).	Pearson's Correlation Analysis	Supported for P<0.05
H2.ii. Knowledge Externalization (E) significantly affects Organizational Performance (OP).	Pearson's Correlation Analysis	Supported for P<0.05
H2.iii. Knowledge Combination (C) significantly affects Organizational Performance (OP).	Pearson's Correlation Analysis	Supported for P<0.05
H2.iv. Knowledge Internalization (I) significantly affects Organizational Performance (OP).	Pearson's Correlation Analysis	Supported for P<0.05
H3. Organizational Culture (OC) has sigificant effect on Organizational Performance (OP).	Linear regression analysis including • Parameter estimates & ANOVA	Supported for P<0.05

Chapter No.5 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5. DISCUSSIONS AND CONCLUSIONS

This chapter deals with the detailed discussion about the results derived from the analysis of the data conducted in the previous chapter. The findings are also discussed under this chapter. In addition to that, the outcomes of statistical analysis, correlation analysis, and linear regression, which have tested the hypotheses of this research study, are also being discussed here. Final part of this chapter forms the conclusions, recommendations, limitations and the suggestions for future research.

To understand the order of discussion in this chapter, a short discussion is given on the results of similar nature of study conducted by SM Tseng (2010) in Taiwan, China. Because, it is that study from which the instrument (Questionnaire) for the data collection has been adopted for this study:

5.1 CAUSAL RELATIONSHIP

In order to prove that the proposed relationship between the main the three constructs of the study is causal as suggested by the hypotheses, it is necessary that the usefulness of the measurement scales, used in this study, in collecting the information on the relevant concepts, may be verified and evaluated before-hand. To verify also that the procedure used here is accurate and based on real-life situation, for obtaining the relevant information. There are three pre-conditions for any measurement instrument to be accurate, relevant, faithful and practically useful; dimensionality, reliability, and validity (SM Tseng, 2010).

5.1.1 DIMENSIONALITY

As far dimensionality of the OC, and, SECI is concerned, the results of the dimensions show that all of them are statistically significant through the fit indices test, same is true for Organizational Performance (SM Tseng, 2010).

5.1.2 RELIABILITY

All components of reliability such as the internal consistency of the scales, their stability, quality of the instrument, design of structure of the scales, error-free measurement, have been established by the results. The process has further been refined through the application of Delphi Method and the Pre-test technique. Hence, the results demonstrated that all three scales are reliable, stable, and consistent (SM Tseng, 2010). It has been found from the results of the Re-test method as well as The compound reliability coefficient, that the Knowledge Conversion dimensions are measured accurately, every dimension has been measured by each item accurately, being based on a reliable source (SM Tseng, 2010).

5.1.3 VALIDITY OF THE SCALES

There are three types of validity involved such as content validity, convergent validity, and, discriminant validity. Content validity is nothing but the procedure to develop an adequate instrument of measurement (Nunnally, 1978). It is often difficult to verify the content validity of a scale due to the non-availability of an objective criterion of evaluation. There is, however, always one procedure, mostly used, to verify and evaluate whether the scale construction process fits the criteria which has been suggested by the literature for the purpose. That criteria are found within the methodology, coefficients, and techniques portions of the relevant literature. The methodology of this study has been adopted as per the recommendations of Churchill (1979) to measure key

constructs. Scales have been developed with relevant instruments based on the compound reliability coefficients or techniques used by other similar type of studies found out from the review of the literature. Apart from those elements suggested by Churchill (1979), other scales have been selected on the basis of Delphi Method from earlier studies. The re-test method also contributed to the results that the scales used are reliable (Conant et al., 1990; Daniel and Simon, 2006; SM Tseng, 2010).

5.1.4 CONVERGENT VALIDITY

If the measurement has positive and strong correlation with other measurements of the same concept or construct, that means convergent validity is considered to exist between them (Churchill, 1979). In the study, the convergent validity is established through the result that Bentler-Bonett coefficient is greater than 0.9, the factorial loading magnitude stands greater than 0.4, and, all the estimated parameters have become statistically significant at a point where t is equal or greater than 1.96; means 95 %. All that proves that all items converge on the same selected construct (Daniel and Simon, 2006; SM Tseng, 2010).

5.1.5 DISCRIMINANT VALIDITY

This shows the extent to which the two measurements are related with each other, which are developed for similar constructs, but, those constructs are conceptually different ones. That relationship is tested through this type of validity (Bearden et al., 1993). The results from the Chi-squared Tests reveal that the values of Chi-square have significant differences of statistical nature (P is less than or equal to 0.05). A different concept has been represented by every dimension. Hence, the scales such as Knowledge Management practices (Conversion), and, Organizational

Performance, have fulfilled the conditions of socio-metric relationship between them which are often required for scales used in social sciences (Daniel & Simon, 2006; SM Tseng, 2010).

Main Conclusions: It is concluded from the results that positive and strong causal relationship exists between Organizational Culture, and, Knowledge Conversion Process. Similarly, strong and positive relationship existed in between SECI and Corporate Performance of the business firm (SM Tseng, 2010).

5.2 DISCUSSIONS

In addition to the main conclusion of the above-mentioned study, this instant empirical study has come up with following hypotheses results being discussed in detail below

5.2.1 Discussion on the results of Hypothesis 1:

This study has developed a core rational. That was to explain the effect of Organizational Culture on Knowledge Conversion process in the telecom sector companies working in Balochistan (Pakistan). The results of the hypothesis (H1) are discussed below:

H1. Organizational Culture (OC) has significant effect on knowledge conversion process (SECI).

The main purpose of this study was explaining the relationship between OC and SECI in the telecom sector companies working in Balochistan. The results of SPSS based tests suggest that there exists positive as well as significant relationship between OC and SECI in the selected companies of Telecom sector in Balochistan which came in the purview of this study.

Taking the results from table 4.2, the mean values for Organizational Culture are noted as (OC= 4.7667), SECI(S=3.7956, E=3.0891, C= 3. 8123,I=3.057), and OP (FP=4.3263, MCP=4.0126, PP=3.0017, PDP=3.024, FBP=3.0266). While, the Std. Deviation values of OC = 0.688, SECI (S = 0.567, E=0.942, C= 0.663, I = 0.944) and that of OP (FP=0.534, MCP=0.712, PP=0.905, PDP=0.838, FBP= 0.992). That is concluded that both independent variable and the dependent variable have positive and significant association.

The results of the SPSS based tests such as Pearson's Correlation Analysis as well as linear regression analysis, revealed that OC has significant effect on Knowledge Conversion (SECI). This is the first major hypothesis of the study. It aimed to test the impact of OC on SECI in the telecom related companies in Balochistan. A significant relationship has been examined between the two constructs by this study. This is so due to the fact that Strong Culture, which is based on Learning, encourages to create, convert, and exchange Knowledge on regular basis within the companies to achieve good results and perform better. Knowledge Conversion is represented in the form of Socialization, Externalization, Combination, and Internalization, within the companies. Better performance of the companies are represented by good results. Those results are represented by good performance indicators such as financial profitability, increase in productivity, growth in sales, customer satisfaction, value creation, competitive advantage, and, development of a better future planning.

In order to test and prove the hypothesis, regression and correlation analysis have been applied. As per correlation analysis results, significant positive association has existed between the two variables, r = .80 or more (in between normal range from -1 and +1), p = 0.000 (two tailed p < .05). Similarly, the regression analysis results developed a regression equation (F (1, 301) =

266.219, p < .000) with R Square of 0.220. On the other hand, Beta value is .285, p < 0.05 which suggests that SECI increases by 0.285 units, when OC is increased by one unit.

