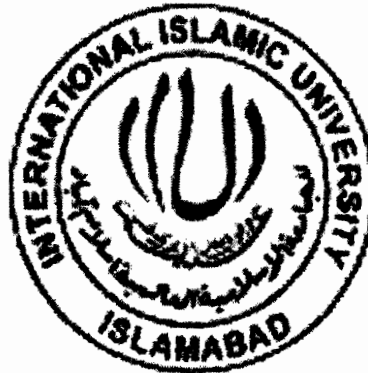


**REALIZATION OF GROWING IMPORTANCE
OF INTELLECTUAL CAPITAL AND ITS REPORTING IN
DEVELOPING ECONOMIES**



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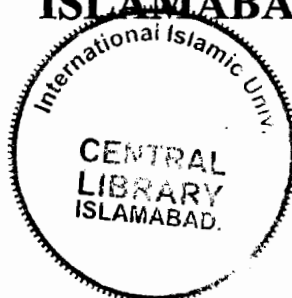
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**REALIZATION OF GROWING IMPORTANCE
OF INTELLECTUAL CAPITAL AND ITS
REPORTING IN DEVELOPING ECONOMIES**

Chaudhry Zubair Sarfraz
Registration No: 17-FMS/MSMGT/F07

A thesis submitted in partial fulfillment of the requirements for the Degree of Master of
Philosophy/Science in Management with specialization in Human Resource Management
at the Faculty of Management Sciences
International Islamic University,
Islamabad.

Supervisor

Dr. M. Bashir Khan

DEDICATION

This thesis is dedicated to my caring and loving family and supportive teachers who have raised and guided me to be the person I am today. They have been with me at every step of the way, through good times and bad. Thanks to them for all the unconditional love, guidance, and support that they have always extended me, helped me to succeed and instilled in me the confidence of doing anything and everything that I intend to do in my life.

(Acceptance by the Viva Voice Committee)

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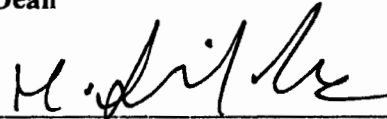
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Accepted by the Faculty of Management Sciences International Islamic University Islamabad, in partial fulfillment of the requirements for the Master of philosophy Degree in Management with specialization in Human Resource Management

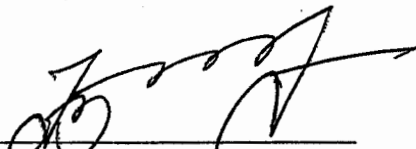
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Dated: 30.10 2009

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ABSTRACT

Intellectual capital is a significant value driver in today's organizations. Conventional financial statements in company's annual reports do not provide the appropriate information for managers or stakeholders to recognize how their intangible resources create value in the future. This study had addressed this issue by devising the concept of Intellectual Capital Statements (ICS), which are intended to connect this gap by presenting information about how intellectual resources generate future value. The concept of intellectual capital is new in the market and much of the discussions and the research work is needed for its strategic recognition amongst business community. For this purpose, in-depth analysis was chalked out which can only be made possible through qualitative study and market survey. Triangulation and matching technique was applied to codify the qualitative data so that the outcomes can be measured and recorded. The results indicated that the potential of Intellectual capital is realized in the Telecom and Banking sector as a competitive-edge-carrier. The study was thus limited to the qualitative visualization of IC and its components in these sectors. The future direction for research is quantitative study of IC based on value measurement.

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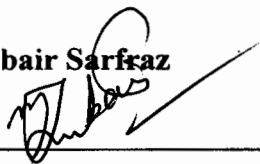
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DECLARATION

I here by declare that this thesis, neither as a whole nor a part thereof has been copied out from any source. It is further declared that I have prepared this thesis entirely on the basis of my personal effort made under the sincere guidance of my supervisor.

No portion of the work presented in this thesis has been submitted in support of any application for any degree or qualification of this or any other university or institute of learning.

Zubair Sarfraz

A handwritten signature in black ink, appearing to read 'Zubair Sarfraz', is written over a horizontal line. The signature is stylized and includes a long, sweeping underline that extends to the right.

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Firstly I want to express my thanks to Allah Almighty for his blessing and guidance which gave me the confidence and strength to complete this thesis in the best possible way.

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LIST OF ABBREVIATIONS

ICS:	Intellectual Capital Statements
IAS:	International accounting standards
HC:	Human Capital
SC:	Structural Capital
RC:	Relational Capital
IC:	Intellectual Capital
IP:	Intellectual property
IPO:	Intellectual Property Organization
CIMA:	The Chartered Institute of Management Accountants
ICM:	Intellectual Capital Management
HR:	Human Resource
HCD:	Human Capital Development
CRM:	Customer Relationship Management
OSC:	Organizational System Capabilities
KM:	Knowledge Management
IFAC:	International Federation of Accountants
R&D:	Research and Development
OECD:	Organization for Economic Co-operation and Development
TPP:	Technological product or process
TPI:	Technological Product Innovation
MNCs:	Multinational national corporations
ICMS:	Intellectual Capital Management Strategy

REALIZATION OF GROWING IMPORTANCE OF INTELLECTUAL CAPITAL AND ITS REPORTING IN DEVELOPING ECONOMIES

CHAPTER NO: 1

1. INTRODUCTION

IC or Intellectual capital has numerous meanings according to the various diverse theories in Social Sciences. Webster's defines intellect as: "Knowledge capability for the cognitive use of brainpower."

In accordance with the IAS (accounting standards recognized globally): the non-physical and non-financial asset which can be acknowledged and employed in the development and delivery of products and services is known as Intellectual Capital. In other words, the insubstantial sources of value or assets that are used by the organizations as capital or resource to gain competitive advantage are known in the present arena as Intellectual Capital.

All that wealth or possession which creates sustainable development for the organization by creating competitive dominance over others is known as IC.

Stewart (1997) portrays the wealth of the organization which is generated through contribution and financing in information channels, intellectual property rights and innovation is none other than the intellectual capital (IC).

Bontis (1998) bifurcates Intellectual Capital as under:

1. HC (Human Capital)
2. SC or Organizational Capital
3. RC (Relational Capital)

The term "intellectual capital" is used or employed for information technology, standards and innovation research and venture capital by the theorists due to the industrial focus. Moreover, this term became widespread between 1995-2000 as theories were being chalked out to know the nature and behavior of the Dotcom Boom as the concept of value and its evaluation was in the process of evolution. The management and safeguarding of intellectual property in Pakistan was considered globally to be an area which was not given due attention and importance, previous to the year 2005.

IPO-Pakistan, A newly established autonomous organization of the Federal Government is meant to deal with the deficiency and ineffectiveness at the organizational level which is proving to be hurdle in the way of well-organized administration of rights related to Intellectual Property.

As it is evident that the awareness level regarding Intellectual property (IP) in the country is IP awareness in Pakistan is near to ground. For this very reason, *Intellectual Property Organization* has been working on this concept through through social and corporate integration. There is a mechanism which is governed by a program which aimed at creating awareness to the out-distance community. Under this program, the pillars of the economy like business community, research and educational institutes and common man are linked through various means and applications communication.

IPO is only the start of the struggle which is aimed at making the nation as a part of the international community which is aware of the significance of IP and its various components. This will also provide a platform for the strengthening of the economy by giving recognition to the creativity, innovation, research and devel-

opment in the area of Intellectual Capital Management. Hence, it is crucial to have strict and pre-programmed policy and system for attaining the goal which is suppose to have a reinforced economy backed by:

- *Transfer of expertise*
- *Innovation*
- *Research and development*

1.1 JUSTIFICATION AND IMPORTANCE OF THE STUDY

This study is based on the universalistic perspective indicating that the most relevant domains and elements of Intellectual Capital are known as:

1. *HC*
2. *SC*
3. *RC*

(Quinn et al, 1993; Meritum, 2002; Bontis, 1998; Bontis, 1999; Bontis, 2002; Bou-ty, 2000; Bontis, 2000)

This study is an attempt to learn the role of Intellectual Capital in the organizations and how it can be valued and measured. The role of IC-components in maintaining the competitive edge will be determined through their effect on the performance of the organization.

The present age is categorized as the age of knowledge management where there is explosion of information which has created the need of a society backed by timely and vital information to gain economic benefits through competitive organizations which can compete in the international market.

Most of the eminent scholars including Peter *Drucker* believe that the emergence of knowledge-based society is marked with the materialization of novel concept and

practice where the vital source of value creation are intangibles based on knowledge and other intangible assets.

The present age is the journey of the concept of value creation from tangible or material sources to intangibles. Similarly, there is visible transformation in the way companies generate and project value for the attainment of sustainable progress. Knowledge in contrast with the tangibles (assets, goods, resources) grows mostly by sharing mechanism based on communication channels.

There are five Communication theories which state that a network's potential benefits grow exponential with respect to its interconnection. This phenomenon is true for all knowledge-based networks which are responsible for sharing and disseminating the required information.

Rational and radical growth at the organizational level can only be possible through the dissemination of information to have uniformity in awareness level of the stock and stakeholders. This will promote homogeneity in targets and cross functional responsibilities. In this way every process in the organization will be source of value creation and assurance.

Today, one of the most valuable intangible resources is knowledge which is termed as Intellectual Capital (James et al, 1993).

In *Asian philosophy*, it is not categorized as a substance or a thing rather it is an element or a course of action. Prevailing metaphors include knowledge as spirit, wisdom or enlightenment.

In *western organizations*, it is observed that knowledge is believed to be a substance which has value or can be valued. This concept is depicted by **Gustavsson, (2001)** and it is named as *thingification*. It is not uncommon in management think-

ing today. He also depicted that knowledge has value and can be utilized to attain the “bottom line” as far as business and economic activities are concerned.

Quinn et al, (1993) have concluded that customer recognition has been achieved by those corporations which have adopted this novel principle by creating and adopting new knowledge for enhancement in Intellectual Capital. Grant (1996) depicted that in order to make the most out of intangible assets, internal and external customers are to be involved in the process of intellectual capital development. This collective expertise will be highly beneficial for optimum utilization of the cutting-edge sources and their management which will pave the way for superior value generation. Knowledge which can be constructive is defined by *Stewart (1997)* as “Intellectual Capital”.

1.2 ORGANIZATION OF THE STUDY

The first chapter deals with the introduction and rationale of the intellectual capital and its details about the whole theme as well as its realization in the developed and developing world. The second one illustrates about the background, insight and visualization of the concept of IC and its components.

The three main components of IC are defined and classified in the light of the work done by the renowned scholars like Bontis, Edvinsson and Andriessen and their work in this field is like a milestone. The work of OECD (Organization for Economic Co-operation and Development) in the shaping of manuals like Fracasti and Oslo for R&D and innovation along with the policies is also added according to the concept being described in the dissertation along with the illustration of relevant models. The reporting of Intellectual Capital and its strategy is also elaborated in detail in the same chapter.

The research methodology, which explains about the constructs and concepts of the study, is labeled as the third chapter. It covers the Research Design, Survey Methods (Interviews), Sampling Technique, The Advantage, Response Rate and the Research Model. Chapter four discusses the result, outcomes of the study. Finally, conclusion, limitation, recommendation and future research directions are wrapped up in the fifth chapter.

The comprehensive tables of the survey responses are given at the end of the thesis under the heading of Appendix I.

The sample of the interview questions are also positioned at the end as Appendix II.

CHAPTER NO: 2

LITERATURE REVIEW

2.1 REALIZATION OF INTELLECTUAL CAPITAL

During the period of agricultural and industrial era, only tangible items like land, manpower and wealth were valued at all levels of the economy. Today, considerable shifting has been observed in this concept as intellectual assets are performing as the substitutes of investment and material resources. Intellectual assets which are mainly backed by innovation and know-how are categorized as the vital wealth creation sources.

This revolution in concept and practice has occurred during the start of the new millennium which is considered as the dawn of the knowledge-based economy. The chief productivity indicators are not tangibles now rather they are placed at secondary importance. This is the result of the information communication means which have amplified the transportability and transfer of technology and knowledge in the area of IC. Moreover, now the legacy can be maintained by only those companies which are having a culture of continuous improvement and progress in their management practices. In other words, to be a learning organization, the need of learning organization is also increased by the fact that information cannot be blocked in any manner.

The most observable advantage that the organization will receive from applying this concept is that the HC, RC and SC will collectively built the competitive advantage of any innovative organization. This is because the value creation strategy will revolve around innovation, market research and continuous progress to have due share in the emerging markets.

The view of the firm, which is based on knowledge, clearly states that expertise of the employees and steady flow of objective struggles determines the future of the organization. In this respect the management of knowledge assets has become cardinal.

According to Grant (1996), this change in perception has moved the “physical capital” to “knowledge capital” is meaningful. It may be revolutionary as the industrial revolution. It caused a transition between 50 and 150 years to shift from agricultural to an industrial era. Similarly we are now in the start of moving to a knowledge based economy which may take 10 to 50 years (Bertels, 1998). Knowledge is principally perceived to be an asset which has the ability to be stocked, innovated and maneuvered in a book entitled working knowledge.

It is also visualized to be an asset which can be exploited and has the ability to generate return greater than the input (Stewart, 1997). So we can name it as intangible asset. According to Curado (2008), the unstated and unspoken knowledge which is the property of the employees is the *human capital or HC*.

The employees, generally, take the HC with them when they leave the organization. It can be said that in organization the knowledgeable employees are the strength of the organization due to this HC.

SC or the Organizational Capital which is based on the structural efficacy mainly consists of the resources possessed by the organization and they remain with it at the closing stages. It remains with the organization even when the external customers leave. It mainly consists of the stock of knowledge whether undeclared or clear which is contained in the organizational customs and values. The useful information like the business documents and organizational network also come under the definition of SC.

The capital which involves the external and internal integration for the fabrication of business networks is known as the capital based on Relational Capital or RC. Most of this constituent of IC is unstated and implanted in the *relational management mechanism* of the organization related to the external and internal stock and stakeholders.

Quinn et al., (1993) have stressed that *Intellectual capabilities* are a source of productivity of a modern corporation or nation. It is also considered as a foundation for value addition. The field of Knowledge Management/ Intellectual Management had seen a significant growth in the last decade and a half. It is declared globally during conferences that the effective and efficient management of IC is the need of the modern times and it is high time for a comprehensive research on it to unleash its benefits for the global community.

Comprehensive research activity is dreadful need of the present in order to have an improved understanding of the discipline (Serenko et al, 2009).

