

**MEASURING AND REPORTING OF INTELLECTUAL CAPITAL IN THE
HEALTH CARE SECTOR OF ALBANIA**

By

ORNELA KADIU

**Thesis submitted to the Faculty of Economics and Administrative Sciences,
Epoka University, in fulfillment of the Requirement for the Degree of Master
of Science**

June, 2014

ABSTRACT

Abstract of thesis presented to the Administrative Board of Epoka University in fulfilment of the requirement for the degree of Master of Science

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Ornela Kadiu

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Supervisor: Professor Doctor Mustafa Uç, PhD

Faculty: Economics and Administrative Sciences

Intellectual capital is recognized as the most valuable resource of an organization and the fundamental issue to its success or failure, whereas it is also acknowledged as the most important source of organizations' competitive advantage. Intellectual capital is a combination of human capital, organizational capital and relational capital. Human capital refers to the knowledge that belongs to the employees of an organization (including employees collective competences, capabilities and brainpower), while structural capital refers to that knowledge which is created by the human capital that belongs to the organization (in the form of quality and reach of IT systems, company images, hardware, software, databases, organizational structure, patents and trademarks). The effective coordination between structural and human capital, makes

possible that a company develops good relations with its stakeholders in the form of relational capital (which is the knowledge embedded in the relationships of an organization with its customers, suppliers, stakeholders and strategic alliance partners).

The aim of this study is to determine the general attitude of the health care center' managers and doctors to the intellectual capital assets in Albania. Besides, another aim of this study is to test the hypothesis that "the level of intellectual capital concept recognition and application of executives between private and public institutions is different. In order to reach the aim of the study a survey has been made, to six health care institutions in Albania, five in Tirana which is the capital city of Albania and one in Durrës, which is the second biggest city in Albania. In total 60 questionnaires were distributed to the health care institutions (managers and doctors), 30 to the private and 30 to the public institutions respectively. The 5-point likert scale questionnaire was composed of 20 questions: 7 questions measuring human capital, 7 questions measuring organizational capital and 6 questions measuring relational capital. According to my researches made in this field, it is the first time that a research about Intellectual capital is conducted in Albania, which is one of the main reasons why this topic was chosen, hoping that it will create a path for future researches.

Keywords: Intellectual capital, human capital, organizational capital, relational capital, knowledge, health care institutions, Albania.

ABSTRAKT

Abstrakti i tezës së prezantuar para Bordit Drejtues të Universitetit Epoka në përmbushje të kërkesave për diplomë Master Shkencor

MATJA DHE RAPORTIMI I KAPITALIT INTELEKTUAL NE QENDRAT E KUJDESIT SHENDETESOR

ORNELA KADIU

Qershor, 2014

Drejtues Teze: Profesor Mustafa Uc, PhD

Fakulteti: Ekonomik dhe i Shkencave Administrative

Kapitali intelektual është i njohur si burimi më i vlefshëm i një organizate dhe çështja themelore e suksesit apo dështimit të saj, ndërsa është e njohur edhe si burimi më i rëndësishëm i përparësisë konkurruese organizatave. Kapitali intelektual është një kombinim i kapitalit njerëzor, kapitalit organizativ dhe kapitalit relacional. Kapitali njerëzor i referohet dijes që i përket punonjësve të një organizate (përfshirë kompetencat kolektive të punonjësve, aftësitë dhe kapacitetet), ndërsa kapitali strukturor i referohet dijes e cila është krijuar nga kapitali njerëzor që i përket organizatës (në formën e cilësisë dhe arritjeve të sistemeve të IT-se, imazhit të kompanive, paisjeve, programet kompjuterike, bazat e të dhënave, strukturën

organizative, patentat dhe markat tregtare). Koordinimi efektiv midis kapitalit strukturor dhe njerëzor, bën të mundur që një kompani të zhvillojë marrëdhënie të mira me grupet e interesit të saj në formën e kapitalit relacional (e cila është njohuria e ngulitur në marrëdhëniet e një organizate me klientët e saj, furnizuesit, grupet e interesit dhe partnerët strategjikë të aleancës) .