Hence, it is established from the above explanation of results that our first main hypothesis is accepted which clearly shows that OC has significant effect on Knowledge Conversion (SECI).

5.2.2 Discussion on the results of Hypothesis 2.1:

H2.1. Knowledge Socialization significantly affects Organizational Performance.

The core rationale behind this study was to explain the impact of SECI (knowledge Conversion) on OP. From SECI, knowledge Socialization is the first sub-construct. The results of the SPSS based tests such as Pearson's Correlation Analysis as well as linear regression analysis, reveal that Socialization has significant effect on Organizational Performance. This is within the second hypothesis of the study. It aimed to test the impact of Socialization process on OP in the telecom related companies in Balochistan. A significant relationship has been examined between the two by this study. This might be so due to the fact that SECI (specifically Socialization process) lead to create opportunities for the companies to produce good results. Those results are represented by good performance indicators such as profitability, increase in productivity, growth in sales, customer satisfaction, value creation, and competitive advantage.

In order to test and prove the hypothesis, regression and correlation analysis have been applied. As per correlation analysis results, significant positive association has existed between the two variables, r = .80, p = 0.000 (two tailed, p < 0.05). Similarly, the regression analysis results developed a regression equation (F (1, 301) = 299.766, p < .000) with R Square of .836. On the

other hand, Beta value is .265, being positive, and p < 0.000 which suggests that OP increases by 0.265 Units, when Socialization is increased by one unit. Hence, it is established that our hypothesis is accepted which clearly shows that Knowledge Socialization (S) has significant effect on Organizational Performance (OP).

5.2.3 Discussion on the results of Hypothesis 2. ii

H2.II. Knowledge Externalization significantly affects Organizational Performance.

This is the third hypothesis of the study which explains that Knowledge Externalization (E) has significant effect on the organizational performance(OP). Externalization, being the second sub-construct of SECI, has been put to SPSS-based tests such as Pearson's Correlation and Linear (multiple) regression analyses. The results demonstrate that Knowledge Externalization has significant effect on OP within companies of Telecom sector in Balochistan. These companies include PTCL, Mobilink, and Ufone. The results suggest that knowledge Externalization is a continuous process that makes an organization to produce better performance.

Correlation and regression analyses have been applied to prove and evaluate the hypothesis. There has been found a positive and significant relationship between the Knowledge Externalization (E) and OP constructs under Pearson's Correlation analysis by obtaining the p-value equal to 0.000 (Two-tailed) (P < 0.05), and r = .80, p = 0.000 (two tailed, p < 0.05). Similarly, the regression analysis results developed a regression equation (F (1, 301) = 299.766, p < .000) with R Square of .836. On the other hand, Beta value is .265, being positive, and p < 0.000 which suggests that OP increases by 0.265 units, when Externalization process is increased by one unit.

Hence, our hypothesis, that knowledge Externalization has significant effect on OP, has been established and, therefore, accepted.

5.2.4 Discussion on the results of Hypothesis 2.iii

H2.III. Knowledge Combination significantly affects
Organizational Performance.

This is the fourth hypothesis of this research study. Knowledge Combination (C) is the third sub-construct of SECI Model. It was supposed by the hypothesis that Combination has significant impact on OP. After the SPSS-based tests were run. The results show that the hypothesis is proved. As per the correlation analysis results, R-value is equal to or more than .80 and, P-value is equal to $0.000 \ (p < 0.05)$. Whereas, the regression analysis results revealed the value of R-square as $0.836 \ \text{while}$, giving the value of beta as .265.

Hence, it has been proved that the hypothesis is accepted, as, Knowledge Combination has significant effect on organizational performance (OP) of the telecom companies (PTCL, Ufone, and Mobilink) in Balochistan.

5.2.5 Discussion on the results of Hypothesis 2. iv

H2.1V. Knowledge Internalization significantly affects
Organizational Performance.

This, being the fourth constituent of SECI Process, forming the fifth hypothesis supposing that Internalization of Knowledge (I) has significant effect on organizational performance (OP). The tests of Pearson Correlation and Linear Regression were run. Their results produced the p-value

as 0.000, r-value as .80, (two tailed) with respect to correlation values. Whereas, the regression results produced the Regression equation (F (1, 301) = 299.766, p < .000) with R-Square value of 0.836, and Beta value of 0.265. The hypothesis, therefore, held true and accepted within the PTCL, Mobilink, and Ufone companies of Balochistan.

5.2.6 Discussion on the results of Hypothesis-2

H2. Knowledge Conversion (SECI) has significant effect on Organizational Performance (OP).

Right from the start, the core rationale behind this research study was to explain the impact of Knowledge Conversion process (SECI Model) on OP. The results of the SPSS based tests such as Pearson's Correlation Analysis as well as linear regression analysis, revealed that SECI has significant effect on Organizational Performance (OP). This is the second major hypothesis of the study. It aimed to test the impact of SECI on OP in the telecom related companies in Balochistan. A significant relationship has been examined between the two constructs by this study. This might be so due to the fact that implementation of Knowledge Management initiatives leads to create opportunities for the companies to produce good results. Those results are represented by good performance indicators such as financial profitability, increase in productivity, growth in sales, customer satisfaction, value creation, and competitive advantage.

In order to test and prove the hypothesis, regression and correlation analysis have been applied. As per correlation analysis results, significant positive association has existed between the two variables, r = .80 or more (as overall), p = 0.000 (two tailed p < .05). Similarly, the regression analysis results developed a regression equation (F (1, 301) = 299.766, p < .000) with

R Square of 0.836. On the other hand, Beta value is .265, p < 0.05 which suggests that OP increases by 0.265 units, when SECI are increased by one unit.

Hence, it is established from the above explanation of results that our second main hypothesis is accepted which clearly shows that SECI has significant effect on Organizational Performance (OP).

5.2.7 Discussion on the results of Hypothesis-3.

H3. Organizational Culture (OC) has significant effect on Organizational Performance (OP).

In addition to the above, it was also among the core rationale behind this research study, to explain the impact of Organizational Culture (OC) on Organizational Performance (OP). The results of the SPSS based tests such as Pearson's Correlation Analysis as well as linear regression analysis, revealed that OC has significant effect on Organizational Performance (OP). This the third major hypothesis of the study. It aimed to test the impact of OC on OP in the telecom related companies in Balochistan. A significant relationship has been examined between the two constructs by this study. This is so due to the fact that Strong Culture, which is based on Knowledge Conversion and Learning, leads to create opportunities for the companies to achieve good results and perform better. Those results are represented by good performance indicators such as financial profitability, increase in productivity, growth in sales, customer satisfaction, value creation, competitive advantage, and, development of a better future planning.

In order to test and prove the hypothesis, regression and correlation analysis have been applied.

As per correlation analysis results, significant positive association has existed between the two

variables, r = .80 or more (as overall), p = 0.000 (two tailed p < .05). Similarly, the regression analysis results developed a regression equation (F (1, 301) = 76.388, p < .000) with R Square of 0.231. On the other hand, Beta value is .255, p < 0.05 which suggests that OP increases by 0.255 units, when OC are increased by one unit.

Hence, it is established from the above explanation of results that our third main hypothesis is accepted which clearly shows that OC has significant effect on Organizational Performance (OP).