Today, the dominant investments are going into intangible activities like Research and development, education and competencies as compared to industrial-based tangible value creation mechanism, which is no longer the leading source of value creation. The business is going digital and characterized as a shift from bricks and mortars to clicks and portals which has elevated the importance of intangible value or assets which are also known as intellectual assets. This phenomenon is also reflected in the form of gradual and significant increase in the difference between market and book value. The challenge for the IC leadership on societal and commercial level, nowadays, is to communicate the value of intellectual assets to the stakeholders in a trustworthy and auditable manner (Edvinsson, 2000).

The characteristics of IC depict that all its elements work as system by interacting with each other to generate value for the company. For example, a company could create software application by its skilled programmers but is unable to make value supported product without the input of intangibles like loyalty and dedication of its employees and potent brand name backed by the strong distribution channel. This is the secret of the giants like Microsoft. (CIMA)

2.1.1 HUMAN CAPITAL

It is the component of intellectual capital and a set of explicit and implicit knowledge of the people in the organization shared or not amongst them, that has value for the organization. Examples for Human Capital are: skill s, abilities, knowledge, know-how (Bontis, 1998).

According to (Lepak et al, 1999), Human capital theory mainly deals with the cost and return related to the human-based cost-effective transactions. It is also mentioned that HC determines the value and uniqueness of employee skills. Investigation on the Intellectual Capital Management (ICM) and its application is the core of the whole research process.

The work of Carpenter et al., (2001), consistent with our study, explains that “Human capital embedded in the organizational structure and relational capabilities can be source of competitive advantage, knowledge- and human capital-based resources may create an opportunity for stakeholders”

The studies which were done on the cost accounting methods of human resource gave birth to IC. This observable fact is stated in the research work done by Bontis in 1999. Some researchers highlighted the difference in the methods used for the measurement

of Human Resource (HR). They were of the view that they are of two types known as accounting techniques for HR asset and HR capital. The scope of HR accounting is to devise a method for the valuation of the HR across the organization so that it can be rigorously communicated and transferred.

HCD known as human capital development is the next step of HR accounting. It can be done through the valuation of the human resources invested in an organization according to the knowledgeable workers employed in an organization.

Competitive edge based on HR, which is empowered by knowledgeable work force and knowledge-based-networks, is a legacy in itself. This competitive edge is the most stable one which cannot be copied by the competitors in this learning-backed-performance age. This is evident from the fact that knowledgeable workers are attracted by their concerned organizations. This is the process which supports the leader organizations to sustain.

For this process to be ongoing there should be a system of continuous HRD (human resource development) through quality measurement at the "Shop Floor" by Intellect-based-appraisals.

These appraisals should be backed by well run professional shops. Leaders tend to be demanding, visionary, and intolerant of half effort (James et al, 1993). Bontis (1999, 2002) has twice emphasized that this Human Capital is based on the cognitive skills of the employees which are backed by the organizational culture. This capital in the form of investment can be readily observed at the stages where there is interaction between external and internal customer.

Many of the eminent scholars along with Bontis, (2002); Roos et al, (1999) and finally Guerrero, (2003) believed that capital based on HR known as HC is the composition of various elements. Some of the productive factors of HC are know-how, understanding, motivation, problem solving attitude.

Intellectual competency of many financial firms lies in the human experts and the systems software that collects and analyzes the data surrounding their investment specialties. Access to the internals of these centralized software systems is tightly restricted (James et al, 1993).

2.1.2 STRUCTURAL OR ORGANIZATIONAL CAPITAL

Bouty (2000) explained that organizational culture should support exchange of intellect, is the way towards innovation and to the development of intellectual capital, which has to be "renewed continually". This mechanism guarantees that the new resources, new ideas, and new skills flow in and can be developed in an organization which gives the organization a boost. Structural or Organizational Capital is the investment at the organizational level regarding the business routine. This is the form of intellect that is purely the property of the organization. It is what's left when the employees leaves the organization (Grasenick, 2004; Roos et al, 1997).

Bontis (2000) depicts that it consists of all that which is not the part of HC and RC. All the value creation reservoirs which are based on knowledge documentation come under the umbrella of OC or organizational capital.

The constituents of this capital are:

- Standard Operating Procedures

- Manuals
- Policies
- Public reports
- Internal reporting mechanism
- Business networks security

Effective leveraging of intellectual processes requires attention to all opportunities for expansion. The techniques used for leveraging these resources closely resemble successful coaching. It means that learning and dissemination of intellect is one the core competency of financial firms. The critical activities which are to be followed in this manner are:

- ✓ Creating systematic technological and organizational structures that capture, focus, and leverage intellect to the greatest possible extent
- ✓ Demanding and rewarding top performance from all players

Much can be learned from how successful (and failing) practitioners have handled the leveraging of their intellectual resources (James et al, 1993).

Not only must a company design its recruiting, organizing, outsourcing and software support systems to focus and leverage its intellectual capabilities; it must also develop its measurement and reward infrastructures to reinforce its strategic intentions in the following significant dimensions:

- Work related aptitude
- CRM (Customer Relationship Management)
- Intellect-backed-asset
- Internal efficiency

Strategists inspected that new and fruitful opportunities can be gained through re-focusing towards the above vital points of performance. These are to be made the art of the corporate plan through restructuring and re-engineering of the organization.

2.1.3 RELATIONAL CAPITAL

Relational Capital is the stock of intellect based on stated and unspecified knowledge in which organizations deal with their customers, business partners, funding agencies and other stakeholders, including society and the region in which they are located. The examples for RC are value-based associations and connections with customers, distributors and the stakeholders.

The source of productivity for most of the companies as far as their value based connections are concerned is directly proportional to the Organizational System Capabilities (OSC). These capabilities involve the development supportive structure of the company which is focused on the leveraging the return or benefit from IC based abilities (Quinn et al, 1993).

Further studies depict that the root of increasing the supremacy of IC resides in the fact that the value should be generated from the worth transferred to the customers. Conceptually, it means to break down the tasks of the employees in to value –steps which are traceable, transferable, manageable and be given standardized –value. This will promote the employees understanding regarding the intellectual-based-tasks. Such activities can either be performed internally or outsourced.

For maximum leverage, a company should focus on the vital customers by directing their intellectual resources towards them. This means that the focal point should be the edge of the company.

Managers need to look behind their products to identify this by measuring those intellectual-based skills, knowledge bases, or systems that permit the company to generate elevated investment-returns than its competitors. With rare exceptions, these resources are what create unique value for customers. An interesting phenomena is that these resources do not include products or physical assets, which means that loyalty is created by soft assets and not mainly by hard assets. By developing these unique core competencies in depth as a secure strategic block between its suppliers and its customers, the company can more aggressively outsource or enter alliances with the world's most effective external suppliers to leverage its fiscal and intellectual resources in other areas.

This insight of the vitality of the intellectual capital leads the way towards an understanding that the future of the giant's lies in the intellectual-based core competencies which describe the legacy of their market leadership (James et al, 1993). Eminent researchers have sharply pointed out that Relational Capital characterizes an organization's official and unofficial affairs with the inverters entrusted by their corporate wide perception. It is also the two-way traffic based on value communication between the internal management and external customers. Fletcher, (2003); Garsenick, (2004) and Bontis (1998) also supported this concept.

The three components of intellectual capital which are named as HC, RC, and OC are interdependent with respect to combination, utilization, interaction, alignment. This theme reflects that management of IC, backed by the stream of knowledge blended with its constituents gives purposeful value to the organization (Subramaniam et al, 2005; Youndt et al, 2004).

2.2 DEFINITION

The majority of the researchers consider it as the gains which are knowledge-based and generated through intangible assets. Stewart (1997) describes IC as the set of constructive facts which are productive and practical.

In an economy, there are three main forms of production; land, material and capital. However more attention is now being given to a fourth, less tangible form, which is knowledge. This is increasingly prominent and significant core of global economy, and understanding, what knowledge is and managing it are vital to the organization and individuals who work with in it.

The gap found between the market value and that of book is the evidence of the presence of IC (Bontis, 1998; Bontis, 2002).

IC is the vital source of competitive advantage for the organizations today and it is recognized as a potent and valuable asset. The competitive edge of the organization today and in near future will rely on the means through which the capabilities of the organization are effectively exploited. These capabilities or potentials are chiefly related to R&D and innovation that can be effectively exploited. R&D and Innovation encapsulates all the unstated and absolute knowledge, at the organizational level; it is called IC.

Some of the research scholars are also of the view that all the knowledge-assets at the organizational level, in totality, are known as IC. The organization of these knowledge-assets is done through KM known as knowledge management (Bontis et al., 2002).

IC in contrast with the other conventional resources like financial and monetary resources behaves in a very different way. Unlike the tangible resources like manpower, property or capital, IC can produce investment return at a higher level than other tangible ones. It means that if knowledge management can support the utilization of intellectual assets then these assets can have a positive-synergic-effect on the investment return ratio. From this, it is evident that if proper supervision is applied then the value of intangibles is far more superior to the material resources. One thing is also worth mentioning that the technological and organizational infrastructure should be knowledge-management-supportive.

2.3 CLASSIFICATION OF INTELLECTUAL CAPITAL

The International Federation of Accountants (IFAC) report in 1998 explains the classification of intellectual capital in the following manner:

HC (Human Capital)

- Human intellect
- Learning
- Professional aptitude
- Task awareness
- Job-related appraisals

OC (Organizational Capital)

- Official Documents
- Productive Capabilities
- Out-of-the-way business activities

- Material Competitive Advantages
- Architectural effectiveness

RC (Relational Capital)

- Brand Names
- Clientele
- Purchaser Loyalty
- Company Name
- Stock of Inventory
- Delivery Channel
- Company Alliance
- Contracts Related to Licenses

Source: Kamath (2006)

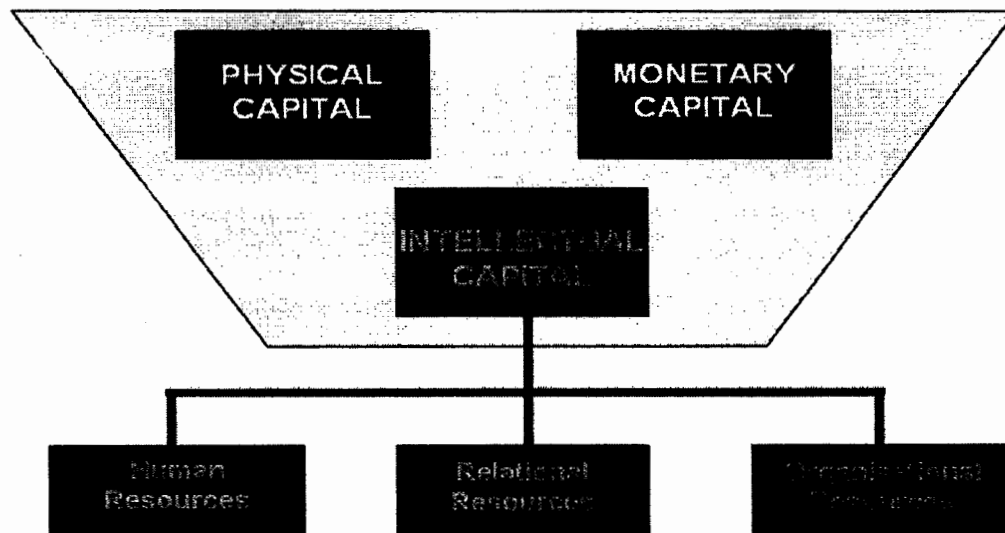
Human capital is the degree of competency of the employees reflected by the aspects related to their training, development, and their contribution to the organizational - development. It also involves value creation, generation and sustenance for the sustainable and rational edge over other companies.

From this, it is clear that the cognitive and practical skills of the knowledgeable employees are those that can be valued to the degree of which they apply and use it for their betterment and company's future. (Bontis, 1998; James et al, 1993) The Structural Capital, on the other hand refers to the corporate culture which supports and develops systems for storage and sharing of knowledge to promote know how within the organization.

The organizational structure is also a vital and core part of this capital along with the vision, mission, infrastructure and Intellectual Property (IP) which determines the market value of the company (Bouty, 2000; Grasenick, 2004; Roos et al, 1997; Bontis, 2000).

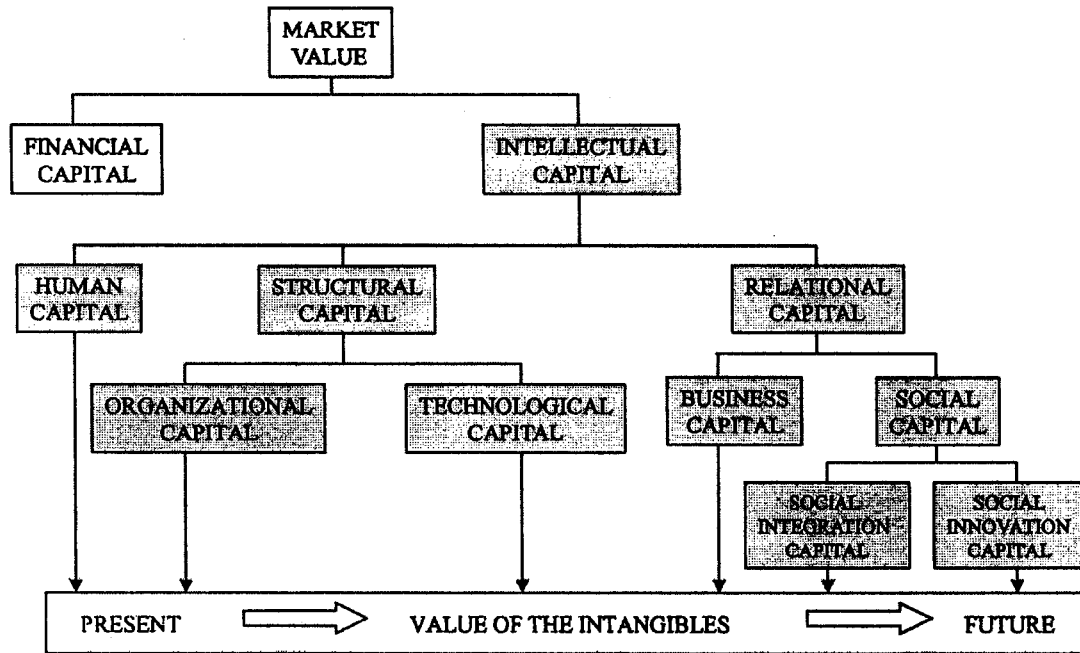
Finally, Customer or Relational Capital is the customer commitment level which is based on his/her customer life cycle and repetitive business. It further incorporates networking with the suppliers and stakeholders. (James et al, 1993; Bontis, 1998)

2.4 MODELS



Source: Bernard Marr (2005)

The model above shows that the combination of intangible resources namely human, relational and organizational capitals form the Intellectual Capital of the organization without which the structure of the organizational capital portfolio is incomplete. It further illustrates that the three types are distinct from each other yet they are interdependent to attain the capability of creating stakeholder value.