Qëllimi i këtij studimi është të përcaktojë qëndrimin e përgjithshëm të menaxherëve dhe mjekëve të qendrave shëndetësore lidhur me asetet kapitale intelektuale në Shqipëri. Përveç kësaj, një tjetër qëllim i këtij studimi është për të testuar hipotezën se "niveli i njohjes së kapitalit intelektual si koncept dhe aplikimi i saj prej perfaqësuesve të qendrave mjekësore private dhe publike është i ndryshëm". Për të arritur qëllimin e studimit një sondazh është bërë, për të gjashtë institucionet e kujdesit shëndetësor në Shqipëri, pesë në Tiranë, që është kryeqyteti i Shqipërisë dhe një në Durrës, i cili është qyteti i dytë më i madh në Shqipëri. Gjithsej 60 pyetësorë u shpërndanë në institucionet shëndetësore (menaxherët dhe mjekët), 30 në ato private dhe 30 në institucionet publike respektivisht. Pyetësori 5-pikësh i shkallës Likert ishte i përbërë prej 20 pyetjeve: 7 pyetje matëse të kapitalit njerëzor, 7 pyetje matëse të kapitalit organizativ dhe 6 pyetje matëse të kapitalit relacional. Sipas kerkimeve të mia të bëra në këtë fushë, kjo është hera e parë që një studim në lidhje me kapitalin Intelektuale zhvillohet në Shqipëri, e cila është një nga arsyet kryesore pse kjo temë është zgjedhur, duke shpresuar se ajo do të krijojë një rrugë për studime të ardhshme.

Fjalet Kyçe: kapitali intelektual, kapitali njerëzor, kapitali organizativ, kapitali relacional, njohuri, institucionet e kujdesit shëndetësor, Shqipëria.

DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Epoka University or other institutions.

ORNELA KADIU

Date:

LIST OF TABLES

| Table | Page |
|--|-------------|
| Table 1: Respondents demographic | 68 |
| Table 2: Human capital mean and standard deviation | 68 |
| Table 3: Organizational capital mean and standard deviation | 70 |
| Table 4: Relational capital mean and standard deviation | 71 |
| Table 5: Independent samples test for human capital | 73 |
| Table 6: Independent samples test for organizational capital | 74 |
| Table 7: Independent samples test for relational capital | 75 |

LIST OF ABBREVIATIONS

| | |
|-------|---|
| IC | Intellectual Capital |
| ICM | Intellectual Capital Measurement |
| HC | Health care sector |
| OECD | Organization for Economic Cooperation and Development |
| IASB | International Accounting Standards Board |
| IFRS | International Financial Reporting Standards |
| BSC | Balanced Scorecard |
| DCF | Discounted Cash Flow |
| EVA | Economic Value Added |
| ICTEM | Intellectual Capital Transformation Evaluating Model |
| VAIC | Value Added Intellectual Coefficient |
| DTI | Department of Trade and Industry |
| EC | European Community |
| WTO | World Trade Organization |
| WIPO | World Intellectual Property Organization |

TABLE OF CONTENTS

INTRODUCTION

| | |
|---|----------|
| I. THEORETICAL BACKGROUND..... | 5 |
| 1.1 Fundamental Concepts..... | 7 |
| 1.1.1 Brief History of intellectual capital: The main contributors to the development of Intellectual capital concept..... | 9 |
| 1.2 Classification and components of intellectual capital..... | 15 |
| 1.2.1 Human Capital..... | 17 |
| 1.2.2 Structural Capital..... | 20 |
| 1.2.3 Relational Capital..... | 23 |
| 1.3 Intellectual Capital Measurement..... | 24 |
| 1.3.1 Financial measurement models for Intellectual Capital..... | 29 |
| 1.3.1.1 Discounted cash flow model..... | 29 |
| 1.3.1.2 Relief-from-royalty..... | 30 |
| 1.3.1.3 Comparable transactions..... | 30 |
| 1.3.1.4 Avoided cost model..... | 31 |
| 1.3.1.5 Value Chain scoreboard..... | 31 |