5.3 CONCLUSIONS

Following conclusions have been derived from this research study:

The role of culture of an organization is associated strongly with the Knowledge Conversion process within that organization which is based on SECI model. By conceptualizing Knowledge Conversion, SECI model was adopted which assumed four dimensions of the process. It attracts the attention of managers to focus on these dimensions of Knowledge Management to be introduced within organizations. Results reveal that Culture as the main dimension cannot be ignored, rather it is very vital to develop a Knowledge Management strategy that must be effective. The target to measure the key constructs is achieved through this study. An instrument has been adopted which has successfully attempted to measure the question of the topic; what is the degree to which the processes of Knowledge Conversion have been implemented in the business organization. That is answered. As far the general application of the scale is concerned, it is deduced that it can easily be applied to other industries like knowledge intensive nature of industries; consultancy, or for that matter, software industries. It is Organizational

Culture that is important for the success of initiatives of Knowledge Management. Because, it is Organizational culture which can make a success or failure of Knowledge Management process within an organization. Hence, dominant/ significant role is played by the Organizational culture in the implementation of a robust Knowledge Management practices.

Additionally, the results make it clear that the methodology adopted in this empirical study may be used as a reference in the study of other constructs which are fundamental to the understanding of strategic management and knowledge management. This reference may be used during the processes such as conceptualization, theorization, operationalization, causation, as well as measurement of the forthcoming constructs in future studies. These are having a multi-dimensional nature no doubt. Because, there are many elements or dimensions which take part in the definition of these constructs. Another positivity emanating from this study is that the instrument adopted under this study has used perceived scale of classification which has made it easier to translate company employees' opinion and experience into subjective kind of measurement of the assets that are intangible in nature. Besides above, there appeared another result, being very important, is the use of valid procedure to measure the constructs of the study, through the use of subjective scale. It is based on the self-classification and perception of the company employees in relation to their internal and external environment as well as competitors. As a consequence, the validity and reliability of measurement through these subjective means prove from the above results that this subjective or perceptual measurement is considered a valid replacement to the objective measures. If the objective measures use proxy

variables, then all the constructs' attributes may not be represented fully. Hence, there will arise the problem of in-complete measurement or representation.

- As long as the scale generalizability is concerned, it can easily be applied to other industries like knowledge intensive; consultancy and software related. Because there are no specific conditions attached with the industry or companies under this study. Similarly, the findings of this study can be applied to other industries such as construction, production, IT etc., in Pakistan and the world over. New avenues of inquiry can be explored by introducing modifications to the adopted instrument or developing altogether a new one. It can be used in other cross-sectional studies as well as longitudinal studies, determining when and how the performance of the business firms undergo changes after the SECI model is introduced within a learning-oriented culture. Moreover, analysis can be resorted to at other level too. The flows and stocks of Knowledge can be studied with their potential consequences.
- On the basis of findings of this study, The management is convinced that SECI model, if introduced within a favorable culture, will bring about positive changes in the performance of the business organization. That is translated into improvement in profitability, growth, customer satisfaction, efficiency, and competitive position. Thus, it has been concluded by the study that impact of Organizational Culture on Knowledge Conversion, and on Organizational Performance is significant. The outcomes that have been derived from the study demand exact implementation of these processes. This is required with compact level with deep consciousness and dedication. It is demonstrated from these outcomes that KM

initiatives constitute that aspect of the successfulness of the organization which is significant. Yet, it is urged that these may be accounted cautiously. It is one of the motivational findings of this study that the successful implementation of KM Initiatives involves higher level of management attentiveness. The role of Clan and Hierarchy cultures has importance. But, Adhocracy culture has more significant role in the promotion of Knowledge Conversion process, and, enhancement of Organizational performance. Because, it is based on Marketing, competitive, rist-taking, and, futuristic factors or challenges.

The study has been carried out with a view to take into account Pakistan's national culture, specifically the local culture of Balochistan province, reflected in the Organizational culture of the Telecom Sector companies. The culture was found rich in values such as friendship, brotherhood, cooperation, respect, hospitality, positivity, dignity, courage, and, constructive thinking, based on socio-cultural as well as multi-linguistic behavior and attitude of the managers and employees of the selected companies. In association with Clan and Hierarchy culture, Adhocracy culture is the most significant one to be nurtured by an organization to establish a favorable environment for Knowledge workers to create, convert, and exchange Knowledge in an effective way. Because, with this culture and environment, they can be open to learn more and more, be creative and come up with new ideas and innovations. Hence, this is the way they can increase the organization's value by making it perform better and so on. The culture of an organization, which extends necessary support to the activities of Knowledge sharing, business-related needs of

knowledge workers, and collaborative kind of needs, must be fostered by that organization in a solid way.

There is ample evidence which demonstrates that the capacity of an organization on business innovation is increased, if initiatives of Knowledge Management are successfully implemented within a viable culture. It is clear that the liberation of the knowledge assets, owned by an organization, will occur, if these processes are intently carried out by the management, being aligned with the goals of the organization, by utilizing main competencies of the organization. That liberation of the knowledge assets will result in the form of the ultimate success of the organization. That success will be seen as productivity, survival, sustainability, profitability, efficiency, growth, competitive advantage, and, customer satisfaction. However, it is noteworthy that it is necessary to interpret the outcomes of this study very carefully. Hence, The role played by Organizational Culture is associated strongly with the competitive performance of an organization.

• Despite the existence of many ways in which Knowledge Management practices may be implemented, all depends on an organization's to select a certain criteria as a suited method to do so. The criteria may include culture of an organization, the nature of an organization's services or products, the size of an organization or company, business object of an

organization, and access to the resources of an organization. These criteria will turn out to be the crucial factors, which act as moderating elements, to successfully implement Knowledge Management within the organization. However, a favorable culture which provides opportunities to the members of an organization to share their Knowledge, ideas, and experience. This will enable them to feel comfortable, learn new Knowledge, to be innovative and creative, leading them become true Knowledge workers. As a result, they will contribute to the competitive performance of their organization in the form of competitive advantage. The role of Adhocracy culture is more relevant here. All that will lead to enable the organization to increase its value.

5.4 RECOMMENDATIONS

This study puts forward the below-mentined recommendations:

1. Since it is suggested by the study that the above-mentioned three constituents of knowledge Organizational Culture are the key factors, the building blocks, and the supporting and sustaining foundations. On these building blocks, the archetype of knowledge Conversion Process is founded in organizations, having four main dimensions; SECI. These strategic factors are required to be implemented in any business organization which seeks to improve its performance on consistent basis. If the idea

Discussion, Conclusions, Recommendations of establishing a learning culture took hold in and across organizations, or it gained credence among the management practitioners and managers, it will definitely lead to put a positive impact on the performance of relevant

organizations.

The archetype of knowledge Conversion processes that has been expounded by this research study, has come up with the four prominent building blocks (SECI), playing strategic, foundational, and intervening roles in order to make the organizations productive and efficient. These attributes must allow the managers of organizations to take necessary initiatives, actions, and intervene to make the organizations to produce the best possible outcomes. These outcomes are demonstrated in terms of best financial, market-customerbased, process-based, people-developmentbased, and futuristic performance. Hence, a composite performance of the organization may be improved.

- 3. The managers must strive to turn these achievements of better performance into something solid and robust like the achievement of competitive advantage through sound planning and wiser strategy.
- 4. The managers may extrapolate the findings of this study to other industries such as IT, Construction, Medicine, Law, Accountancy, Audit etc., so that best knowledge management practices be enshrined in the corporate sector or public sector development to play a leading role in the betterment of over all corporate performance.
- 5. Managers have to develop a learning culture in which frequent and fluent knowledge exchange, knowledge inflow as well as knowledge outflow occurs on regular basis.
- **6.** KM Practices such as SECI may be adopted as a permanent culture to trigger and retain the

Discussion, Conclusions, Recommendations innovation and creative thinking or conceptualization as a permanent feature of the

business organization.