Source: Intellectus Model (CIC, 2002) and self-elaboration

According to Bueno et al, (2004), this is an evolutionary intellectual capital model which strengthens the fact that the three core elements of the intellectual capital can have further subdivisions in a society where it is recognized in its institutions and valued as a source of future competency. It is, however, the main contribution of this model towards this study of realization of intellectual capital in organizations.

2.5 PRODUCTIVE TOOLS OF IC- R&D AND INNOVATION

Quinn et al, (1993) believes that the corporations today have productivity which is based on IC rather the tangible assets. This is evident from the fact that the book value of the assets is mostly less than the market value. Other than the service industry, the manufacturing sector has also observed IC in the form of:

- Procedures based on research and development and innovation.

- Innovative production.

As this is the age of information technology, innovation also generates the sustainable value for the organization.

2.5.1 THE FRASCATI MANUAL

It is the globally acknowledged method for assembling and employing R&D statistics and information. In other words, it is an instrument which is crucial for the knowledge intensive institutions globally for the recognition of corporate competence.

This manual serves as a set of improved guidelines with regards to:

- Capacity of research and development in the service sector.
- Universalization of the concepts and applications.

Research and development is defined as the organized and resourceful effort which is objectively done to gain intellectual leverage. It consists of the HR, norms and values, and the reservoir of expertise for the structuring and operationalization of the novel applications.

2.5.2 RESEARCH AND DEVELOPMENT AND INTELLECTUAL CAPITAL

Bontis et al., (2002) has depicted that “stock of knowledge” is Intellectual Capital. So it can be concluded that R&D is reflection or the productive tool of IC.

Activities included in R&D: The methods of research named as basic, applied and experimental research come under the umbrella of R&D: *Basic research* is untried or hypothetical work initiated principally to attain novel understanding of basic ground-work related to the observable fact and being objective less.

Contrary to this, the *applied research* includes novel examination commenced for the sack of novel dimensions of intellect. Applied is objective oriented research .

Realistic know-how of experimental knowledge can be achieved through investigational expansion in disciplined activity which is to be obtained from accessible information. The objective of this knowledge is to have application procedure and plan for:

- Production of innovative equipment or applications
- Establishment of up-to-the-minute practices and arrangements
- Considerable development in matured systems

2.5.3 DISTINCT NATURE

The core of every economic activity has certain characteristics like the productive capability of intellectual capital; this is that property which discriminates between research and development and other activities which are backed by financial or activities related to observation of various developments in economic sectors.

The manual named as *Frascati* is the reservoir which serves as the directory of the activities which are included in the research and development process and clearly discriminates those activities are not the part of R&D.

The element of novelty of the issue along with declared improbability regarding technological and scientific advancement is present in R&D. Moreover, elementary level awareness along with methodological knowledge is not helpful in familiarization and the explanation of the setback or problem. The activity, initiated for the sack of the investigation of the solution in this situation, comes under R&D.

This is the fundamental standard by which clear line can be marked between R&D and other activities. Talking about a guide book, the Frascati manual supplies the following list of questions to identify some supplementary criteria for distinguishing research and development (R&D) activities.

Complementary principles (list) which distinguishes from related activities are:

- *Aim of the task*
- *Novelty of the assignment*
- *Can it be an addition to the available knowledge?*
- *Relationship between the current and previous observations*
- *Can it be a source of development in understanding?*
- *The methodological nature*
- *The source of financial support*
- *Is it another scientific, technological or industrial activity?*

Source: OECD (Organization for Economic Co-operation and Development)

The difference can be clarified that, which activity can be included under R&D and the one that cannot be by the following examples:

Routine analysis of causes of death is not R&D whereas unusual exploration and analysis of specific fatality to investigate about the adverse affects of distinct cancer therapy is R&D. Likewise the activities which do not have a specific objective do not come under the definition of R&D. Where as, activities like teacher training programmes and their affect on the scoring of the students under certain conditions and environment is R&D. The Frascati Manual, while describing the scope and border of R&D activities to have thumb rule for differentiating between R&D and other activi-

ties, gives some vital rule. According to the Organization for Economic Co-operation and Development (OECD) (2002), R&D covers all those activities which have fundamental aim for development and enhancement in the course of action or produce.

Classification statement : The work which is predefined or preplanned or it is done to learn the efficient running of the system without any novelty of improvement in system, then this activity does not come under the definition of R&D.

2.5.4 SOCIAL SCIENCES AND HUMANITIES

The know-how regarding human, values and civilization included under the definition of R&D cover activities of social sciences and humanities. Human and Relational Capital as defined by Bontis, (1998) is basically the useful knowledge regarding the human and organizational structure. According to the Manual, the criterion defined is: Novelty of the concepts, procedures, empirical, otherwise intellectual component of the task. The categorizing of R&D in the service sector has exceptional barriers like:

- The identification of the projects, which involve R&D, is complicated
- The line which marks the difference between R&D and other activities is doubtful
- The notion of R&D is not specific in the service sector and has to cover a long journey of realization before it can be recognized

Elementary characteristics of R&D in service industry are as follows:

- Create new knowledge
- New applications devised form the user of knowledge

- Service products which innovate by the virtue of their functions are also included in R&D

Identification standard for R&D in the service sector:

Existence of R&D in service activities can be investigated by considering the following factors:

- Relations by means of community exploration facilities
- Workforce participation with research students or research scholars
- The chalking of model

2.5.5 BANKING AND FINANCIAL COVERS

The Manual provides a milestone for the development of scale for differentiating R&D from other activities is:

- Monetary uncertainty investigation
- The chalking out of a mechanism for mobile banking
- The system for mobile number portability
- The development of strategies for the tracking of the customer behavior regarding the introduction of a new product

A number of other activities are associated or linked with R&D due to their nature of information flow, operations, structural and human resources. They also have somewhat scientific and technological basis but cannot be included while measuring R&D. Conclusively, these activities along with R&D come under the activities related to science and technology.

The procedural nature of scientific and technological innovation and R&D

The implementation of product and process innovation which is based on novel concepts, technologically and having new understanding, which is created with the investment in innovative activities, is known as breakthrough in the scientific and technological fields. This is known as “scientific and technological innovation”. Research and development is executed at different levels during the whole procedure. Thus, R&D acts as the basic source and as a mean of problem solving till the implementation stage.

“Realization of incorporeal knowledge plus expertise, getting hold of personified know-how, business re-engineering, further wealth attainment, fabrication plus advertising for a novel or enhanced goods” Source: Oslo Manual (OECD, 1997)

A significant demonstration stage is incorporated in the innovations, based on government R&D programs. It can be stated as the assignment which requires innovative activities at every phase and is objectively a rational situation, mainly for the devising of nationwide guidelines supporting modernization. The disconnection points sandwiched in investigational growth plus connected events, which are critical toward realization of novelty, are the vital points of significant errors.

2.5.6 INNOVATION

2.5.6 (I) THE DEFINITION OF INNOVATION

It is the novel process directed towards the enhancement of the competitive edge of the organization, along with its understanding. Source: Oslo Manual (1992)

2.5.6 (II) INTRODUCTION-OSLO MANUAL

Today, in this age of informational and technological revolution, it is evident that the source of growth and productivity is the growth and dissemination of new technologies. A clear necessity to unearth structured set of procedures or policies for the analysis of the technological innovative activities is there, on which, relies the escalation of output. The first edition of the Oslo Manual (1992) which mainly encompasses the two aims: one is to chalk out a structure which can serve as a guideline for the prior studies to be similar. The second is the assistance to the trainee to this crucial work field.

2.5.6 (III) INNOVATION BOUNDARIES

The Oslo manual states that innovation has two main categories:

1. Technological product innovation
2. Technological process innovation

These two are based on development of significantly improved and technologically innovative new practices.

The Technological process innovation is put into practice when the product is in the introduction stage otherwise utilized in the developmental process; this involves product and process innovation. The Technological product innovation consists of a sequence of organizational, monetary and economic activities.

The organization which has employed or used processes or products which are superior with regards to innovation and technology has performed TPP (Technological product or process innovation).

2.5.6 (IV) TECHNOLOGICAL PRODUCT INNOVATION

The characteristics of a product like improvement in quality and timely delivery with better services to the customer is TPI.

2.5.6 (V) TECHNOLOGICAL PROCESS INNOVATION

It is the execution of novel manufacturing or deliverance techniques. TPP innovation can consist of, in individual or collectively, the alteration in HR, materials or functioning routines. The manual depicts that it is the scientifically innovative and notably better fabrication processes, together with delivery techniques. The techniques can be directed to create or distribute scientifically original otherwise better goods that cannot be formed otherwise distributed by means of usual fabrication systems. Technological innovation may occur both in production process along with the goods of the organization. It can also be observed in additional underneath proceedings like the supply by the other departments. It is important to note that innovation occurs when the product or process is new or significantly improved. Globally, TPP innovation occurs with the implementation and development of novel process or product.

2.6 RATIONAL AND INSIGHT FOR IC REPORTING

2.6.1 VALUE, VALUATION AND MEASUREMENT

The extent to which something is desired or needed in comparison with any other thing is classified as its value. Value is the worth which is associated with any object

due to its usefulness. Valuation means the value of the object which is recognized as an understandable manner. This clarifies that a framework or criterion is to be chalked out that reflects the usefulness or desirability of the object. Conclusively the valuation of an object is an evidence of the availability of value in that object or thing.

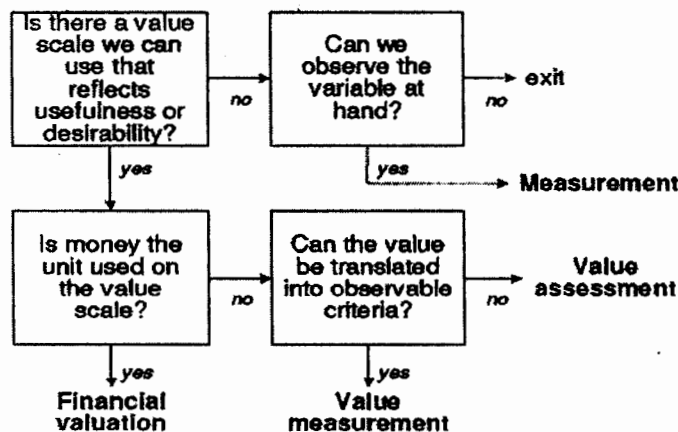
There are four elementary ways for this purpose:

1. The criterion of valuation in financial or economic terms
2. Value measurement to have observable evidence
3. Value assessment through personal evaluation
4. A frame work consisting of metrical scale based measurement

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Obviously, it has been evidently observed above, the measurement method, is not a valuation technique, however, it is used by the intellectual capital society. Measurement is a process in which the relationship of the assigned scale numbers depicts the variables. Measurement methods use measurement scales instead of value scales.

(Andriessen, 2004)



Source: Andriessen, 2004, P.22.

2.6.2 INTELLECTUAL CAPITAL STATEMENTS AND MEASUREMENT

Caddy (2000) says that the intangible assets which have an ability to produce an economic benefit for the organization and are measurable by any method, to some extent, can be quantified. This measurable effect results in increased sales or reduced expenditures. This means that reduction in outlay in any form can be a proof of presence of IC. The organizations are fighting for this today, and this competition is developing into a cut-throat and aggressive struggle. He further insists that the increase in intellectual capital can be a source of increase in other types of intangible assets. An interesting breakthrough in the studies of intellectual assets is that its impairment can be traced by the application, success and the organizational effect of the ideas put forward by the members of the organization.

Intellectual capital is not merely a set of intellectual assets, it also comprises of the intellectual based liabilities. This concept takes us to the view that more work on intellectual capital is to be done to have a proper picture of this valuable intangible capital. Meritum (2002) discovered that IC is applied to the total intangible, mental possessions and capital of an organization, as well as its practices.

Accountants often use the phrase: "intangible assets" when referring to a compartment of these. IC is the mixture of the HC, SC and OC and the related activities of an organization. Lepak et al, (1999) depicts that the human resources have information plus abilities which possess the same significance. This view is also supported by the resource-based view in addition to HC theory. Oliveras et al., (2008), is of the view that there is a significant "hidden" value in companies scrutinized, and is in the gap between the values of the book and market.

Carpenter et al., (2001) supported this view, according to them the senior managers of the MNCs of USA performed better with having experience of foreign assignments. The hidden capital of the firm known as the IC can be shown by the help of IC statements which can depict the reason of the gap between the market and the book value. (Edvinsson et al, 1997). Hitt et al., (2001) have explained with evidence that there is a positive effect of human capital on performance. It contributes towards “resource-strategy contingency fit” of the firm. Intellectual Capital is a significant value driver in today’s organizations. Conventional financial statements in company’s annual reports do not supply the appropriate information for managers or stakeholders to recognize the way the intangibles create value for them.

Intellectual Capital Statements are intended to connect this gap by presenting information about how intellectual resources generate future value. It has been found out that the conventional monetary declaration model is not able to reveal the business value. There is need for novel accounting techniques for the accounting of the intangibles as the current ones do not account the recording of most of the intangibles. The most understandable measurement of IC is the book value and market value difference (Oliveras et al., 2008).

As far as the measurement is concerned, IC can be measured to some extent by the valuation of the intellectual property or IP. It also points out revitalization and development as the IP rights are generated from novel concept and practices. Conclusively, it can also be viewed as the return on the investment. (Bollen et al, 2007).

Measuring Approaches for Intangible Assets:

Hansen et al., (2007) listed measurement techniques for intangible assets which are categorized in four categories:

- Direct IC technique: evaluates the monetary value of all the intangibles and then accumulate them
- Market financial capital technique: the value difference between the market exploitation and the shareholders value
- Return on assets method: the earning of the organization is to be divided by the total value of the assets

The valuation of IC with respect to the regeneration capacity of the business is also reliable method to depict the future value of IC (McCutcheon, 2008).

Problems with Measuring Intellectual Capital: Luthy, (1998) is of the view that management of intellectual capital is going through its development stage which is evident from the infancy of the understanding regarding the scales of measurement of IC.