| | | |
|-------------|--|-----------|
| 1.3.1.6 | Value added approach..... | 32 |
| 1.3.1.7 | Market-to-book ratio..... | 33 |
| 1.3.2 | Non-Financial measurement models for intellectual capital..... | 33 |
| 1.3.2.1 | Balanced scorecard..... | 35 |
| 1.3.2.2 | Skandia navigator..... | 36 |
| 1.3.2.3 | Human resource accounting..... | 37 |
| 1.3.2.4 | Intangibles asset monitor..... | 38 |
| 1.3.2.5 | Knowledge assets map..... | 39 |
| 1.4 | Ten Principles for managing Intellectual Capital..... | 40 |
| II. | LITERATURE REVIEW..... | 43 |
| 2.1 | Prior Research on Measuring IC of Healthcare Sector Worldwide..... | 44 |
| 2.2 | Prior Research on Measuring IC of Healthcare Sector in Albania..... | 52 |
| III. | APPLICATION: MEASURING IC IN THE HEALTH CARE SECTOR IN ALBANIA..... | 59 |
| 3.1 | An overview of the health care centers involved..... | 59 |
| 3.2 | The aim of the research and Methodology..... | 66 |
| 3.3 | Data..... | 66 |
| 3.4 | Research Methods..... | 66 |
| 3.5 | Research Hypothesis..... | 67 |

| | |
|--|-----------|
| 3.6 Data analysis..... | 67 |
| 3.7 Descriptive statistics..... | 68 |
| 3.7.1 Human Capital..... | 68 |
| 3.7.2 Organizational Capital..... | 70 |
| 3.7.3 Relational Capital..... | 71 |
| 3.8 Testing the research hypothesis..... | 72 |
| CONCLUSION AND RECCOMENDATIONS..... | 76 |
| REFERENCES..... | 78 |
| APPENDIX A..... | 81 |

INTRODUCTION

Nowadays, since the global economy is changing, measuring organizational performance and success constitutes a constant challenge for managers as well as researchers. Intellectual capital is recognized as the most valuable resource of an organization and the fundamental issue to its success or failure, whereas it is also acknowledged as the most important source of organizations' competitive advantage. Measuring intellectual capital is a growing area of interest.

The healthcare sector in Albania is the one concerning to all, since it is suffering more from the lack of development and the differences consisting in the healthcare conditions in the private and public hospitals. This is due to the low wages of the clinical personnel, including the nurses and doctors leading to high levels of corruption in this sector. Also in the public hospitals it is observed a lack of infrastructure, medicine and hygiene due

to the lack of investment from the government. On the other hand in the private hospitals, it is a more dedicated staff, optimal hygiene and modern equipment, but at very high prices, unattainable for the lower levels of society, which cannot afford. Additionally, health care industry is in the service sector, which means that most of the employed people are well educated and perform white collar jobs. So the output of the industry and its success is based on staff quality besides high tech health equipments.

The goal of conducting this study was development of an instrument to measure intellectual capital and evaluate its validity and reliability in identifying the components of intellectual capital in the Health Care (HC) sector in Albania, namely human capital, structure capital and customer capital. The data were collected based upon a questionnaire survey conducted in six of them, three private and three public hospitals. The explorative method was utilized, because it was considered as the appropriate one, due to the lack of research concerning intellectual capital reporting in the health care centers in Albania.