- 7. Managers must focus on the significance of individual workers of the organization as a valuable asset for the development, and growth of the organization.
- 8. Managers must focus on the upgradation of the competence, skill, and capacity of the individual workers, managers, supervisors and staff as knowledge workers, as part of the strategic goals of the business organization.
- 9. The achievements and accomplishments of the organizational goals such as better profit, customer satisfaction, growth in sales, growth in production, product quality improvement, and competitive advantage, may be assessed and aligned by the top management on permanent basis to get better performance.

- **10.** As it is crystal clear from the analytical type of judgements delineated from the contemporary studies about the center stage significance of Knowledge Management Practices, the managers of today's organizations must concentrate on the indoctrination and embedding of best KM Practices into the organizations modern of today, being knowledge intensive by nature.
- 11. As the importance of technology is pivotal in KM as a strategy, Managers must help the organization s to ensure the smooth effective operation and use of KM technologies.
- 12. In order to make any KM program a success, managers are required to make the Knowledge Conversion Processes as a vital part of organizational culture. These constituents must be introduced within organizations as a part of Organizational change. These changes may be brought about in the people, climate and processes of the organization.

- knowledge entity and organization must take benefits from the efficiency of KM Initiatives.

 They may resort to robust knowledge management activities such as human capital development, business restructuring processes, mapping of Knowledge, constituting cross functional teams, creating formal channels of Knowledge sharing, and, stressing more on collaboration, including, creation, conversion, exchange, storage, dissemination of Knowledge.
- 14. The conclusion of this study mentioned above is a starting point for managers who are taking initiative to implement a successful KM program within organizations. They must take a multi-dimensional view of extensive and prolonged program of KM to realize the grand target of best organizational performance.

5.5 LIMITATIONS OF THE STUDY

- Due to time, cost and space constraints, this study has focused on the three main companies of the telecom sector in Balochistan; PTCL, Mobilink, and, Ufone.
 Other companies such as Zong, Telenor, Warid, NTC etc. have not been included in the study.
- Besides above, this study has used three facets of Organizational culture, four facets of Knowledge Conversion, and five facets of Organizational Performance.
 All facets of Organizational culture, Knowledge Management, and OP have not been addressed as a whole.

5.6 SUGGESTION FOR FUTURE RESEARCH

- The study may be extended to other companies of Telecom sector in Balochistan as well as Pakistan.
- The study may be conducted on other sectors of Pakistan's Economy such as Information Technology, Consultancy services, Industries, Commerce, Bio-Technology etc.
- The study can incorporate other companies and other industries outside Pakistan, anywhere in the world.
- The study can focus multi-national companies and businesses around the world.
- Researchers and academicians can incorporate other facets of OC, Knowledge Conversion, and, OP in their future studies.

SUMMARY OF CHAPTER-5

This chapter has come up with a thorough discussion over the main findings and results of this study derived from the analysis of the data carried out in chapter 4. The results that have been obtained from Correlation and Regression analyses were discussed in detail to judge the hypotheses developed by this study. This chapter has brought about the conclusions of this research study which shed light on the implementation of knowledge Conversion processes (SECI) within a favorable Culture, leading to make telecom sector companies in Balochistan achieve better performance targets. The recommendations, limitations as well as suggestions for future research on the issue of implementation of knowledge management Initiatives, resulting in the enhancement of the organizational performance, have been presented in the last part of this chapter.

REFERENCES/ BIBLIOGRAPHY

Adams, G.L. and Lamont, B.T. (2003), "Knowledge management systems and developing sustainable competitive advantage", *Journal of Knowledge Management*, Vol.7 No. 2, pp. 142 – 154.

Ahn, J.H. and Chang, S.G. (2004), "Assessing the contribution of knowledge to business performance: the KP3 methodology", *Decision Support Systems*, Vol. 36 No. 4, pp. 403-16.

Albert, S., & Bradley, K. (1997). *Managing knowledge: Experts, agencies and organizations*. Cambridge University Press, Cambridge.

Alchian, A., & Demsetz, H. (1972). Production, information costs, and economic organization. *American Economic Review*, 62: 777-795.

Ali, S.M., Qadus, A., Waseem, A., Zaman, K. (2012). Linking knowledge management practices and the organizational performance of Pakistan's telecommunication. *Management Science Letters*, 2(8), 2929–2938.

Andersen, J.A. (2006). Leadership, personality, and effectiveness. *Journal of Socio Economics*, 35 (6), 10781091.

Andreeva, TE and Ikhilchik, IA (2009). Applicability of the SECI model of knowledge creation in Russian cultural context: Theoretical analysis. Russian Management Journal, 7(3), 3-20.

Andreu R. and Sieber S. (1999) La gestio 'n integral del conocimiento y del aprendizaje. *Economi* 'a industrial 326, 63–72.

Andrew Brown. (1995, 1998). *Organisational Culture*. (2nd ed). Pitman Publishing. pp. 9, 33, 176.

APQC. (1996). *The American Productivity and Quality Centre*. Retrieved May 17, 2004, from http://www.apqc.org.

Armit, T. (2001). The essential guide to Knowledge Management. New Jersey. Prentice Hall PTR. ISBN: 0-13-032000-5

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

Asleema, H. (2010). The Articulation of KM Strategy in Public Sector Organisations. Proceeding of Knowledge Management 5th International Conference, May, 2010. UUMCAS, Malaysia.

Aston Business School Knowledge Management Group. (2006). Information obtained from the website [consulted: April 2006]: http:// knowledgemgt.abs.aston.ac.uk/newweb/AcademicGroups/OIM/MS/ KM/.

Ayobami, A., & Rabi, S. (2012). Knowledge Discovery in Database: A Knowledge Management Strategic Approach. In Knowledge Management International Conference (KMICe) 2012.

Bailey, W.G. (1995), *The Encyclopedia of Police Science*, 2nd ed., Garland Publishing, New York, NY.

Barney, J. B. 2002. *Gaining and sustaining competitive advantage* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Bates, K. A., Amundson, S. D., Schroeder, R. C., & Morris, W. T. (1995). "The crucial interrelationship between manufacturing strategy and organizational culture." *Management Science*, 41(10), 1565-1581.

Becerra-Fernandez, I., Gonzalez, A., &Sabherwal, R. (2004).Knowledge Management – Challenges, Solutions, and Technologies. New Jersey: Prentice Hall. Retrieved from: http://www.worldscibooks.com/etextbook/5639/5639_chap01.p df

Benedict, R. 1934, Patterns of Culture, Houghton Mifflin, Boston

Bhardwaj, M and J Monin (2006). Tacit to explicit: An interplay shaping organization knowledge. *Journal of Knowledge Management*, 10(3), 72-85.

Brown, A. 1995, Organisational Culture, Pitman Publishing, London.

Cameron, K. S., & Whetten, D. A. 1986. Organizational effectiveness: One model or several? In K. S. Cameron, & D. A. Whetten (Eds.), *Organizational Effectiveness: A Comparison of Multiple Methods:* 1-24. New York: Academic Press.

Carton, R. B., (2004). Measuring organizational performance: an exploratory study, Unpublished Doctoral Dissertation, The University of Georgia, Athens, GA.

Chang, S.C. and Lee, M.S. (2007), "A study on relationship among leadership, organizational culture, the operation of learning organization and employees" job satisfaction", *The Learning Organization*, Vol. 14 No. 2, pp. 155-85.

Chatman, J. A., & Jehn, K. A. (1994). "Assessing the relationship between industry characteristics and organizational culture: how different can you be?" Academy of Management Journal, 37(3), 522-554.