Revolutionary steps are being taken to make effective management of IC possible, as it is a complex combination of all forms of usable productive knowledge in the organization. IC does not only comprise of assets but the liabilities also without which the complete picture of IC cannot be chalked out (Caddy, 2000). Models of IC which are developed have rarely attained recognition across the globe rather there is growing realization that all members of the corporate world should be involved. The most elementary problem faced by the recent research is that a great deal of focus is on solutions rather on the organizational barriers. Moreover, the intellectual capital community is lacking behind in this manner by neglecting the setback in the understanding related to the valuation and measurement hitches of IC (Andriessen, 2004).

Historically the Accounting Rules were designed to account the tangibles which were recognized in the industrial age, Intangibles are intricate to measure due to lack of standards which are acceptable throughout the industry. Idiosyncratic nature of IC re-

veals that each organization has a diverse system of intangible's valuation due to which comparability across the companies is problematic.

THE "MERITUM" GUIDELINES

IC bifurcated in two categories:

1. Static intangible resources can be measured at any particular instance
2. Dynamic intangible resources are the activities like acquiring or internally fabricating intangible resources for the cause of sustainable improvement, valuation and monitoring. These intangibles do not appear business financial reports (CIMA)

2.7 INTELLECTUAL CAPITAL MANAGEMENT STRATEGY (ICMS)

Intellectual Capital Management Strategy can be a source for the writing of IC statements (Brown, 2005). ICMS is a tool which is used by the organizations to create and maintain their competitive edge. The change in the management thinking from the tangible to intangible for the value chain creation is imperative. It is proved that booming companies have made strategies which are based on the valuation of IC and its elevation through innovation and human resource management (Quinn et al, 1993). The knowledge based economy has led to focus on IC from its economic point of view. The regional IC development plan is being devised to develop a plan to measure, standardize and evaluate the intellectual capital which is the soft asset and it is some times more valuable than the hard assets. RICBS (Regional Intellectual Capital Benchmarking System) aims at the formulation of a strategy which tackles the issues like the performance bottle necks and the inefficient usage of the intangibles in the building of IC. This leads us to the view that Intellectual Capital Benchmarking at regional level is vital for the realization and valuation of IC from the economic aspect as it is depicted by **Rodriguez et al., (2006)**. In recent years, the academic field of IC

has grown significantly. The value-creating factors of the organization are included in IC that traditional balance sheet does not show but they are of critical importance for the long-term profitability of a company.

Human capital, structural capital and relational capital are the main constituents of the IC. The combined knowledge, skill, innovativeness and capabilities of the company's individual employee represents the HC whereas the SC represents the non-human storehouses of knowledge embedded in technology, and RC stands for the information rooted in business associations with customers and contractors (Bontis, 1998).

IC is difficult as the price that is invested in developing it (Bontis, 1999). It is difficult to measure IC as it is implicit (Bontis et al, 1999). Notwithstanding, the risk associated with the development, management and commercialization of these knowledge assets is generally higher than that of physical assets.

Some of the researchers used value-based measurement for the measurement of the IC of the firms by signifying the value of IC can be calculated by the market and book value difference. Experiential study points out that the supposed knowledge-intensive corporations have a market value that is considerably superior to their book value of equity (Bollen et al, 2007).

According to the IC literature, there is no general approach and IC measurement is based on the internal value process of the company. Management of IC can be applicable by means of various frameworks. IC management covers the handling of the resources like the HC, RC and OC.

Some management systems or approaches are practiced by many organizations like TQM (Total Quality Management), BPM (Business Process Management) and the concept of value chains. IC-related factors of business are covered by many of these

general management approaches which include the brands, employee competencies and stakeholder relationships.

Four essential factors likely to affect the choice in light of the existing literature are:

- IC management application challenge
- Knowledge of various models available for IC management
- Available Resources

ICMS is crucial for the competitive advantage of the organization as the business uniqueness is the edge which is safeguarded by the IP rights Andrew Brown (2005).

CHAPTER NO: 3

3. RESEARCH METHODOLOGY

This chapter wraps the facts and essentials regarding research design, purpose of research, research model and variables. The hypotheses, sample size, and response rate are also detailed according to the qualitative research study.

3.1 RESEARCH DESIGN

Non probability purposive judgmental technique has been used to find out the affects of IC and its components in this research attempt. This technique is applied for the purpose to make research process qualitative and concrete. It is also used for obtaining a large number of completed questionnaires quickly, economically and objectively. The selected companies are scrutinized on the basis of their employee's education, skill and corporate life of the organization. In this respect, the considered benchmark was companies having not less than hundred employees and having minimum corporate history of not less than three years.

3.2 SURVEY METHODS (INTERVIEWS)

Mostly, Management science research studies have used interview based surveys as methods of primary and first-hand data collection for the sake of qualitative study of the topic. This method is used for the qualitative research of intellectual capital. It relies on a panel of independent experts and is a systematic, interactive forecasting method. In two or more rounds, the carefully selected experts answer questionnaires.

A facilitator provides an anonymous summary, after each round, to the experts' forecasts, which is the reminder from the previous round as well as the reasons they provided for their judgments. The group converged towards the "correct" answer. During this process and the range of the answers decreased for the purpose of filtered data.

Finally, course of action stopped after stop criterion which was pre-defined and the results were depicted by matching the arguments (Rowe et al, 1999).

3.3 SAMPLING TECHNIQUE

As it is a qualitative study, Non-probability Purposive judgmental technique for the following purpose:

- It engages in the accumulation of a division of people with verifiable experience in some area
- The researcher subjectively rated the interviewees
- As it is stated above, sample was taken while taking into consideration the opinion of the interviewees and by the fact that he represents that community targeted

3.4 THE ADVANTAGE

There is no need to defend the decision and concept of this research as it is backed by the acknowledgement of the professionals.

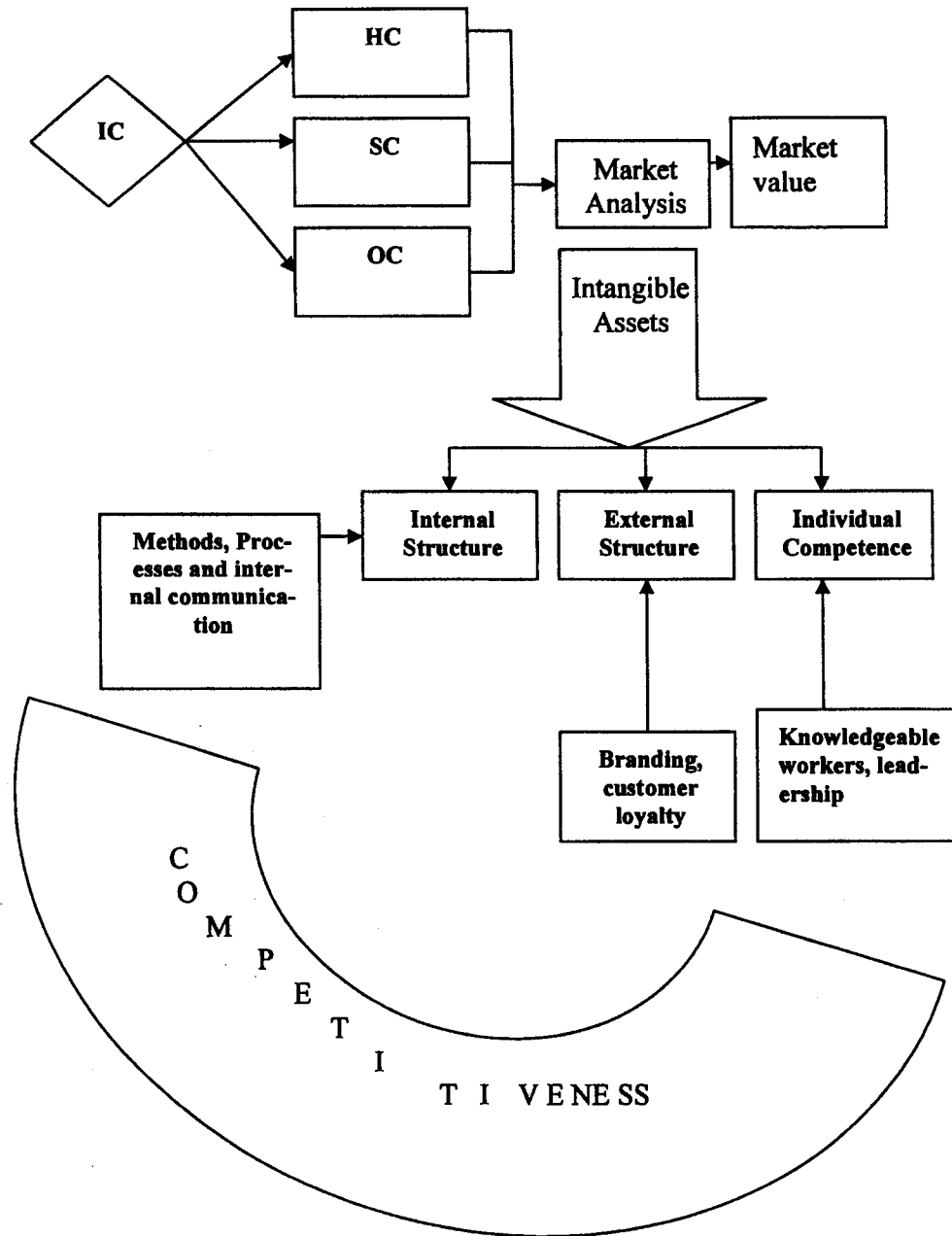
Sampling Size: The managers/manager operations and the people working in the banking and telecom sector at the strategic and managerial level were targeted to see the visualization rather growth in the importance of intellectual capital. For this purpose, a database was developed of almost all the banks and five giants of the Telecom sector. It consisted of a grotesque list of people standing at a level which matched our requirements.

3.5 RESPONSE RATE

The response rate was almost 73% which is an evidence that people want a change rather improvement in standards. This can be done by considering those assets that can generate resources.

3.6 PROPOSED RESEARCH MODEL FOR THE STUDY

IC AND ITS REALIZATION



IC with its three components is taken as a construct and as a whole it moves towards market analysis in an independent position. The market value is considered to be de-

pendent variable. The market analysis is positioned in between as a mediating variable. The determinants of the market analysis are also reflected in the model as intangible assets. The enhancement in the market value can be measured by the presence of IC and its realization, which is directly related to the competitive advantage of any organization.

CHAPTER 4

4. RESULTS AND DISCUSSION

4.1 TRIANGULATION, MATCHING AND TRANSFERABILITY

The tables of HC, RC and SC of Telecom and Banking sector showed the result of the deductive and inductive questions which have been asked in the interview-based-research survey. The answers, given by the responders are then codified through the use of triangulation and matching techniques. The presented tables which are reflected in this chapter are the result of this whole considerable process. These tables are purified and abstracted for triangulation, matching and transferability from the first hand data tables which are highlighted in appendix.

4.2. INTELLECTUAL CAPITAL AND OUTCOMES

Table 1 shows that the state of Intellectual Capital in the Telecommunication Sector. The readings of the various indicators show that there is ample evidence of the presence of intellectual assets. The general range of frequency is defined from 1 to 4, where 1 means weak and 2-4 reflects a clear and strong response about the presence of any concept depending on the number of the respondents. Most of the respondents were of the view that the source of *intellect* can be knowledge; the aggregate response shows the handsome figure of 4. There was a mix response as far as the issue of *knowledge source* is concerned. The table of Intellectual capital shows that the convergence of the responses illustrated that research is the main source of IC. The other indicator, coded as *intangible assets*, had a very remarkable response of 2.4 which is equal to that of intellect. Nearly all the people agreed that the three core elements of IC namely HC, SC and RC can be one of the intangible assets present in the company. Innovation was considered as the main common intangible asset. The average response rate of *measure or value* was 1.6, which means that there is weak concept of

its measurability. *Vital intangible assets* (2.6) is interesting to note as there is a clear acknowledgement of difference between the value of different intangibles. The concept of *Intellectual Capital* (1.8) is at the stage of visualization but its components (2.2) are identified with some form of measuring standards (1.4) which shows that they are not completely recognized.

The *management* (2.2) of this asset is given more value as compared to *industry wise importance* (1.8) because the managers believe that this asset is interpreted according to the company's business nature and therefore it has to be managed by the companies internally as this is the age of realization of this newly discovered asset. Finally, the future of IC is bright as *shareholders, stakeholders* and *pubic reports*; all are the same (2.4), which means that managers believe that the value of IC of the company must be communicated to the outside world.

Table 2 depicts about the HC (Human Capital) where it is surprising to note that *Human Capital, Valuation, Human Resources* and *Company Strength* are at 2 where as the *HR Department* is at 2.2. This is mainly due to the fact that it is the component of IC and has received noticeable response (2.2) in Table 1 related to IC. The *decision making process* and the *company vital strength* are at the low level as (1.6) and (1.8). At the same time, the company performance is at (2.6). The remaining two, *training* and *share ideas* is at the highest level (2.8).

The Relational Capital and its indicators were codified and encapsulated in the third table. Table 3 shows that *management* and *standards* are at lowest level (1.2) and (1.4) because the distribution channel, valuation, company vital strength and relational assets, all were at (1.8) which means that there is little understanding among the management community about these factors. Moreover, *market-oriented, CRM* and *company worth* are at (2.4). *AVL (approved vendor list)* and *employee relations* were

at (2.2) with customer relations at (2.6). These results were mainly due to management issues as it is evident from the result above and inappropriate valuation of overall intellectual capital as it is said in the table 1. Table 4 is concerned with the Structural Capital (SC). The results concluded that despite the identification of *components* (2.8), the *standards* (1.8) were not compatible, which had an adverse impact on the *management* (2) and *valuation* (2). This further disturbed the *company vital strength, structure* and the *company worth* (2.2) as there are no solid evaluation standards for SC which means that this element of Structural capital can not be properly described. Table five addressed the core and elementary issue of intellectual capital in the Banking sector. According to the table, *knowledge source* (1.92) at the lowest level and *shareholders, stakeholders* and *public reports* are at the top level (2.43). The reason behind this is *common intangible assets* (2.35), *Intellectual Capital* (2.26), *components* (2.22), *measure and Valued* (2) and *management* (2). *Industry wise importance, intellect* and *measuring standards*, all were at (2.13). Lastly, *intangible assets* (2.08) and *responsibility* (2.09) which shows and determines that most of the managers in the Banking Sector are of the view that IC is an asset which is to be dealt with in a responsible manner by all the workforce of the company.