This thesis aims to shed light firstly on the process that makes intellectual capital an influencing factor of performance improvement in healthcare organizations. The results of this study may be useful to assess the levels of intellectual capital of the private and public hospitals in Albania, as well as in a wider context. The necessity of the reporting and its results need to be clarified and understood. The Intellectual Capital report needs to be combined with a guiding or direction tool to be used at the center.

This thesis is organized as follows. In the first chapter it is made an introduction of my topic, the fundamental concepts, the brief history, classification and components

of intellectual capital, following by its measurement, financial and non-financial ones, and lastly the ten principles for measuring it. In the second chapter, it is the literature review, containing also the prior research made on measuring the intellectual capital in the HC sector in Europe and then more specifically to Albania. And finally in the third chapter there is an application of intellectual capital in the healthcare sector in Albania, the health care sectors involved in the study, the methodology used, research hypothesis and concluding with the testing of the research hypothesis.

CHAPTER I

THEORETICAL BACKGROUND

Intellectual Capital refers to the essential and indispensable knowledge-based resources, which are utilized by firms to aid productive activities. These resources are now largely recognized as the most crucial sources of competitive advantage of the organizations.

Hermansson Holberg and Ringquist (2003) argued that “demand for information on knowledge-based resources is constantly increasing as companies progressively base their competitive strength and value on know-how, patents, competent employees and other intangibles. This demand applies either to traditional annual reporting or to newer types of reporting such as intellectual capital statements”.

“Owing to the constantly changing global economy, Deregulation of markets, globalization, the decreased costs and the increased volume of information flow enabled by the new Information Technology, are some of the factors that are transforming the basis of competition and value establishment for many firms” (Teece, D J, 2002).

This trend was described as “the rise of the new economy, the knowledge economy or the knowledge society” (Bontis, N, 1998). “It is an economy guided by information and knowledge, a change from a manufacturing into a service oriented economy. This change is reflected by the decrease of traditional industries and the growth of numerous new knowledge based companies. This trend gives explanation to the increasing interest for Intellectual Capital as a business and research area” (Hermansson Holberg and Ringquist, 2003).

“In dynamic situations of knowledge economy, knowledge is a strategic resource for company’s competition”. Tangible assets have diminished in relative importance Intellectual Capital is becoming a key resource for the success and value of a company”. (Hermansson Holberg and Ringquist, 2003).

One of the greatest changes of the new economy is that the law of diminishing returns has proved to be the law of increasing returns; a company with a head start can quickly become the market leader and dominate a market. Ideas and knowledge have enormous potential (Hermansson Holberg and Ringquist, 2003). Health care is a big knowledge industry. Albanian Health care centers are coping with great challenges. The difference between resources and costs of health care is widening; available resources must be efficiently used.

The Albanian population is getting older, and the number of patients will dramatically increase during the next years. The need for care of elder people is expected to increase

70 percent by 2030, therefore the need of employees for medical information, training and education will increase as well. Medical research is quickly developing and there are increasing expectations and demands by the population regarding health care.

The possibility to receive care in all country regions will lead to increased mobility among patients and employees. Patients want to receive treatment faster and are becoming more active and competent because they are obtaining better information and documentation through the Internet. Different quality registers will ensure an increased level of transparency that increases expectations and requires effective health care (Hermansson Holberg and Ringquist, 2003).

1.1 Fundamental Concepts

Researchers suggest different definitions concerning intellectual capital, the following are some examples: "Intellectual capital is intellectual material-knowledge, information, intellectual property, experience that can be put to use to create wealth"⁽¹⁾ (Stewart, 1997: Foreword XX).

It has become common to say that a company's intellectual capital is the sum of its human capital (talent), structural capital (intellectual property, methodologies, software, documents, and other knowledge artifacts), and customer capital (client relationships) (Stewart, 2001).

"Intellectual capital is a combination of human capital: the skills, insights, and potential of those in an organization and structural capital: things like the capital wrapped up in customers, processes, databases, brands, and IT system. It is the ability to transform

knowledge and intangible assets into wealth and creating resources, by multiplying human capital with structural capital" (Hermansson Holberg and Ringquist, 2003).