Chen, R.S. and Hsiang, C.H. (2007), "A study on the critical success factors for corporations embarking on knowledge-community-based e-learning", *Information Sciences*, Vol. 177 No. 2, pp. 570-86.

Choe, J. (2004). The consideration of cultural differences in the design of information systems. *Journal of Information and Management*, 41(5), 669-688.

Choi, Y.R., & Shepherd, D.A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 377-395.

Chua, A. and Lam, W. (2005), "Why KM projects fail: a multi-case analysis", *Journal of Knowledge Management*, Vol. 9 No. 3, pp. 6-17.

Chung, R-G. and Lo, C-L. (2007), "The relationship between leadership behavior and organizational performance in non-profit organizations, using social welfare charity foundations as example", *Journal of American Academy of Business, Cambridge*, Vol.12 No. 1, pp. 83-7.

Churchill, G.A. (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16 No. 1, pp. 64-73.

Dalkir, K. (2017). Knowledge Management in Theory and Practice, Burlington: Elsevier Butterworth-Heinemann.

Daniel Palacios Marqués, Fernando José Garrigós Simón, (2006) "The effect of knowledge management practices on firm performance", *Journal of Knowledge Management*, Vol. 10 Issue: 3, pp.143-156.

DAVENPORT TH and PRUSAK L (1998) Working Knowledge: *How Organizations Manage What They Know*. Harvard Business School Press, Boston, MA.

Davis, S.M. (1984). Managing Corporate Culture. Ballinger, Cambridge, MA.

Davenport, T. (1999). Knowledge management and the broader firm: strategy, advantage, and performance in Liebowitz. J. (Ed.), Knowledge Management Handbook, CRC Press, Boca Raton, FL, 1-11.

Dayan R., and Evans S. (2006). KM your way to CMMI. *Journal of Knowledge Management* 10(1), 69–80.

Deal, T. E., & Kennedy, A. 1982. Corporate Cultures: The Rites and Rituals of Corporate Life, Addison-Wesley, Reading, MA.

Decarolis, D.M., & Deeds, D.L. (1999). The impact of stocks and flows of organizational knowledge on firm performance: an empirical investigation of the biotechnology industry. *Strategic Management Journal*, 20, 953-968.

Delaney, J.T and Huselid, M.A (1996), "The impact of human resource management practices on perceptions of performance in for-profit and nonprofit organizations", *Academy of Management Journal*, Vol. 39, pp. 949-69.

Deloitte Touche Tohmatsu. (1999, November 4). Riding the e-business tidal wave. Available at http://www.istart.co.nz/index/HM20/PC0/PVC197/EX245/DOCC65/F11843.

De Long, DW and L Fahey (2000). Diagnosing cultural barriers to knowledge management. *Academy of Management Executive*, 14(4), 113-128.

De Vellis, R.F. (1991), *Scale Development: Theory and Applications*, Sage Publications, Newbury Park, CA.

Dibella, A., & Nevis, E. (1998). *How Organizations Learn: An Integrated Strategy for Building Learning Capacity*. Jossey-Bass, San Francisco, CA.

Dierickx, I., & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science*, 35(12), 1504-1513.

Dixon, N. M. (2000). Common knowledge: How companies thrive by sharing what they know. Harvard Business School Press, Boston, Massachusetts.

Drucker, P. (2001), "The next society: a survey of the near future", *The Economist*, Vol. 3 No. 1, pp. 2-20.

EARL M (2001) Knowledge management strategies: toward a taxonomy. *Journal of Management Information Systems* 18(1), 215–233.

Easterby-Smith, M and MA Lyles (2003). Introduction: Watersheds of organizational learning and knowledge management. In *The Blackwell Handbook of Organizational Learning and Knowledge Management*, M Easterby-Smith and MA Lyles (eds.). Oxford: Blackwell Publishing Ltd, pp. 1-15.

Edvinsson, L., and Malone, M. (1997). *Intellectual capital: realizing your company's true value by finding its hidden brain power*. New York: HarperCollins.

Etzioni, A. (1964). Modern Organizations, Prentice-Hall, Englewood Cliffs.

Fadhilah, A., Ashley, A. (2010). Information Technology for Knowledge Management in Malaysia: the Effects of Organisational Factors. Proceeding of Knowledge Management 5th International Conference, May, 2010. UUMCAS, Malaysia.

Ferraro, G.P. (1998), *The Cultural Dimensions of International Business*, Prentice-Hall, Englewood Clifffs, NJ.

Firestone, J.M. (2001). Estimating benefits of knowledge management initiatives: concepts, methodology, and tools. *Journal of Knowledge and Innovation*, 1(3), 13-27.

Ford, J.D. and D.A. Schellenberg. (1982). 'Conceptual issues of linkage in the assessment of organizational performance', *Academy of Management Review*, January 1982, pp.49-58.

Fink, G, N Holden and M Lehmann (2007). Survival by subversion in former socialist economies: Tacit knowledge exchange at the workplace. In *Knowledge Management in Developing Economies: A Cross-Cultural and Institutional Approach*, K Hutchings and K Mohannak (Eds.), Cheltenham: Edward Elgar Publishing Limited, pp. 35-51.

Gerlach, M. L., & Lincoln, J. R. (2000). Economic organization and innovation in Japan: Network spin-offs and the creation of enterprise, in (Ed) von Krog, G; I. Nonaka and T. Nishiguchi. Knowledge creation: A source of value, Macmillan Press, London, 151-196.

Gerstner Jr., L.. V. (2002). Who says elephants can't dance? New York: Harper Collins Publishers.

Gibbons, M, Limoges, C., Nowotny, H. Schwartzman, S., Scott, P., & Trow, M. (1999). *New production of knowledge*. Sage Publications, London.

Glisby, M and N Holden (2003). Contextual constraints in knowledge management theory: The cultural embeddedness of Nonaka's knowledge-creating company. *Knowledge and Process Management*, 10(1), 29-36.

Goffee, R., & Jones, G. (1996). "What holds the modern company together?" Harvard Business Review, 74(6), 133149.

Gold, A., Malhotra, A. and Segars, A. (2001), "Knowledge management: an organizational capabilities perspective", Journal of Management Information Systems, Vol. 18 No. 1, pp. 185-214.

Gordon, G. 1991, 'Industry Determinants of Organizational Culture', *Academy of Management Review*, vol 16, no. 2. pp. 396-415.

Green, K.W. and Inman, R.A. (2007), "The impact of JIT-II-selling on organizational performance", *Industrial Management & Data Systems*, Vol. 107 No. 7, pp. 1018-35.

Guns W.D. and VA "Likangas L. (1998) Rethinking knowledge work: creating value through idiosyncratic knowledge. *Journal of Knowledge Management 1*(4), 287–293.

Hamon, T.T. (2003). Organizational effectiveness as explained by social structure in a faith-based business network organization. unpublished doctoral dissertation, Regent University, Virginia Beach, VA.

Hancott, D.E. (2005). The relationship between transformational leadership and organizational performance in the largest public companies in Canada. unpublished doctoral dissertation. Capella University, Minneapolis, MN.

Harvey, M., Novicevic, M.M., & Garrison, G. (2004). Challenges to staffing global virtual teams. *Human Resource Management Review*, 14, 275-294.

Hofer, C. W. 1983. ROVA: A new measure for assessing organizational performance. In R. Lamb (Ed.), *Advances in Strategic Management*, Vol. 2: 43-55. New York: JAI Press.

Hofstede, G (1980). Culture's Consequences: International Di®erences in Work-Related Values. Newbury Park: SAGE Publications.