Table 6 is concerned with HC and reported that *company performance* is (2.2) because *measuring standards* are chalked out which can be communicated rigorously throughout the corporation (2.13). *Components* (2) and *valuation* (2) both have been well defined and this leads to the human development resource as it is reflected by the *training* and *human resource* (1.96), . Furthermore, *company strength, share ideas* and *company vital strength* (1.91) with *human capital* (1.87) and *decision making* (1.83).

Table 7 handles the RC and projected that *CRM* (2.2) as *market-oriented* (2.17) and *customer relations* (2.13). *Company worth* (2.09), which can be traced through *AVL* (1.96), *employee relations* (1.95) and *distribution channels* (1.91). *Valuation* (1.78) and *company strength* (1.7) are somewhat positive where as *standard* (1.57) and *management* (1.3) were having low response level as the majority of the managers in the banking sector believed that the management and standardization are not a very important issue, it is the financial backing which matters in the whole process

Table 8 covers the Structural Capital (SC), the *structure* (2.26) is well perceived and this is on the basis of the input by *standards* (2.26), *company strength* (1.83) *valuation* (1.87) and *management* (1.87). Conclusively, the result is clear from *company worth* (1.96) as structural capital is given much importance as compared to RC.

Many managers believe that one of the vital strength of a bank is it's structural capital in the shape of ATM and branch networks through which it can have a solid market positioning through bottomless amalgamation in the social fabric.

TELECOM

Table: 1 Intellectual Capital

IC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Intellect	4	2	2	2	2
Knowledge source	3	2	2	2	2
Intangible Assets	4	1	2	2	2
Common Intangible Assets	3	2	2	2	3
Measure or valued	2	1	1	2	2
Vital Intangible Assets	4	2	2	2	3
Intellectual Capital	2	1	2	2	2
Components	4	2	2	1	2
Measuring Standards	1	1	2	1	2
Management	4	2	2	1	2
Industry wise importance	2	1	2	2	2
Share Holders	4	2	2	2	2
Stake Holders	4	2	2	2	2
Public Reports	4	2	2	2	2

Graphical representation of IC of selected companies (Ufone, Zong, Telenor, Mobilink, Warid)

Chart 1: Intellectual Capital

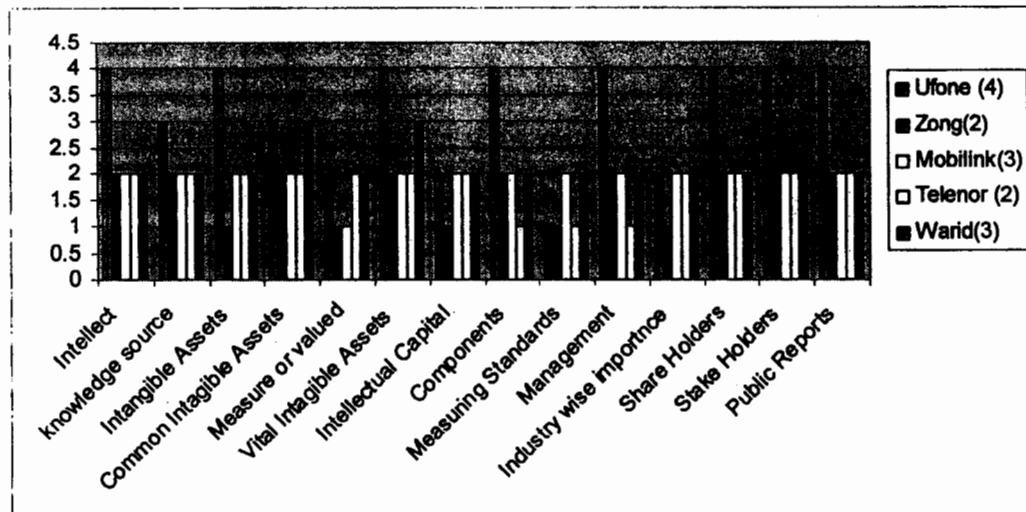


Table: 2 Human Capital

HC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Human Resource	2	1	3	2	2
HR department	3	2	2	2	2
Company Strength	2	1	3	2	2
Decision making process	1	1	3	2	1
Share Ideas	4	2	3	2	3
Valuation	2	2	2	2	2
Training	4	2	3	2	3
Human Capital	2	1	3	2	2
Company Vital Strength	2	1	3	2	1
Company performance	3	2	3	2	3

Chart: 2 Human Capital

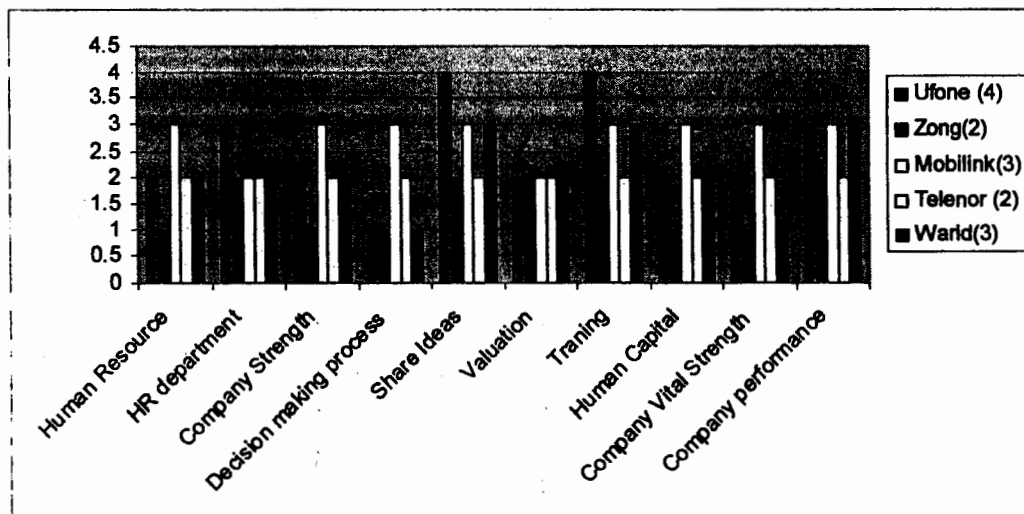


Table: 3 Relational Capital

RC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
AVL	3	1	3	2	2
Employee relations	3	1	3	2	2
Customer relations	4	1	3	2	3
distribution channel	2	1	2	2	2
Market Oriented	4	1	3	2	2
CRM	4	1	3	2	2
Company Vital Strength	3	1	2	1	2
Valuation	1	1	3	2	2
Relational Assets	2	1	2	2	2
Management	1	1	1	2	1
Standards	1	1	1	2	2
Company Worth	3	2	3	2	2

Chart :3 Relational Capital

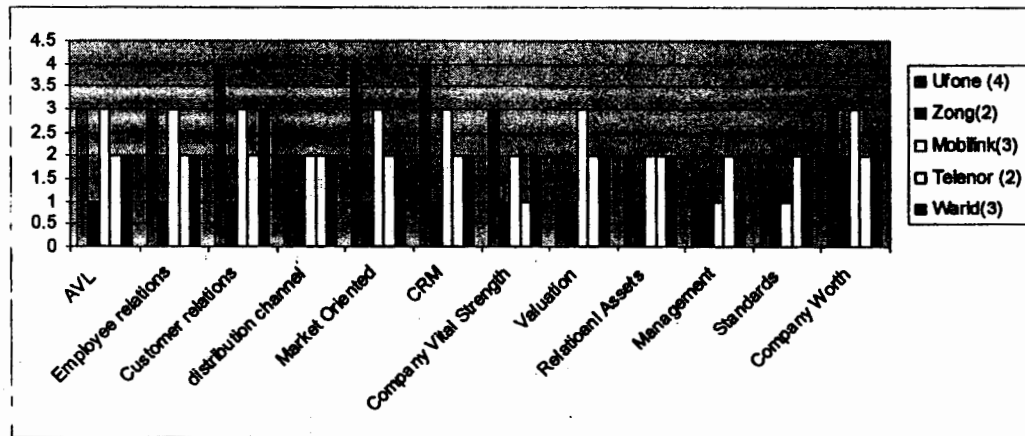
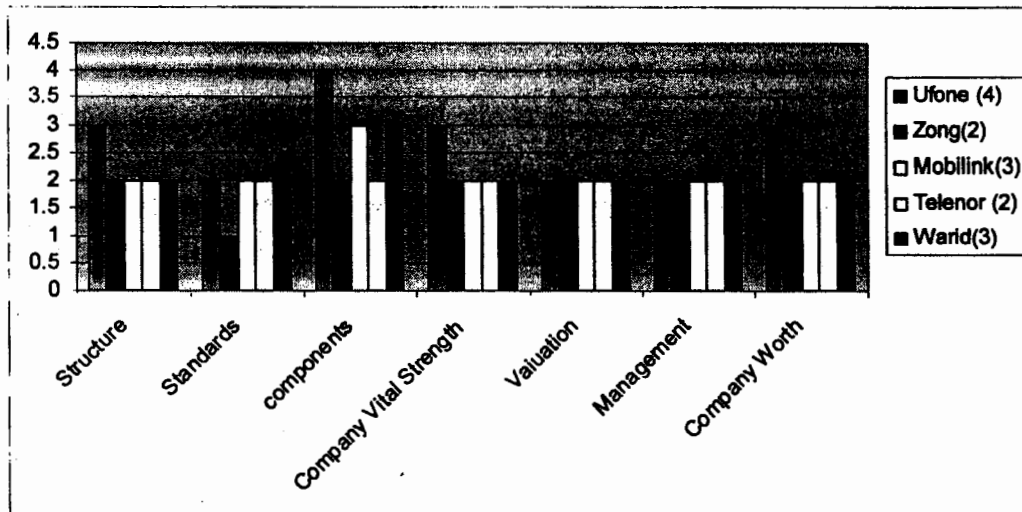


Table: 4 Structural Capital

SC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Structure	3	2	2	2	2
Standards	2	1	2	2	2
Components	4	2	3	2	3
Company Vital Strength	3	2	2	2	2
Valuation	2	2	2	2	2
Management	2	2	2	2	2
Company Worth	3	2	2	2	2

Chart: 4 Structural Capital



BANKING

Table 5: Intellectual Capital

IC	Intellect	knowledge source	Intangible Assets	Common Intangible Assets	Measure and valued	Intellectual Capital	Components	Measuring Standards	Management	Industry wise importance	Responsibility	Share Holders	Stake Holders	Public Reports
NBP(5)	2	3	3	5	2	4	5	4	4	5	3	5	5	5
ZTB(2)	2	1	2	2	1	2	2	2	2	1	1	2	2	2
ABL(2)	2	2	2	2	2	2	2	2	2	1	2	2	2	2
Ask(2)	2	2	2	2	2	2	2	2	2	2	1	2	2	2
Atlas(3)	2	2	3	2	2	3	3	2	1	3	3	3	3	3
Al falah(4)	3	4	4	4	4	3	3	2	2	3	4	4	4	4
Faysal(2)	2	2	2	2	1	2	1	1	2	2	1	2	2	2
HBL(3)	2	3	3	2	3	2	1	2	2	2	3	3	3	3
HMB(2)	2	1	2	2	2	1	2	2	2	2	2	2	2	2
JS (3)	2	2	1	3	2	3	2	3	3	3	2	3	3	3
KASB (3)	2	2	3	3	2	3	3	2	3	3	2	3	3	3
MCB(3)	3	2	3	3	3	3	3	3	3	3	3	3	3	3
Mybank (1)	3	1	2	2	2	3	2	2	2	3	2	2	2	2
NIB (2)	2	2	2	2	2	2	2	2	2	1	2	1	1	1
Soneri (2)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Citi (2)	2	2	1	2	2	2	2	2	2	2	2	2	2	2
HSBC (2)	2	2	2	2	2	2	2	2	2	1	1	2	2	2
Meezan (2)	2	2	2	2	2	2	2	2	2	1	2	2	2	2
AjBaraka (2)	2	2	2	2	2	2	1	2	1	1	2	2	2	2
Islami (2)	2	2	2	2	1	1	2	2	1	2	2	2	2	2
Emirates Global (3)	2	2	2	2	2	3	3	2	2	2	2	3	3	3
Dawood Islamic(2)	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Dubai Islamic(2)	2	1	1	2	1	1	2	2	1	2	2	2	2	2