There is no generally accepted definition of Intellectual Capital. Intellectual Capital is often used as a synonym of Intellectual Assets, Intangible Assets or Knowledge Assets (Hermansson Holberg and Ringquist, 2003).

The most widely used definition of intellectual capital is "knowledge that is of value to an organization". The definition suggests that the management of knowledge (the sum of what is known) creates intellectual capital.

Many academics emphasize the importance of the difference between Intangible Assets and Intellectual Capital. Historically, the difference has been unclear. The definition of Intellectual Capital used by the Organization for Economic Cooperation and Development's (OECD) makes a distinction by considering Intellectual Capital as a subset of, rather than the same as, the overall intangible asset foundation of a company. OECD depicts Intellectual Capital as the economic value of two categories of intangible assets of a company: organizational (structural) Capital and human Capital (Hermansson Holberg and Ringquist, 2003).

Intellectual capital is a term with various definitions in different theories of economics. Although the definitions of Intellectual Capital are not identical, the field is commencing to notice a convergence in what Intellectual Capital comprises (Hermansson Holberg and Ringquist, 2003).

For this reason, its only truly impartial definition initiates a debate over economic "intangibles". Ambiguous combinations of instructional and individual capital used in productive enterprise are usually what are meant by the term, when it is utilized to essentially refer to a capital asset whose product constitutes intellectual rights.

The Intangible Asset and the Balanced Scorecard classify intangibles into three categories. They suggest that non-financial measures offer a way of complementing financial measures. The Balanced Scorecard, with measures for customers, internal processes and innovation together with financial measures, was intended to concentrate the attention of managers on those factors that aid the business strategy; it was not originally intended to concentrate on IC but it is already “internalized” as part of the IC literature (Hermansson Holberg and Ringquist, 2003).

I.1.1 Brief history of intellectual capital: The main contributors to the development of Intellectual capital concept

Moolman, 2009 study results suggest that the debates on intellectual capital started as early as the mid 1960s. However, there was no universal definition or classification of intellectual capital in place during this period, as a result of the fact that there was still much that was unclear about its nature, and the way in which these assets work (S. Moolman, 2009).

However, the topic of intellectual capital was later researched by a number of researchers who identified and analyzed different classes of these assets. The debate on the topic also forced the International Accounting Standards Board (IASB) to include certain of the intellectual capital categories in its definition of intangible assets.

There are three clearly different origins of the intellectual capital management movement. The first origin is related to the innovative work of Hiroyuki Itami, from Japan, who studied the influence of *invisible assets* on the management of Japanese corporations. The second is related to the work of a different groups of economists in

search of a different view or theory of the firm. The views of these economists (Penrose, Rumelt, Wemerfelt, and others) were combined by David Teece of UC Berkeley in a influential article on technology commercialization which was published in 1986.

Finally, the work of Karl-Erik Sveiby in Sweden, published initially in Swedish, elaborated on the human capital aspect of intellectual capital and, in this way, offered a plentiful and thoughtful perspective of the potential for assessing the enterprise based on the skills and knowledge of its employees.

A various group of academic researchers and economists developed over the time-period of 1959-1997, a new view on business strategy that highlighted resource efficiency compared to the generally accepted competitive forces. The resource-based perspective points out the fact that firms have different or exceptional resources, capabilities, and talents.

In addition, these resource talents are “sticky”, at least in the short run, so that firms must operate with what they have. The resources-based perspective concentrates on strategies for utilizing existing firm specific assets. Given that some of the firm's assets are intellectual, it means that issues such as skills acquisition, knowledge-management and know-how, and learning turn out to be essential strategic issues.