Hofstede, G. (1984). Cultural Consequences: International Differences in Work Values. Sage, Beverly Hills.

Hofstede, G. (1997). Culture and Organisations: Software of the Mind: Intercultural Cooperation and its importance for Survival. McGraw-Hill.

Hooijberg, R. and Petrock, F. (1993), "On cultural change: using the competing values framework to help leaders execute a transformational strategy", *Human Resource Management*, Vol. 32 No. 1, pp. 29-50.

Huseby, T. and Chou, S.T. (2003), "Applying a knowledge-focused management philosophy to immature economies", *Industrial Management & Data Systems*, Vol. 103 No. 2, pp. 126-32.

Javidan, M. (2001). The Impact of National Culture on Cross-Border Mergers: The Lessons from GLOBE, presentation at the Fifth International Management Conference of The Carnegie Bosch Institute for Applied Studies, Berlin, Germany, October 4-6.

Jelavic, M. & Oglivie K. (2010) "Cultural Perspectives on Knowledge Management in Central and Eastern Europe: The SECI model of Knowledge conversion and "Ba", *Journal of Information and Knowledge Management*, vol. 9, no. 2: 161-169

Jenny Darroch, (2005) "Knowledge management, innovation and firm performance", *Journal of Knowledge Management*, Vol. 9 Issue: 3, pp.101-115.

Jenny, D. (2005). Knowledge management, innovation and firm performance, *Journal of Knowledge Management*, 9, 101.

Jensen, M., & Meckling, W. 1976. Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*: 305-360.

Johnson, G & Scholes, K. (1999). Exploring Corporate Strategy. (5th ed). Prentice Hall.

Jones, M.C., Cline, M. and Ryan, S. (2006), "Exploring knowledge sharing in ERP implementation: an organizational culture framework", Decision Support Systems, Vol. 41, p. 434.

June (2005). Drivers of knowledge management in the corporate environment. *International Journal of Information Management*, 25(3), 193-202.

Kaplan, R.S. and Norton, D.P. (1996), The Balanced Scorecard, Harvard Business School Press, Boston, MA.

Kluckhohn, C. & Strodtbeck, F. 1961, Variations in Value Orientations, Row Publishing, Illinois.

Krefting, L.A. and Frost, P.J. (1985), "Untangling webs, surfing waves, and wildcatting: a multiple-metaphor perspective on managing culture", in Frost, P.J., Moore, L.F., Louis, M.R., Lundberg, C.C. and Martin, J. (Eds), *Organizational Culture*, Sage Publications, Beverly Hills, CA.

Kunkel, S., & Hofer, C. W. (1991). Why Study the Determinants of New Venture Performance: A literature Review and Rationale. Paper presented at the Academy of Management 51st Annual Meeting.

Langfield-Smith, K. (1995), "Organisational culture and control", in Berry, A., Broadbent, J. and Otley, D. (Eds), Management Control: Theories, Issues and Practices, Macmillan, London.

Leavy, B. (1998). The concept of learning in the strategy field: review and outlook. *Journal of Management Learning*, 29(4), 447-466.

Lee, H., & Choi, B. (2003). Knowledge Management Enablers, Processes, and Organizational Performance: An Integrative View and Empirical Examination. *Journal of Management Information System*, 20, 179288.

Lehaney B., Clarke S., Coake E., and Gillian J (2004). *Beyond Knowledge Management*. Idea Group Publishing, London.

Lemon, M. and Sahota, P.S. (2004), "Organizational culture as a knowledge repository for increased innovative capacity", *Technovation*, Vol. 24, pp. 483-98.

Li- An Ho, (2008) "What affects organizational performance? The linking of learning and knowledge management", *Industrial Management & Data Systems*, Vol. 108 Issue: 9, pp.1234-1254.

Lloria, M. B. (2008). "A review of the main approaches to knowledge management". *Knowledge Management Research & Practice*, Vol. 6, pp. 77-89.

Liao, S.H. & Wu, C.C. (2009). The Relationship among Knowledge Management, Organizational Learning, and Organizational Performance. *International Journal of Business and Management*, 4(4), 64-76.

Liew, CL (2007). From concept to context: Toward sociocultural responsibility in the organization of knowledge. In *Cross-cultural Perspectives on Knowledge Management*, DJ Pauleen (ed.). Westport, Connecticut: Libraries Unlimited, pp. 81-94.

Linn, M. (2008), "Organizational culture: an important factor to consider", The Bottom Line: Managing library finances, Vol. 21 No. 3, pp. 88-93.

Liu, H., Ramasubramanian, V. & Srer, E.G. Department of Computer Science, Cornell University, Ithaca. Retrieved from: http://www.cs.cornell.edu/people/egs/papers/rsssurvey.pdf

Martinsons, M.G. and Davison, R.M. (2007), "Strategic decision making and support systems: comparing American, Japanese and Chinese management", Decision Support Systems, Vol. 43 No. 1, pp. 284-300.

Mart ín-de-Castro, G, P López-Saez and JE Navas-López (2008). Processes of knowledge creation in knowledgeintensive "rms: Empirical evidence from Boston's Route 128 and Spain. *Technovation*, 28(4), 222-230.

Marti'n I. and Casadesu's M. (1999) Las TIC como factor determinante del aprendizaje organizativo. El caso de una empresa suministradora en el sector del automo 'vil. *Economi 'a Industrial* 326, 73–84.

Maull, R., Brown, P. & Cliffe, R. (2001). Organisational culture and quality improvement. *International Journal of Operations & Production Management*, Vol. 21, No. 3, pp. 302-326.

McGraw, K., and Harrison-Briggs, K. (1989). *Knowledge acquisition: Principles and guidelines*. Englewood Cliffs, N.J.: Prentice Hall.

Morgan, G. (1986). Images of Organisation. Beverly Hills, Cali.: Sage.

Morgan, G. (1997). Images of Organisation. Thousand Oaks, CA: Sage.

Müller, RM, M Spiliopoulou and H-J Lenz (2005). The infuences of incentives and culture on knowledge sharing. *Proceedings of the 38th Hawaii International Conference on Systems Sciences*.

Neilson, R. (1997). *Collaborative Technologies & Organizational Learning*. Idea Group Publishing, Hersey, PA.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.

Nonaka, I. and Takeuchi, H. (1995), *The Knowledge-creating Company*, Oxford University Press, New York, NY.

Nonaka, I., Toyama, R. and Konno, N. (2000), "SECI, ba and leadership: a unified model of dynamic knowledge creation", *Long Range Planning*, Vol. 33 No. 1, pp. 5-34.

Nonaka I. and Teece D.J. (2001) Research directions for knowledge management. *In Managing Industrial Knowledge: Creation, Transfer and Utilization* (Nonaka I and Teece D.J., Eds), pp 330–335, Sage, London.

Nonaka, I. (2007). Strategy as Distributed Phronesis: Knowledge Creation for the Common Good. Proceedings of the International Productivity Conference, 2007, Bangkok, Thailand "Knowledge Management: From Brain to Business Proceedings".

Norton, N., and Kaplan, D. (1996). *The balanced scorecard: translating strategy into action*. Boston: Harvard Business School Press.

Nunnally, J.C. (1978), *Psychometric Theory*, McGraw-Hill, New York, NY.

O'Dell, C., and Grayson, C. (1998). *If only we knew what we know: the transfer of internal knowledge and best practice.* New York: Simon & Schuster.

O'Dell, C., & Grayson, C.J. (1998). If Only we knew what we know. Free Press, NY.