Chart 5: Intellectual Capital

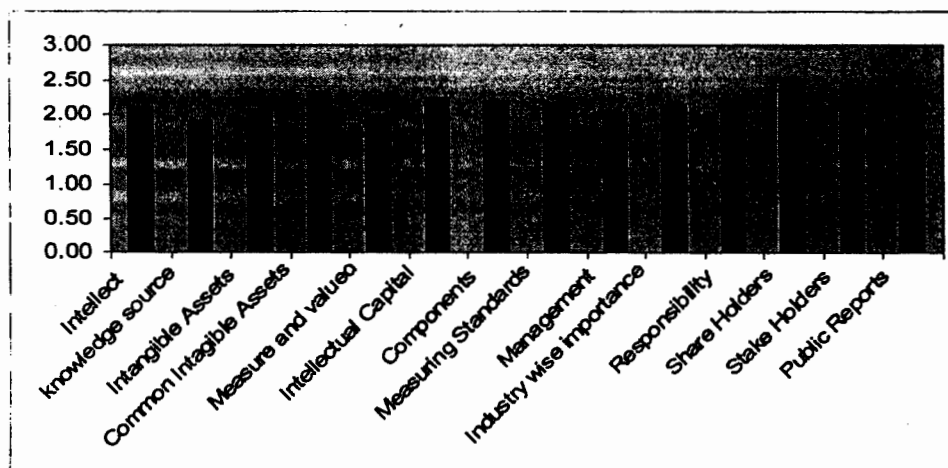


Chart 6: Human Capital

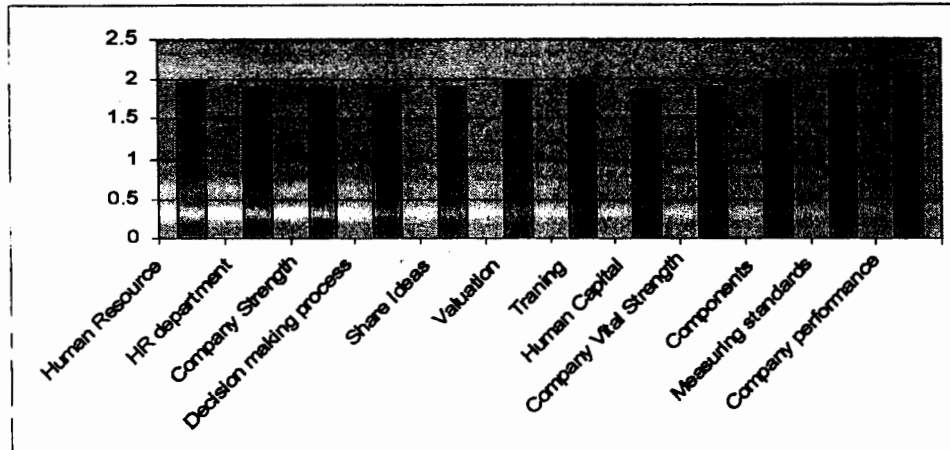


Table 7: Relational Capital

RC	AVL	Employee relations	Market Oriented	Customer relations	distribution channel	Relational Assets	CRM	Company Vital Strength	Valuation	Management	Standards
NBP(5)	1	1	4	4	1	4	5	1	1	2	3
ZTB(2)	1	1	2	2	1	2	2	1	2	1	2
ABL(2)	1	no(1)	1	1	1	1	1	1	1	1	1
Ask(2)	2	1	2	2	2	2	2	2	2	1	1
Atlas(3)	1	2	2	2	2	2	2	2	2	1	1
Al falah(4)	3	3	3	3	3	2	3	3	1	2	3
Faysal(2)	2	1	2	2	2	2	2	2	2	1	1
HBL(3)	3	3	3	2	1	2	3	2	2	1	1
HMB(2)	2	2	2	2	2	2	2	1	1	2	2
JS (3)	3	3	3	2	2	2	2	2	2	2	2
KASB (3)	2	2	2	3	3	2	3	1	2	2	2
MCB(3)	2	1	2	2	2	2	2	2	2	1	3
Mybank (3)	2	2	2	2	2	2	2	2	2	2	2
NIR (2)	2	2	2	2	2	2	2	2	2	2	1
Soneri (2)	2	1	2	2	2	2	2	2	2	1	1
Citi (2)	2	2	2	2	2	2	2	2	2	1	1
HSBC (2)	2	2	2	2	2	2	2	2	2	1	1
Meezan (2)	2	2	2	2	2	2	2	2	2	1	1
AlBaraka(2)	2	2	2	2	2	2	2	1	2	1	2

Islami (2)	2	2	2	2	2	2	2	1	1	1	1	2
Emirates Global (3)	2	2	2	2	2	2	2	1	2	2	2	2
Dawood Islamic(2)	2	2	2	2	2	2	2	2	2	1	1	2
Dubai Islamic(2)	2	2	2	2	2	2	2	2	2	1	1	2

Chart 7: Relational Capital

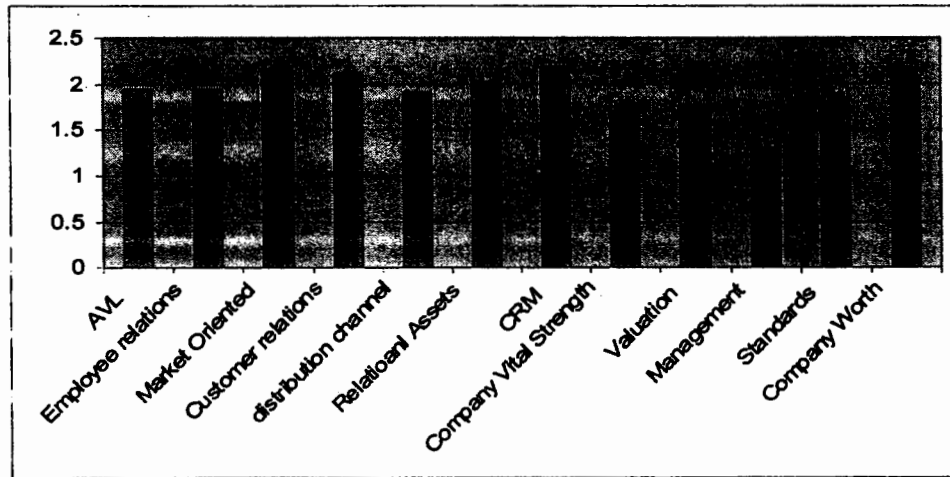
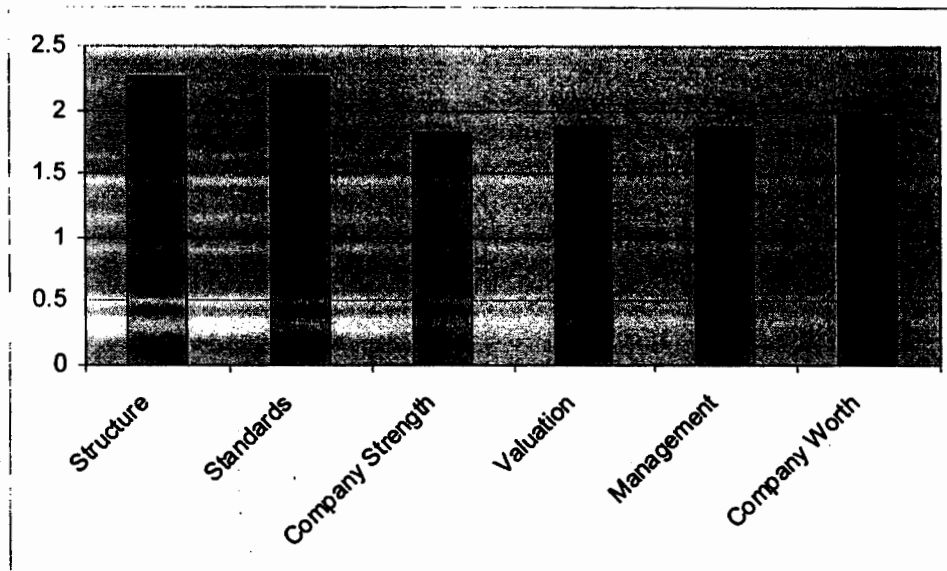


Table 8: Structural Capital

SC	Structure	Standards	Company Strength	Valuation	Management	Company Worth
NBP(5)	4	5	2	2	2	2
ZTB(2)	2	5	1	2	2	2
ABL(2)	1	1	1	1	1	1
Ask(2)	2	2	1	1	1	2
Atlas(3)	2	3	1	2	2	2
Al falah(4)	4	2	1	1	1	2
Faysal(2)	2	2	2	2	2	2
HBL(3)	2	2	2	2	2	2
HMB(2)	2	2	2	2	2	2
JS (3)	3	2	2	2	2	2
KASB (3)	3	2	3	2	2	2
MCB(3)	3	2	2	2	2	2
Mybank (3)	2	2	2	2	2	2

NIB (2)	2	2	2	2	2	2
Soneri (2)	2	2	2	2	2	2
Citi (2)	2	2	2	2	2	2
HSBC (2)	2	2	2	2	2	2
Meezan (2)	2	2	2	2	2	2
AlBaraka(2)	2	2	2	2	2	2
Islami (2)	2	2	2	2	2	2
Emirates Global (3)	2	2	2	2	2	2
Dawood Islamic(2)	2	2	2	2	2	2
Dubai Islamic(2)	2	2	2	2	2	2

Chart 8: Structural Capital



CHAPTER 5

5. CONCLUSION

In the past few years, the companies are realizing that there is a potent asset other than the tangibles which is the source of the continuous increase in the difference between market and book value of the companies' assets. Companies are placing greater emphasis on their IC which consists of HC, RC and SC (Bontis, 1998).

These resources along with their brand image which is supported by the Product Development Policy (R&D and Innovation) provide sustainable competitive advantage in period of economic recession. This concept is also supported by the OECD's numerous reports.

The financial analysts are also of the view that standards for valuation should be chalked to know the source from where the financial numbers of the companies have occurred. We have come to the conclusion that intellectual capital statements are to be included in the annual financial reports which would prove to be a step forward in the way of realization of Intellectual Capital as a factor which could be considered by the stock and stakeholders. The annual reports can increase the reliability of the intellectual capital statements and play their part in the realization of accounting standards for the intellectual capital so that it could be communicated and valued throughout the business community and managed in the proper manner. There should be a section in the report which highlights the efficiency of the IC.

Intellectual Capital has all these elements and hence it is apparent that it can be reported in the financial statements to show the potential of the intangibles of the company (CIMA).

IC reporting makes the company's IC more transparent, valuable and manageable to investors and shareholders to assess the value-creation- capacity of the company. IC

reporting is the means for disclosure of the IC assets and their efficiency which in this knowledge based economy can be the basis of organizational competitive advantage (Makki et al, 2008). IC reporting and disclosure of the assets can be done through chalking out Intellectual capital statements which serves as a tool for making the storage and communication of knowledge easy to understand while enhancing the IC of the company at the same time.

One of the highlighted advantages of Intellectual Capital Statements is as under:

1. IC statement works as managing tool for knowledge resources of the company while supporting value addition process
2. It directs focus towards the activities which are responsible for knowledge resources development and also eliminates the affect of the activities on IC
4. It serves as a guide for the structuring the Knowledge sharing culture in the organization. It also promotes better and enhanced external and internal communication channels. Intellectual capital is renowned by the management of the companies as an important driver today as conventional statements, which do not consider intangibles and does not provide complete information about the generation of value in future.

For this purpose,

IC Statements are created in the company's accounts which will provide a guide about the valuation of gains which can be generated in future through the Intellectual capital. They also work as a strategic tool for knowledge based external and internal communication which aimed at realization of Intellectual capital (Mouritsen et al, 2004).

Conclusively, According to the data expressed, most of the interviewees were of the view that Intellectual Capital is present in the company but is not realized as there are

no internationally practiced intangible accounting standards being implemented in the service sector. Amongst them, the most profitable markets and innovative culture societies are the assets of the banking and telecom sectors. Therefore the managers of the companies related to banking and telecom feel that there is an unleashed potential which is evident from the difference between book value and market value of the company's reported assets. Intellectual capital can be a source in the shape of ICS (intellectual capital statements) which can increase the company's wealth and have positive effect on the share holder's and stock holder's value.

IC reporting can be done through ICS which generate awareness regarding the contribution of Intellectual Capital raised through Innovation and R&D (tools for Knowledge Management). It gives insight about the nature and realization of the financial returns through which understanding regarding IC is raised. Furthermore, the increased transparency through IC reporting enhances repute and magnetizes internal and external customers of the companies. As far as the internal customers are concerned, it attracts potential work force which will increase the Human capital (HC) of the respected organization. The existing employees are given a sense of importance and recognition which elevates their satisfaction level due to which skilled/knowledge workers can be retained. There are many more benefits for the organization other than these which can be observed without any differences with respect to the size or type of the organization. This criterion of evaluation reveals that Intellectual capital can be beneficial, irrespective of the industry where it is visualized and valued. There is one thing which should be kept in mind that every business and industry has its own way to operate and similarly IC is to be visualized according to their own environment and procedures. IC can be a threat minimization technique as it promotes learning and bridges the gap between the understanding of the management and the investors.

5.1. LIMITATIONS

The limitation of this study is that the nature, value and effectiveness of Intellectual Capital or assets for every business and industry are unique so there is no universal rule for its reporting and valuation. Methods can be devised but they can not be applied rigorously through out the organization.

The research work does not address the issues of its applicability and the barriers in its way in detail as the main focus of study is the visualization of the novel concept.

The non probability judgmental technique also specifies that the population and sample size was not predefined as the plan was to interview the experts of the market and not the ordinary people who do not hold any managerial position. This also includes that only banking and telecommunication industry was chosen as they are experiencing growth and being injected with investment by the multi-national corporations in the country.

5.2. RECOMMENDATIONS AND FINDINGS

Intellectual capital behaves as a means for value maximization and competitive edge against the competitors. Most of the mangers working on strategic levels are of the view that the main barriers in the way of realization of intellectual capital are:

- External allocation of capital is not the real wealth of the company as the IC is not considered as a valuable asset throughout the shareholders' community which results in insufficient investments.
- The internal allocation of the resources is affected when true picture of the effectiveness of the organization and its resources is not available which negatively affects the budget allocation and forecasting process.

- Human resource is not considered as capital which results in inefficient recruitment process by which competent and capable staff could not be hired.

- The absence of the alignment of strategic objectives and vision with day to day targets.

A dialogue between investors and investees is needed which can be done through IC reporting in the company's reports and record. It can serve as a means to show how value can be created through IC and complementary assets and their contribution towards the increase in the assets of the company. The capitalization of intangibles is evident from the International Accounting Standards like IAS38 which states that anything which is controllable, identifiable and can generate future value is the asset of the company.

5.3. FUTURE RESEARCH DIRECTIONS

Future research is recommended to test the visualization of Intellectual Capital in other sectors along with emphasis on the measurement models so that the generalizability can be tested along with a step forward towards its measurement. Different models have been tested with respect to the diversity in the nature of the economic activity in the developed as well as the developing part of the world.

The testing of these models can be a vital topic for the researchers of management and other allied sciences who are of the view that intangible assets are gaining value and appearing as a source of competitive advantage. Furthermore, in my PhD. studies, I will be working on the applicability of the concept of HCD with its impact on training, employee satisfaction and company performance.

REFERENCES

- Andriessen, D. (2004). IC Valuation and Measurement-Classifying the state of the art, *Journal of Intellectual Capital*, 5, 2, pp.230 – 42.
- Bontis, N., (1998). Intellectual Capital: An exploratory study that develops measures and models, *Management Decision* , vol. 36 No. 2 pp. 63-76.
- Brown, Jr., Osbom, T., Chan, J.M., Jaganathan, V., (2005). Managing intellectual capital: sustaining the global competitive edge provided by your IC depends on developing and implementing an integrated business strategy. *Research-Technology Management*, Available at:
http://findarticles.com/p/articles/mi_6714/is_6_48/ai_n29219762/
- Bertels, T., Savage, C.M., Krogh, G.V., Jroos and Dkleine (1998). Tough questions on knowledge management, knowing in firms: understanding, managing and measuring knowledge, (pp.7-25), London: Sage.
- Bontis, N., (2002). Managing organizational knowledge by diagnosing intellectual capital: framing and advancing the state of field, *International Journal of Technology Management*, 18, 5-8, pp.433-62.
- Bontis, N., (1999). The knowledge toolbox: a review of the tools available to measure and manage intangible resources, *European management journal*, 17, 4, pp. 391-402.
- Bontis, (2000). Intellectual Capital and Business Performance in Malaysian industries, *Journal of intellectual capital*, 1, 1, pp. 85-100.
- Bernard, M. (2005), "Strategic management of intangible value drivers" *Handbook of Business Strategy*, Vol 6, pp.147 - 154
- Bollen, L., Vergauwen, C. P., Oirbans, E. (2007), Intellectual capital disclosure and intangible value drivers: an empirical study, *Management Decision*, 45, 7, pp.