“The works of Itami and Sveiby, elaborating on the invisible assets or human capital, may have, in this context, an enormous potential for contributing to business strategy. There has been an increasing frequent and specific contribution to the field since the beginning. The range of contributors and their impact on each other are explained below” (Sullivan, 2000):

Hiroiyuki Itami

The innovative work of Hiroyuki Itami on the value of invisible assets to the corporation was initially published in Japanese in 1980-s. Since it was not published in English language until 1987, it took time until it was noticed by people having an interest in intellectual assets and hence it took time to be pointed out as an important contribution to the field. Nonetheless, all the readers of his work agree regarding the clarity of its insights about intangible assets and their significance to the corporation (Sullivan, 2000).

David Teece

The article of *David Teece* entitled "Profiting from Technological Innovation" brought together a large part of the existing work of academic researchers and economists leading to a resource-based theory of strategy. This article, which was published in 1986, was influential in demonstrating the economist's view of technology commercialization and comprised several ideas that were essential to the management capacity to obtain value from innovation. "This article (and the following work) recognised sources of value in technological innovation, the mechanisms of transforming value into profits, and steps needed to commercialize innovation" (Sullivan, 2000).

Brian Hall

Brian Hall studied human values for more than 25 years. He developed in cooperation with Benjamin Tonna, a hierarchy of human values as well as numerous instruments for measuring and describing the value sets of individuals and corporations. In order to commercialize his research, Hall founded Omega Associates in 1981. This company changed into the Values Technology in 1989. Values Technology works with firms to identify their values, analyze how those values assist or inhibit the progress of firms

regarding their business goals, and change the values, if necessary, in order to make them more supportive with respect to the business goals of firms (Sullivan, 2000).

Karl-Erik Sveiby

Karl-Erik Sveiby, actually Professor at Macquarie Graduate School of Management in Sydney, is the creator of the very early “Swedish Movement” in knowledge management and intellectual capital. He published in Swedish in 1986, his first book, which gave insights on how to manage the quickly developing field of knowledge companies/organizations that do not have traditional production, but only the knowledge and creativity of their employees.

In 1989, *Sveiby* published the results of the Konrad working group in the book “*The Invisible Balance Sheet*”, recommending a theory for measuring knowledge capital by dividing it into three categories: *customer capital*, *individual capital*, and *structural capital*. The approach was implemented by a large number of Swedish-listed companies and, in 1993, the Swedish Council of Service Industries adopted it as their standard recommendation for annual reports, the first ever standard in this field. “Leif Edvinsson was one of the many people inspired by concepts of *Karl-Erik Sveiby*. Edvinsson re-labelled these intangible assets as *intellectual capital* when he published Skandia's first annual report supplement on intellectual capital in 1995.” (Sullivan, 2000).

Sveiby published the book entitled “*Kunskapsledning*”, in 1990, the world’s first book elaborating the topic of knowledge management. He was the first to emphasize the necessity to measure human capital, and he was innovative regarding accounting practices for these intangible assets, by testing them in his own company.

Hubert St. Onge

Hubert St. Onge, formulated the concept of customer capital and is considered as one of the most creative thinkers in the field of learning and knowledge management. He is notorious for developing learning programs for the Canadian International Bank of Commerce, which was interested in ways of translating learning into both human and structural capital.

St. Onge started by studying the relationship among human capital, structural capital and the financial capital of the firms. St. Onge concluded that in order to be commercially successful in the long term, the first two capitals must concentrate on customer-related interests. In this way, the firm creates a stock of capital based on its customers, which he named “*customer capital*”. (St. Onge defines structural capital in largely the same way that this book defines intellectual assets; see definition later in this appendix.) The St. Onge model shows that long-term profits are created at the convergence among human, structural and customer capital (Sullivan, 2000).

Patrick Sullivan

The work of Patrick Sullivan focused on the extraction of value from IC. As one of the founding fathers of the ICM Gathering, Sullivan has encouraged companies and individuals involved with value extraction to share information and to jointly develop decision processes, methods, and systems that produce practical results. This book is one of the results of that approach. He is closely linked with the ICM model of a knowledge firm, which was designed at the first Gathering meeting using a large part of his concepts as its basis (Sullivan, 2000).