Ogbonna, E. (1992). Managing Organisational Culture: Fantasy or Reality?. *Journal of Human Resource Management*. Volume 3, Number 2, pp. 42-54.

O'Reilly, C. (1989). "Corporations, culture, and commitment: Motivation and social control in organizations." *California Management Review*, 31, 9-25.

Ott, J. S. 1989, *The Organizational Culture Perspective*, Brooks/Cole Publishing Company, California.

Pauleen, DJ, L-L Wu and S Dexter (2007). Exploring the relationship between national and organizational culture, and knowledge management. In *Cross-Cultural Perspectives on Knowledge Management*, DJ Pauleen (ed.). Westport, Connecticut: Libraries Unlimited, pp. 3-19.

Petrides, L., and Nodine, T. (2003, March). Knowledge management in education: defining the landscape. *The Institute for the Study of Knowledge Management in Education*.

Polanyi, M (1966). The Tacit Dimension. London: Routledge and Kegan Paul.

Quinn, R.E. (1988), Beyond Rational Management: Mastering the Paradoxes and Competing Demands of High Performance, Jossey-Bass, San Francisco, CA.

Quintas, P., Lefrere, P. and Jones, G. (1997), "Knowledge management: a strategic agenda", Journal of Long Range Planning, Vol. 30 No. 3, pp. 385- 91.

Ranft, A. L., & Lord, M. D. (2002). Acquiring New Technologies and Capabilities: A Grounded Model of Acquisition Implementation. *Organization Science: A Journal of the Institute of Management Sciences*, 13(4), 420-442.

Ribiere, V.M. and Sitar, A.S. (2003), "Critical role of leadership in nurturing a knowledge-supporting culture", Knowledge Management Research & Practice, Vol. 1 No. 1, pp. 39-48.

Rice, J.L. & Rice, B.S. (2002). The Applicability of SECI model to multi-organisational endeavours: An integrative review. *International Journal of Organisational Behaviour*.9(8), 671682 ISSN 1440-5377. Retrieved from:

http://www.usq.edu.au/extrafiles/business/journals/HRMJournal/InternationalArticles/Volume%209%20Knowledge%20Mgt/Vol9No8Rice.pdf

Robbins, P.S., & Coulter, M. (2002). *Management, Prentice-Hall*. Upper Saddle River, NJ.

Robbins, S. Coulter, M. (2003), *Management* (7th ed), New Jersey, Prentice Hall, p.51.

Robinson, H.S., Carrillo, P.M., Anumba, C.J. and Al-Ghassani, A.M. (2005), "Review and implementation of performance management models in construction engineering organizations", *Construction Innovation*, Vol. 5, pp. 203-17.

Ruggles, R. (1997). Knowledge tools: using technology to manage knowledge better. Ernst and Young Center for Business Innovation Working Paper, April.

Saeed. T., B. M. Tayyab, A. H. Anis-Ul-Haque, and A. U. Chaudhry. (2010). Knowledge management practices: Role of organizational culture, ASBBS Annual Conference: Las Vegas, vol. 17, no. 1, pp. 1027-1036.

Schein, E.H. (1985). Organisational Culture and Leadership. Jossey Bass, San Francisco.

Schein, E.H. (1985a). *How Culture Forms, Develops and Changes*. San Francisco, Calif.: Jossey Bass. pp. 17-43.

Schermerhorn, J.R. Jr, Hunt, J.M., & Osborn, R.N. (2002). *Organizational Behavior*. 7th ed., Wiley, New York, NY.

Schiuma, G. and Lerro, A. (2008), "Intellectual capital and company's performance improvement", *Measuring Business Excellence*, Vol. 12 No. 2, pp. 3-9.

Schollhammer, H. and A.H. Kuriloff. (1979). Entrepreneurship and small business management, Wiley, New York.

Schreiber, G., Akkermans, H., Anjewierden, A., de Hoog, R., Shadbolt, N., de Velde, W.V., &Wielinga, B. (2001). *Knowledge Engineering and Management: The CommonKADS Methodology*. MIT Press: Cambridge.

Senge, P. (1990). *The fifth discipline: the art and practice of the learning organization*. New York: Doubleday.

Sherif, K., Hoffman, J. and Thomas, B. (2006), "Can technology build organizational social capital? The case of a global IT consulting firm", *Information & Management*, Vol. 43 No. 7, pp. 795-804.

Shin, D., & Konrad, A. M. (2014). Causality between high-performance work systems and organizational performance. *Journal of Management*.

Simon, H. A. 1976. Administrative Behavior (3rd ed.). New York: Macmillan.

Singh, M.D., Kant, R., & Narain, R. (2008). Knowledge management practices: a sectorial analysis. *International Journal of Innovation and Learning*, 5(6), 683-710.

S.M. Ali., Qadus, A., Waseem, A., Zaman, K. (2012). Linking knowledge management practices and the organizational performance of Pakistan's telecommunication. *Management Science Letters*, 2(8), 2929–2938.

Starbuck, (1992). Learning by Knowledge-Intensive Firms. *Journal of Management Studies*, 29, 713-740.

Steer, R.M. (1975), "Problems in the measurement of organizational effectiveness", *Administrative Science Quarterly*, Vol. 20 No. 4, pp. 546-58.

Sun, S.(2008). "Organizational culture and its themes." *International Journal of Business Management*. 3, P137.

Sveiby, K. (1996). What is knowledge management? Retrieved May 17, 2004, from http://www.sveiby.com/articles/KnowledgeManagement.html.

Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17, 27-43.

Thompson. J. (1967). Organizations in Action, McGraw-Hill, New York.

Tippins, M.J. and Sohi, R.S. (2003), "It competency and firm performance: is organizational learning a missing link", *Strategic Management Journal*, Vol. 24, pp. 745-61.

Trice, H. & Beyer, J. 1993, *The Cultures of Work Organizations*, Prentice Hall, New Jersey.

Trompenaars, F. 1993, *Riding the Waves of Culture*, Nicholas Brealey Publishing, London.

Trow, D.B. (1961). 'Executive succession in small companies', *Administrative science quarterly*, March 1961, pp. 232-239.

Tseng, S. M. (2010). "The correlation between organizational culture and knowledge conversion on corporate performance". *Journal of Knowledge Management*, Vol. 14, pp. 269-284.

Tse, G., Jason, T.& Patricia, A. (2010). Evolution Strategies for Evolving Artificial Neural Networks in an Arcade Game. Proceeding of Knowledge Management 5th International Conference, May, 2010. UUMCAS, Malaysia.

Tsoukas H. and Vladimirou E. (2001) What is the organizational knowledge? *Journal of Management Studies* 38(7), 973–993.

Venkatraman, N., & Ramanujam, V. (1986). Measurement of business economic performance: an examination of method convergence. *Journal of Management Development*, 13(1), 109-122.

Von Krogh, G, K Ichijo and I Nonaka (2000). *Enabling Knowledge Creation*. New York: Oxford University Press.

Von Krogh, G., Nonaka, I. and Aben, M. (2001), "Making the most of your company's knowledge:a strategic framework", *Long Range Planning*, Vol. 34 No. 4, pp. 421-39.

Wang, Z.N. and Wang, N.X. (2012), "Knowledge sharing, innovation and firm performance", Expert Systems with Applications, Vol. 39 No. 10, pp. 8899-8908.

Weber, Y., Shenkar, O., & Raveh, A. (1996). "National and corporate cultural fit in mergers/acquisitions: an exploratory study." *Management Science*, 42(8), 1215-1228.

Weick, K. E. (1979). *The social psychology of organizing*. 2nd ed., Addison- Wesley, Reading, Massachusetts.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice*. Harvard Business School Press, Boston, Massachusetts.