1163-118.

- Bouty, I. (2000). Interpersonal and Interaction Influences on Informal Resource Exchanges between R&D Researchers across Organizational Boundaries, *The Academy of Management Journal*, 43, 1, pp. 50-65.
- Bueno, E., Salmador, M.P., and Rodriguez, O. (2004). The role of social capital in today's economy-Empirical evidence and proposal of a new model of intellectual capital, *Journal of Intellectual Capital*, 5, 4, pp. 556-574.
- Caddy, I. (2000). Intellectual capital: recognizing both assets and liabilities, *Journal of Intellectual Capital*, 1, 2, pp. 129-146.
- CIMA, Understanding corporate value: managing and reporting intellectual capital, *The Chartered Institute of Management Accountants*, London, UK.
- Curado, C. (2008). Perceptions of knowledge management and intellectual capital in the banking industry, *Journal of Knowledge Management*, 12, 3, pp. 141-155.
- Carpenter, M.A., Sanders, G., Gregersen, H.B.(2001). Bundling Human Capital with Organizational Context: The Impact of International Assignment Experience on Multinational Firm Performance and CEO Pay, *The Academy of Management Journal*, 44, 3, pp. 493-511.
- Edvinsson, L. (2000). Some perspectives on intangibles and intellectual capital, *Journal of Intellectual Capital*, 1, 1, pp. 12-16.
- Fletcher, A., Guthrie, J., Steane, P., Roos, G., Pike, S., (2003). Mapping stakeholder perceptions for a third sector organization, *Journal of Intellectual Capital*, 4, 4, pp. 505-27.
- Frascati Manual (2002). Organization for Economic Co-Operation and Development, France. Available at: www.lmt.it/PROJEKTAI/TEKSTAI/Frascati.pdf
- Grant R. M, (1996). To world knowledge based theory of the firm, *Strategic Man-*

agement Journal, 17, pp. 109-22.

Guerrero (2003). How do firms measure their intellectual capital? Defining an empirical model based on firm practices, *International Journal of Management and Decision Making*, 4, pp.178-93.

Grasenick, K.I. (2004). Shaken, not stirred: defining and connecting indicators for the measurement and valuation of intangibles, *Journal of Intellectual Capital*, 5, 2, pp-268.

Gustavsson, B. (2001). Power over meaning; unlearning and human, *Management of Power – Ethical and Values Aspects*, (pp.339-58). Oxford University Press.

Hitt, M.A., Bierman, L., Shimizu, K., Kochhar, R. (2001). Direct and Moderating Effects of Human Capital on Strategy and Performance in Professional Service Firms: A Resource-Based Perspective, *The Academy of Management Journal*, 44, 1, pp. 13-28.

Hansen, J., Sillebrant, T., Bontis, N., Hofman-Bang, P. (2007), Managing risk with intellectual capital statements, *Management Decision*, Vol. 45 No. 9, pp. 1470-1483.

Available at: www.valuebasedmanagement.net/articles_cima_understanding.pdf

Kamath, G.B. (2006). Management of Intellectual Capital- Part I, ICFAI Business School Nirlon Complex, Goregaon (East), Mumbai.

Available at: http://www.indianmba.com/Faculty_Column/FC406/fc406.html

Luthy, D.H. (1998). Intellectual Capital and its measurement. In: *Proceedings of the Asian Pacific Interdisciplinary Research in Accounting Conference (APIRA)* Osaka, Japan.

Available at: <http://www3.bus.osaka-cu.ac.jp/apira98/archives/htmls/25.htm>

Lepak, D.P. and Snell, S.A. (1999). *The Human Resource Architecture: Toward a*

- Theory of Human Capital Allocation and Development, *Academy of Management Review*, 24, 1, pp.31-48.
- Mccutcheon, G.A. (2008). A valuation model for intellectual asset-rich businesses, *Measuring Business Excellence*, 12, 2, pp. 79-96.
- Mouritsen, J., Bukh, P.N. and Marr, B. (2004). Reporting on intellectual capital: why, what and how?" *Measuring Business Excellence*, 8, 1, pp. 46-54.
- Meritum, (2002). Guidelines for managing and reporting on intangibles , *Intellectual Capital Report*, Airtel-Vodafone Foundation, Madrid.
- Makki, M. A. M., Lodhi, S.A., Rahman, R. (2008). Intellectual Capital Performance of Pakistani Listed Corporate Sector, *International Journal of Business and Management*, 3, 10, pp-45-51.
- Oliveras, E., Gowthorpe, C., Kasperskaya, Y., Perramon, J. (2008), "Reporting intellectual capital in Spain", *Corporate Communications*, 13, 2, pp.168.
- OECD Proposed Guidelines for Collecting and Interpreting Technological Innovation. Data – Oslo Manual , third edition (OECD/EU/Eurostat, 2005)
Available at :www.ttgiv.org.tr/UserFiles/File/OSLO-EN.pdf
- Paula Kujansivu (2008). Operationalising intellectual capital management: choosing a suitable approach, *Measuring Business Excellence*, 12, 2, pp. 25-37.
- Quinn, J.B., Anderson, P., Finkelstein, S. (1993). Leveraging Intellect, *The Academy of Management Executive*, 10, 3, pp. 7-27.
- Rodriguez, B. M., and Marti, J.M.V.(2006). The region's intellectual capital benchmarking system: enabling economic growth through evaluation, *Journal of Knowledge Management*, 10, 5, pp. 41-54.
- Roos, G., Jacobsen, (1999). Management in a complex stakeholder organization , *Monash Mt Eliza Business Review*, 2, 1, pp.83-93.
- Roos, Macmillan, J., Stewart, T. A. (1997). *Intellectual Capital: Navigating New*

Business landscape, Intellectual Capital, The new wealth of the organizations, currency double day, New York, NY.

Rowe and Wright (1999). The Delphi technique as a forecasting tool: issues and analysis. *International Journal of Forecasting*, 5, 4. pp. 353-375.

Subramaniam, M., Youndt, M.A. (2005). The influence of intellectual capital on the types of innovative capabilities, *Academy of Management Journal*, 48, 3, pp.450-63.

Serenko, A., Bontis, N., and Grant, J., (2009). A Scientometric analysis of the Proceedings of the McMaster World Congress on the Management of Intellectual Capital and Innovation for the 1996-2008 period, *Journal of Intellectual Capital*, Vol. 10, No. 1, pp. 8-21.

Youndt, M.A., Subramaniam, M., Snell, S.A. (2004). Intellectual capital profiles: an examination of investments and returns, *Journal of Management Studies*, 41, 2, pp.335-61.

APPENDIX

APPENDIX 1

TELECOM (Ufone, Warid, Telenor, Zong)

Table: 1 Raw Data (first hand)

Intellectual Capital

IC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Intellect	knowledge (4)	knowledge (2)	creativity (2)	knowledge (2)	knowledge (2)
knowledge source	Research(3)	Research(2)	Market survy(2)	Experiance (2)	Experiance (2)
Intangible Assets	HC,RC,SC(4)	HC,RC,SC(1)	HC,RC,SC (2)	HC,RC,SC(2)	HC,RC,SC(2)
Common Intagible Assets	product innovation(3)	product innovation(2)	product innovation (2)	product innovation(2)	product innovation(3)
Measure or valued	yes(2)	yes(1)	yes(1)	yes(2)	yes(2)
Vital Intagible Assets	product innovation(4)	product innovation(2)	product innovation(2)	product innovation(2)	product innovation(3)
Intellectual Capital	innovation(2)	innovation(2)	innovation(2)	innovation(2)	innovation(2)
Components	HC,RC,SC(4)	HC,RC,SC(2)	HC,RC,SC(2)	HC,RC,SC(1)	HC,RC,SC(2)
Measuring Standards	yes(1)	no(1)	no(2)	no(1)	no(2)
Management	no(4)	no(2)	no(2)	no(1)	no(2)
Industry wise importnce	yes(2)	yes(1)	yes(2)	yes(2)	yes(1)
Share Holders	yes(4)	yes(2)	yes(2)	yes(2)	yes(2)
Stake Holders	yes(4)	yes(2)	yes(2)	yes(2)	yes(2)
Public Reports	yes(4)	yes(2)	yes(2)	yes(2)	yes(2)

HC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Human Resource	yes(2)	yes(1)	yes(3)	yes(2)	yes(2)
HR department	yes(3)	yes(2)	yes(2)	yes(2)	yes(2)
Company Strength	yes(2)	yes(1)	yes(3)	yes(2)	yes(2)
Decision making process	yes(1)	yes(1)	yes(3)	yes(2)	yes(1)

Share Ideas	yes(4)	yes(2)	yes(3)	yes(2)	yes(3)
Valuation	yes(2)	yes(2)	yes(2)	yes(2)	yes(2)
Traning	yes(4)	yes(2)	yes(3)	yes(2)	yes(3)
Human Capital	yes(2)	yes(1)	yes(2)	yes(2)	yes(2)
Company Vital Strength	No(2)	no(1)	yes(3)	no(2)	yes(1)
Company performance	yes(3)	yes(2)	yes(3)	yes(2)	yes(3)

RC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
AVL	Yes(3)	yes	yes(3)	yes(2)	yes(2)
Employee relations	Yes(3)	yes	yes(3)	yes(2)	yes(2)
Customer relations	Yes(4)	yes	yes(3)	yes(2)	yes(3)
distribution channel	Yes(2)	yes	yes(2)	yes(2)	yes(2)
Market Oriented	Yes(4)	yes	yes(3)	yes(2)	yes(2)
CRM	Yes(4)	yes	yes(3)	yes(2)	yes(2)
Company Vital Strength	Yes(3)	yes	yes(2)	yes(1)	yes(2)
Valuation	Yes(1)	yes	yes(3)	yes(2)	yes(2)
Relatioanl Assets	Yes(2)	yes	yes(2)	yes(2)	yes(2)
Management	Yes(1)	yes	yes(1)	yes(2)	yes(1)
Standards	Yes(1)	yes	yes(1)	yes(2)	yes(1)
Company Worth	Yes(3)	yes(2)	yes(3)	yes(2)	yes(2)

SC	Ufone (4)	Zong(2)	Mobilink(3)	Telenor (2)	Warid(3)
Structure	Yes(3)	yes(2)	yes(2)	yes(2)	yes(2)
Standards	Yes(2)	yes(1)	yes(2)	yes(2)	yes(2)
components	Yes(4)	yes(2)	yes(3)	yes(2)	yes(3)
Company Vital Strength	Yes(3)	yes(2)	yes(2)	yes(2)	yes(2)
Valuation	Yes(2)	yes(2)	yes(2)	yes(2)	yes(2)
Management	Yes(2)	yes(2)	yes(2)	yes(2)	yes(2)
Company Worth	Yes(3)	yes(2)	yes(2)	yes(2)	yes(2)

Banking

IC	Intellect	knowledge source	Intangible Assets	Common Intangible Assets	Measure and valued	Intellectual Capital	Components	Measuring Standards	Management	Industry importance	Responsibility	Share Holders	Stake Holders	Public Reports
NBP(5)	knowledge(2)	Experience(3)	yes(3)	Customer(5)	valued(2)	Intangible resources(4)	HC, RC, SC(5)	NO(4)	NO(4)	introduction(5)	Govt, company(3)	Positive(5)	Positive(5)	Possible(5)
ZTB(2)	information(2)	Documents(1)	yes(2)	customer, employee(2)	valued(1)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	introduction(1)	Govt, company(1)	Positive(2)	Positive(2)	Possible(2)
ABL(2)	knowledge(2)	Experience(2)	yes(2)	customer, employee(2)	valued+measurable(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	introduction(1)	Govt, company(2)	Positive(2)	Positive(2)	Possible(2)
Ask(2)	know-how(2)	Experience(2)	yes(2)	customer, employee(2)	valued(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	introduction(2)	Govt, company(1)	Positive(2)	Positive(2)	Possible(2)
Atlas(3)	knowledge(2)	Education(2)	yes(3)	customer, employee(2)	valued(2)	Intangible resources(3)	HC, RC, SC(3)	NO(2)	NO(1)	introduction(3)	Govt, company(3)	Positive(3)	Positive(3)	Positive(3)
Al falah(4)	information(3)	Experience(4)	yes(4)	customer, employee(4)	valued+measurable(4)	Intangible resources(3)	HC, RC, SC(3)	NO(2)	NO(2)	introduction(3)	Govt, company(4)	Positive(4)	Positive(4)	Positive(4)
Faysal(2)	knowledge(2)	Documents(2)	yes(2)	customer, employee(2)	valued(1)	Intangible resources(2)	HC, RC, SC(1)	NO(1)	NO(2)	introduction(2)	Govt, company(1)	Positive(2)	Positive(2)	Positive(2)
HBL(3)	knowledge(2)	Technology(3)	yes(3)	customer, employee(2)	valued+measurable(3)	Intangible resources(2)	HC, RC, SC(1)	NO(2)	NO(2)	recognition(2)	Govt, company(3)	Positive(3)	Positive(3)	Positive(3)
HMB(2)	knowledge(2)	innovation(1)	yes(2)	customer, employee(2)	valued(2)	Intangible resources(1)	HC, RC, SC(2)	NO(2)	NO(2)	not vital(2)	Govt, company(2)	Positive(2)	Positive(2)	Positive(2)
JS(3)	Information(2)	Experience(2)	yes(1)	customer, employee(3)	valued+measurable(2)	Intangible resources(3)	HC, RC, SC(2)	NO(3)	NO(3)	introduction(3)	Govt, company(2)	Positive(3)	Positive(3)	Positive(3)
KASB(3)	Creativity(2)	Experience(2)	yes(3)	customer, network(3)	valued(2)	Intangible resources(3)	HC, RC, SC(3)	NO(2)	NO(3)	Not vital(3)	Govt, company(2)	Positive(3)	Positive(3)	Positive(3)
MCB(3)	knowledge(3)	Education(2)	yes(3)	customer, network(3)	valued(3)	Intangible resources(3)	HC, RC, SC(3)	NO(3)	NO(3)	introduction(3)	Govt, company(3)	Positive(3)	Positive(3)	Positive(3)
Mybank(3)	information(3)	Documents(1)	yes(2)	CRM(2)	valued(2)	Intangible resources(3)	HC, RC, SC(2)	NO(2)	NO(2)	not vital(3)	Govt, company(2)	Positive(2)	Positive(2)	Possible(2)
NIB(2)	information(2)	Experience(2)	yes(2)	CRM(2)	valued(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	not vital(1)	Govt, company(2)	Positive(1)	Positive(1)	Possible(1)
Soneri(2)	information(2)	Experience(2)	yes(2)	CRM(2)	valued(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	not vital(2)	Govt, company(2)	Positive(2)	Positive(2)	Positive(2)
Citi(2)	innovation(2)	Observation(2)	yes(1)	innovation(2)	measurable(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	recognition(2)	Govt, company(2)	Positive(2)	Positive(2)	Positive(2)
HSBC(2)	knowledge(2)	Experience(2)	yes(2)	CRM(2)	valued+measurable(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	recognition(1)	Govt, company(1)	Positive(2)	Positive(2)	Positive(2)
Meezan(2)	knowledge(2)	Experience(2)	yes(2)	customer, network(2)	valued(2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO(2)	recognition(1)	Govt, company(2)	Positive(2)	Positive(2)	Positive(2)
AlBaraka(2)	creativity(2)	Education(2)	yes(2)	CRM(2)	valued(2)	Intangible resources(2)	HC, RC, SCO(1)	NO(2)	NO(1)	recognition(1)	Govt, company(2)	Positive(2)	Positive(2)	Possible(2)