Thomas Stewart

Thomas Stewart was a contributor to *Fortune* magazine, and his name started to be

associated with intellectual capital in 1991, a time when he wrote a short article about new ideas in business. That article was the essence of a longer one, entitled "Brainpower", which was published in 1992. The interest of Thomas Stewart in knowledge management led him to write "Intellectual Capital," published in 1994. Stewart has become one of the most obvious representatives in the field of intellectual capital management and writes articles that focus on the brainpower and knowledge management topics which he tried so much to make familiar to the public. He is presently a member of the board of editors of *Fortune* magazine. Stewart published the book, *Intellectual Capital, the New Wealth of Organizations* in 1997 (Sullivan, 2000).

Gordon Petrash

Gordon Petrash was graduated as an architect. He was employed at Dow in 1986 in the capacity of the development manager for construction materials. He was successful in both construction materials management and in managing Dow's Styrofoam films business, thus he was asked to create an intellectual asset management function to identify innovations or ideas that might have been disregarded by the corporation and bring them to commercialization if this was possible.

Petrash built up an intellectual asset vision and implementation model, together with approaches and tools to enable the company to maximize the value of its existing portfolio of intellectual assets. The success of this work enabled him to take on further responsibilities. Petrash was Dow's Director of Intellectual Capital/Knowledge Management. He has been since 1998 a partner with PriceWaterhouseCoopers, specializing in consulting on intellectual assets with an emphasis on tax donations (Sullivan, 2000).

Leif Edvinsson

Leif Edvinsson was responsible for creating ways to describe what Skandia called "the hidden values" and developed an intellectual capital management model for the firm, while he has the position of the Corporate Director of Intellectual Capital at Skandia AFS, a Swedish insurance company. Being one of the best-known representatives of intellectual capital management, Edvinsson built upon the concept created by Sveiby of reporting on external capital. Skandia has already issued about six intellectual supplements to its annual financial reports, shaping the intellectual capital of the firm and the ways in which this hidden value is utilised for the benefit of customers and shareholders (Sullivan, 2000).

Baruch Lev

Baruch Lev is now a professor at the Stern School of Management at New York University. He first began his research on valuing intangibles in the early 1990-s as a colleague of David Teece at UC Berkeley's Haas School of Business. His work concentrates on quantifying the value of intangibles and correlating those values with financial measures observable in the capital markets (Sullivan, 2000).

I.2 Classification and components of intellectual capital

Brooking (1996) advocates that Intellectual Capital includes four kinds of assets: Market assets, Intellectual Property Assets, Human Centered Assets and Infrastructure Assets. Market Assets consist of brands, customers, distribution channels, and business relations. Intellectual Property Assets contains patents and copyrights. Human Centered Assets comprise education and work related knowledge and competences. Infrastructure

Assets includes management process, Information Technology systems and financial systems.

According to Edvinsson and Malone (1997) those categories of intangible assets can be described as follows: innovation capital; human capital; customer capital; supplier capital; investor capital; process capital; and location capital. It is important to emphasize that the term "intangibles" is different from the term "goodwill". Goodwill includes some of the above-mentioned categories but also items that are part of intangibles. For example, the higher price that is paid for an acquisition that is due to the clever negotiation strategies and tactics of the acquiree. The higher price is part of the recognized goodwill, but does not represent an intangible value itself moreover, intangibles comprise all kinds of values whether they can or must be recognized in the balance sheet or not, but goodwill covers only intangibles that may not be recognized separately.

Whereas, later in 1998, Edvinsson and Malone, Abeysekera (2003), and lots of other researchers provided different categories of intangibles, which is the generally accepted classification and receives three essential forms: Human Capital, Structural Capital and Customer Capital.