Wiig, K. (1993). Knowledge management foundations: thinking about thinking. How people and organizations create, represent and use knowledge. Arlington, TX: Schema Press.

Willcoxson, L., & Millett, B. (2000). The Management of Organizational Culture. *Australian Journal of Management & Organizational Behaviour*, 3(2), 91-99.

Williams, A., Dobson, P. & Walters, M. (1994). *Changing Culture: New Organisational Approaches*. (2nd ed). Cromwell Press, Wiltshire.

Xu, J. and Quaddus, M. (2005), "Adoption and diffusion of knowledge management systems: an Australian survey", *Journal of Management Development*, Vol. 24 No. 4, pp. 335-61.

Yang, J.T. (2007), "Knowledge sharing: investigating appropriate leadership roles and collaborative culture", *Tourism Management*, Vol. 28 No. 5, pp. 530-43.

Yew K.W. and Aspinwall E. (2004). Characterizing knowledge management in the small business environment. *Journal of Knowledge Management* 8(3), 44–61.

Zack M.H. (1999) Managing codified knowledge. Sloan Management Review 40(4), 45–58.

Zhou, A.Z. and Fink, D. (2003), "Knowledge management and intellectual capital: an empirical examination of current practice in Australia", *Knowledge Management Research & Practice*, Vol. 1 No. 2, pp. 86-94.

Appendix:

Appendix I: Questionnaire for Employees of the companies (Managers/ Officers/ Staff Members).

"IMPACT OF ORGANIZATIONAL CULTURE ON KNOWLEDGE CONVERSION AND ORGANIZATIONAL PERFORMANCE IN THE TELECOM SECTOR COMPANIES IN BALOCHISTAN."

I am a student, enrolled in PhD (Business Administration) program at Selinus University of Sciences and Literature . I am currently working on my PhD dissertation.

Please cooperate in the completion of my research through participation in this survey. I assure that the data collected from this research study will be brought in aggregate form at the time of presentation, in which the confidentiality of the respondents will be assured at all times. Thanks in Advance for your cooperation.

Name	Gender: Male	☐ Female ☐	
Status (Designation):		_	
Name of the Company:	PTCL Mobilin	ık 🗆 Uf	one \square
City: Quetta (Balochistan)			
Age: 18-30 years ☐ 31-40	years ☐ 41-50 years [above	50 years □
Qualification: Bachelor	Master	Special Education	on (Technical)
Work Experience: 1-2 Years	☐ 3-4 years ☐	5 -6 years 🗆	
7 years & above □			

S.NO.		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<u> </u>		1	2	3	4	5
ORGA	NIZATIONAL CULTURE	L	L			
Clan C	Culture					
1.	The working environment of the company has been harmonious to some extent.					
2.	The workers of the company support each other highly.					
3.	The workers of the company believe in one another strongly.					
4.	The company offers a good place to share things with others as a family.					
5.	The company shows respect for participation of every worker.					
6.	The company respects team spirit always.					
Adhoc	racy/ Market Culture					
7.	The company has an open environment to a certain extent.					
8.	The working attitude of the workers has been found more conservative compared to those of other companies.					
9.	The workers attitude in this company is more averse to risk taking compared to others companies.					
10	The workers attitude here is more averse to revolutions and changes in comparison of other companies workers.					

11	The company is unwilling to take high risks.				
12	The company is also not willing to accept revolutions or changes of higher scale.				
Hiera	archy Culture	•	•	•	
13	The company has extremely formalized structure.				
14	The company has intensely structurized framework or skeleton.				
15	The company manages the tasks of its workers on the basis of certain procedures.				
16	The company workers conduct remains more stable, mature and cautious.				
17	The company conduct is more caring, respectful, and responsible.				
		Source: (9	Quinn 1988	; Park et	al., 2004)
KNO	WLEDGE CONVERSION				
Knov	vledge Socialization				
1	Workers of this company are always willing to share their personal emotions with others.				
2	This company workers are willing to share their personal feelings with others.				
3	The workers of this company are always ready to share their personal experiences with others.				
Knov	vledge Externalization	•	•	•	
4	The company workers are willing to Express their personal Knowledge through spoken language.				

5	The workers of the company are always willing to Express their personal Knowledge through written language.			
6	Workers express their Knowledge, which is in-communicable, through analogies.			
7	The company workers Express their incommunicable knowledge through the help of examples.			
Know	ledge Combination			
8	The workers can communicate, combine and exchange Knowledge through documents.			
9	The workers can communicate, combine and exchange Knowledge through telephones.			
10	The workers can communicate, combine and exchange Knowledge through computer networks.			
11	The workers can communicate, combine and exchange Knowledge through computer internet			
12	The workers can communicate, combine and exchange Knowledge through computer intranet.			
Know	ledge Internalization			
13	The company workers can re-classify and re-combine the existing information in order to create new Knowledge.			
14	Knowledge in this company is always communicated to the workers verbally.			

15	Knowledge to the workers is					
	communicable through stories.					
16	Knowledge is gathered and arranged in					
	a manual to provide excellent training					
	for cultivating workers Knowledge.					
	S	Source: (No	onaka et al.	, 2000; Von	Krogh et	al., 2001)
	ANIZATIONAL PERFORMANCE (Per	ceived)				
	icial Performance		T	1		
1	An integral improvement has been seen					
	in the sales of the company.					
2.	An integral improvement has been seen					
	in the profits of the company.					
3.	An integral improvement has been seen					
	in the return on investment of the					
	company.					
Mark	xet/ Customer specific performance		l			
4.	An integral improvement in the					
	relationship between an organization					
	and its customers.					
5.	An integral improvement has been					
	noted in the relationship between an					
	organization and market share of the					
	company.					
6.	An integral improvement has been					
	noted in the relationship between the					
	company and its customers retention					
	rates.					
7.	An integral improvement has been					
	noted in the relationship between the					
	company and its customers satisfaction.					
Perfo	rmance based on organizational efficienc	y and effec	tiveness (P	rocess-base	ed)	ı

0	A ' 1 1 1 1 1					1
8.	An integral improvement has been					
	noticed in the overall efficiency and					
	effectiveness of the company.					
9.	New products and services are					
	launched by the company on right time.					
10						
10	The company has launched and is					
	managing quality control projects					
	timely.					
11	There are established procedures for the					
	development of new products.					
Perfor	mance based on Human Resource Devel	opment (P	eople-Deve	lopment-ba	ased)	l
12	An integral improvement has been seen					
	in the overall resource development of					
	the company.					
13	An integral improvement has been seen					
	in the skills of the company employees.					
14	An integral improvement has been seen					
	in the company 's commitment to the					
	technology.					
15	An integral improvement has been seen					
	in the company 's commitment to the					
	technological leadership.					
16	An integral improvement has been seen					
	in the company 's endeavors to ensure					
	Personnel development.					
Perfor	mance based on futuristic vision					
17	An integral improvement has been					
	noticed in the company preparing for					
	the future.					
18	An integral improvement has been seen					
	in the quality of strategic planning of the					
	company.					
19	An integral improvement has been					
	noticed in the depth of the strategic					
	planning of the company.					
20	An integral improvement has been seen					
	in the partnership indicators of the					
	company.					

	Main Source: (Tseng, SM, 2010)						
	Source: (Maltz et al., 2003; Germain et al., 2001)						
	noticed in the company's preparations for environmental changes and their anticipation.						
22	An integral improvement has been						
	noticed in the alliances indicators of the company.						
21	An integral improvement has been						