Islami (2)	knowledge(2)	Experience (2)	yes(2)	CRM(2)	valued+m easurable (1)	Intangible resources(1)	HC, RC, SC(2)	NO(2)	NO (1)	recogniti on (2)	Govt, compa ny(2)	Positive (2)	Positive (2)	Positive (2)
Emirate s Global (3)	knowledge(2)	Experience (2)	yes(2)	customer, employee(2)	valued+m easurable (2)	Intangible resources(3)	HC, RC, SC(3)	NO(2)	NO (2)	recogniti on (3)	Govt, compa ny(2)	Positive (3)	Positive (3)	Positive (3)
Dawood Islamic (2)	creativity(2)	Education (2)	yes(2)	customer, employee(2)	valued+m easurable (2)	Intangible resources(2)	HC, RC, SC(2)	NO(2)	NO (2)	recogniti on (2)	Govt, compa ny(2)	Positive (2)	Positive (2)	Possible (2)
Dubai Islamic (2)	knowledge(2)	Experience (1)	yes(1)	customer, employee(2)	valued+m easurable (1)	Intangible resources(1)	HC, RC, SC(2)	NO(2)	NO (1)	recogniti on (2)	Govt, compa ny(2)	Positive (2)	Positive (2)	Positive (2)

HC	Human Resource	HR depart ment	Compan y Strength	Decision making process	Share Ideas	Valuati on	Traning	Human Capital	Compan y Vital Strength	Com pone nts	Measurin g standards	Company performan ce
NBP(5)	vital(2)	yes(2)	yes (3)	No(1)	yes (3)	Possibl e(4)	yes (4)	yes (4)	no (4)	KSA(5)	NO(4)	yes(5)
ZTB(2)	vital(2)	yes(2)	yes (1)	No(2)	yes (2)	Possibl e (1)	yes (2)	yes (1)	no(1)	KSA(1)	NO(2)	yes(1)
ABL(1)	vital(1)	yes(1)	yes (1)	No(1)	yes (1)	yes(1)	yes (1)	yes (1)	yes (1)	KSA(1)	No(1)	yes(1)
Ask(2)	vital(1)	yes(2)	yes (2)	No(1)	yes (2)	yes(2)	yes (2)	yes (2)	No(1)	KSA(1)	performan ce reports(2)	yes(2)
Atlas(3)	vital(2)	yes(2)	yes (2)	No(2)	yes (3)	yes(2)	yes (2)	yes (2)	No(2)	KSA(2)	No(3)	yes(2)
Al falah(4)	vital(3)	yes(2)	yes (2)	yes(2)	yes (2)	yes(2)	yes (4)	yes (2)	yes (2)	KSA(3)	performan ce reports(3)	yes(4)
Faysal(2)	vital(2)	yes(1)	yes (1)	No(2)	yes (2)	yes(2)	yes (2)	yes (1)	No(1)	KSA(1)	no(1)	yes(2)
HBL(3)	vital(2)	yes(2)	yes(2)	yes (1)	yes (1)	yes(2)	yes (1)	yes (2)	yes(2)	KSA(2)	performan ce reports(2)	yes(3)
HMB(2)	vital(2)	yes(2)	yes (2)	No(2)	yes (2)	yes(2)	yes (2)	yes (2)	yes(2)	KSA(1)	No(2)	yes(2)

JS (3)	vital(2)	yes(2)	yes (3)	yes (1)	yes (2)	yes(2)	yes (1)	yes (2)	no(2)	KSA(1)	performance reports(2)	yes(2)
KASB (3)	vital(2)	yes(2)	yes (2)	No(3)	yes (2)	yes(2)	yes (3)	yes (2)	no(2)	KSA(1)	no(1)	yes(3)
MCB(3)	vital(2)	yes(2)	yes (2)	No(3)	yes (2)	yes(2)	yes (2)	yes (2)	No(3)	KSA(2)	No(3)	yes(2)
Mybank (3)	vital(3)	yes(2)	yes (2)	No(3)	yes (1)	yes(2)	yes (2)	yes (2)	no(2)	KSA(2)	no(3)	yes(2)
NIB (2)	vital(2)	yes(2)	yes (2)	No(2)]	yes (2)	yes(2)	yes (2)	yes (2)	No(2)	KSA(1)	no(2)	yes(2)
Soneri (2)	vital(2)	yes(2)	yes (1)	No(2)	yes (1)	yes(2)	yes (1)	yes (1)	No(2)	KSA(2)	No(2)	yes(2)
Citi (2)	vital(2)	yes(2)	properly trained	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	yes(2)	KSA(1)	nce reports(2)	yes(2)
HSBC (2)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	yes(1)	KSA(2)	performance reports(1)	yes(2)
Meezan (2)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (1)	no(2)	KSA(2)	no(2)	yes(2)
AlBaraka(2)	vital(1)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	yes(2)	KSA(1)	no(2)	yes(2)
Islami (2)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	no(2)	KSA(1)	no(2)	yes(2)
Emirates Global (3)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	yes(2)	KSA(1)	no(2)	yes(2)
Dawood Islamic(2)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	no(2)	KSA(1)	no(2)	yes(2)
Dubai Islamic(2)	vital(2)	yes(2)	yes (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	no(2)	KSA(2)	no(2)	yes(2)

RC	AVL	Employee relations	Market Oriented	Customer relations	distribution channel	Relationl Assets	CRM	Company Vital Strength	Valuation	Managemt	Standards	Company Worth
NBP(5)	no(1)	no(1)	yes (4)	yes (4)	no(1)	customer(4)	yes (5)	no(1)	no(1)	no(2)	no(3)	yes (4)
ZTB(2)	no(1)	no(1)	yes (2)	yes (2)	no(1)	customer(2)	yes(2)	yes (1)	yes(public reports)	no(1)	no(2)	yes (2)
ABL(1)	yes (1)	no(1)	yes (1)	yes (1)	yes (1)	yes (1)	yes (1)	yes (1)	yes (1)	no(1)	no(1)	yes (1)
Ask(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
Atlas(3)	no(1)	no(1)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
Al falah(4)	yes (3)	yes (3)	yes (3)	yes (3)	yes (3)	yes (2)	yes (3)	yes (3)	yes (1)	no(2)	no(3)	yes (4)
Faysal(2)	yes (2)	no(1)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
HBL(3)	yes (3)	yes (3)	yes (3)	yes (2)	no(1)	yes (2)	yes (3)	yes (2)	yes (2)	no(1)	no(1)	yes (3)
HMB(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (1)	yes (1)	no(2)	no(2)	yes (1)
JS (3)	yes (3)	yes (3)	yes (3)	yes (2)	yes (2)	business network(2)	yes (2)	yes (2)	yes (2)	no(2)	no(2)	yes (2)
KASB (3)	yes (2)	yes (2)	yes (2)	yes (3)	yes (3)	yes (2)	yes (3)	yes (1)	yes (2)	no(2)	no(2)	yes (2)
MCB(3)	yes (2)	no(1)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(3)	yes (2)
Mybank (3)	yes (2)	no(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(2)	no(2)	yes (2)
NIB (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(2)	no(1)	yes (2)
Soneri (2)	yes (2)	no(1)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
Citi (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
HSBC (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes(2)	no(1)	no(1)	yes (2)
Meezan (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
AlBaraka(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (1)	yes (2)	no(1)	no(2)	yes (1)

Islami (2)	yes (2)	yes (2)	yes(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (1)	yes (1)	no(1)	no(1)	yes (2)
Emirates Global (3)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (1)	yes (2)	no(2)	no(2)	yes (2)
Dawood Islamic(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)
Dubai Islamic(2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	yes (2)	no(1)	no(1)	yes (2)

SC	Structure	Standards	Company Strength	Valuation	Management	Company Worth
NBP(5)	set up(4)	some what(5)	yes(2)	yes(2)	yes(2)	yes(2)
ZTB(2)	set up(2)	some what(5)	yes(1)	yes(2)	yes(2)	yes(2)
ABL(1)	set up (1)	some what(51)	yes(1)	yes(1)	yes(1)	yes(1)
Ask(2)	tangible+intangible(2)	some what (2)	yes(1)	yes(1)	yes(1)	yes(2)
Atlas(3)	tangible+intangible(2)	some what (3)	yes(1)	yes(2)	yes(2)	yes(2)
Al falah(4)	tangible+intangible(4)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Faysal(2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)

HBL(3)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
HMB(2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
JS (3)	tangible+intangible(2)	some what (3)	yes(2)	yes(2)	yes(2)	yes(2)
KASB (3)	tangible+intangible(3)	some what (2)	yes(3)	yes(2)	yes(2)	yes(2)
MCB(3)	tangible+intangible(3)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Mybank (3)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
NIB (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Soneri (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Citi (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
HSBC (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Meezan (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
AlBaraka(2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Islami (2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Emirates Global (3)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Dawood Islamic(2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)
Dubai Islamic(2)	tangible+intangible(2)	some what (2)	yes(2)	yes(2)	yes(2)	yes(2)

APPENDIX 2

INTELLECTUAL CAPITAL (INTERVIEW QUESTIONS)

Personal and Organization Data

1. What is your name and designation in the company?
2. How many years of experience with the company and in total, also mention in which industry and companies?
3. Give a brief history of your company?
4. Briefly explain past five-year performance of your company?
5. Does your company have a website?
6. Which industry is the most knowledge-intensive?

Intellectual Capital (IC)

1. Do you know what intellect is?
2. Does Company have intangible assets?
3. What is the source of these assets?
4. Which industry has the most intangible assets?
5. Which intangible assets are the most common?
6. What is intellectual capital in your words?
7. Can they be valued or measured?
8. Which intangible assets can be the most vital of all?
9. If it is an asset, is there any management for it?
10. What are the components of IC?
11. Are there any standards for measuring or valuing the Intellectual Capital?
12. Can it be the source of STRENGTH for the company?
13. Can it be recorded and reflected in the public reports?
14. Is there any Industry-wise practice?
15. Do SHAREHOLDERS gain benefit for it?
16. Do STAKEHOLDERS gain benefit for it?

Human Capital (HC)

1. Are the employees recruited on the basis of their creativity, resourcefulness and problem solving behavior?
2. Are employees encouraged to participate in the decision making process?
3. Are employees encouraged to share knowledge?

4. Are they encouraged to share new ideas?
5. Are they required to record their know-how and experiences?
6. Do creative and innovative employees are considered as STRENGTH of the organization?
7. Are they considered as the asset of the company?
8. Are they a source of revenue generation for the company?
9. What do you know about Human Capital?
10. Is there any Human development department in your company?
11. Do the employees get training for their tasks?
12. Does the organization aim to get the most out of employees?
13. Is the performance of the employees visible in the financial statements?
14. Is there any policy or strategy to retain, develop and attract creative people?
15. Are there any industry wise standards for it?

Relational Capital (RC)

1. Do you have predefined AVL (approved list of vendors)?
2. Is your firm Market Oriented?
3. Do you have any idea about Relational Capital?
4. Can it be valued?
5. Is it important to have good relations with the customers, employees, shareholders and stakeholders?
6. Is there any NEED to manage the relations with all the above groups (customers, employees, shareholders and stakeholders)?
7. Is it a source of STRENGTH?
8. How good relations with the supplier can be beneficial?
9. How good relations with the distributors can be beneficial?
10. Does it take considerable time and effort to have a list of loyal and efficient suppliers and distributors?
11. How your company does customer relationship management?
12. Is there any mechanism to store the feedback of the internal customers (employees)?
13. Are there any standards for the recording of the feedback and forwarding it to the authorities for action?
14. How important it is to record and respond against the feedback of the internal and external customers?
15. Do all the employees know what the target market of the company is?
16. Do you think that relationship capital is a tangible asset?
17. Can it be documented?
18. Are there any standards?
19. Do relational Capital increases market worth of the company?

20. Do relational Capital strengthens the market image of the company?
21. Why there is difference in the market value and book value of the assets of the company?

Structural Capital (SC)

1. Define the structure w.r.t an organization?
2. Are there any standards for it?
3. Can it be managed?
4. What are the components of the structure if the organization?
5. What do you know about Structural capital (SC)?
6. Does the company need documented knowledge in the shape of manuals and databases?
7. Yes, can you name some of the manuals?
8. Do every policy, standard, plan and even raw data about internal and external customers is documented?
9. Does your company have documented knowledge in the shape of manuals and databases?
10. Who and when the information can be accessed?
11. Who are the beneficiaries of the documented knowledge?
12. Does this documented knowledge identify the conceptual and the core structure of the organization?
13. How valuable is the documented knowledge?
14. Is it the source of STRENGTH of the company?
15. Do the documented knowledge regarding customer's is vital for keeping the track of the target market and the customer base?
16. Do you think that market leaders are the most knowledgeable and well informed?
17. Do you think that market leaders protect their documented knowledge and make their STRENGTH?