Classifying or in other words categorizing intellectual capital aids companies to comprehend what it is. At a basic level, classifications of intangibles are easy because they are used to visualize and therefore communicate how both intangibles and tangibles interact to realize the vision of the firm. The intangibles which are considered as important are under constant change.

Petty and Guthrie (2000) stated that, a number of contemporary classification schemes have developed the distinction by specifically dividing IC into the categories of customer-related (external capital, structural (internal) capital and human capital. Structural capital is sometimes subcategorized into process capital, intellectual property and innovation capital. The classification schemes of intellectual capital models differ too. Knight (1999), for example, identifies an additional factor, the financial performance, in addition to the human, structural and external capital.

Kaplan and Norton (2004) in the process of developing the Balanced Scorecard identified three categories of intangibles assets: human capital, information capital, and organization capital, assets which they call “strategic readiness”, to link these intangible assets to the strategy and performance of a company. Kaplan and Norton developed a tool called the “strategy map”, in that map the intangible assets have an effect on the performance of the company by enhancing the internal processes most crucial to creating value for customers and shareholders.

Companies ought to create their strategy maps from the top down, beginning with their long-term financial goals and then defining the value proposition that will deliver the revenue growth specified in those goals, identifying the processes most crucial to creating and delivering that value proposition, and, finally, defining the human, information, and organization capital the processes demands.

Finally, the question arises: do firms need a classification of intangibles? Obviously, firms need some basic form of classification to be able to communicate their visions. However, is further division needed? Perhaps it is, in as much as in the analytical process categories are divided until enabling intangibles are found.

I.2.1 Human Capital

Human Capital is defined as the combined knowledge, skill, innovativeness, and ability of the individual employees and managers in a company. The term also comprises the dynamics of an intelligent organization and the creativity and innovativeness of the organization. During the last decade, an increasing attention has been focused on investigating the financial importance of human capital investment (Moolman, 2009). Human capital is described as representing a company's individual knowledge stock through its employees, so it is the profit generator of the knowledge economy. It includes employees' collective competences, capabilities, and brainpower. According to Moolman (2009), human capital generates the necessary innovation needed to create new products and services, improving the business processes and creating value.

Human capital is the creation of intellectual capital and it is a crucial element in the performing of intellectual capital functions. Based on its description and functions it is clear that human capital is a driver of growth within an organization. However, OECD (2006) notes that, it is important that intellectual capital assets be combined with other factors, such as improved business processes and information technology, in order to create value. It is, therefore, of the vital importance for an organization both to manage and to use the knowledge possessed by its employees in an extremely effective way (OECD, 2006).

Knowledge management involves both the acquisition of knowledge possessed by employees and making that information available to other employees within the organization, which means, distributing this information to the right users at the right time (Moolman, 2009). Employees acquire their skills and competencies through experience as well as training and development. A part of this knowledge will be unique

to the individual and a part of it may perhaps be generic. According to Moolman (2009) one of the easiest ways to track human capital is through staff turnover benchmarking, by accurately recording and reporting staff turnover rates and comparing these statistics with other companies in the same industry. This will help companies to put controls in place to retain the human talent.

The definition of an asset states that an organization must control the future economic benefits that will flow from that specific asset. This control over future economic benefits is guaranteed by either ownership or a legal right (IASB, 2010: A837). However, unlike other assets, companies do not own their employees, nor do they own the skills, experience and competencies which these employees possess due to the risk of high staff turnover. When terminating their contract of employment with a company, employees take with them their skills, knowledge, experiences, and competencies (Moolman, 2009). But if effectively managed, there may be a clear indication that human capital does, indeed, contribute to the value creation process of an organization. Consequently, companies are not able to control and measure any future economic benefits that may accrue to them as a result of their use of their human capital. However, the IASB (2010: A839) states that an organization may control benefits that flow from technical knowledge if that knowledge is protected by legal rights or by a legal duty imposed on the relevant employee to keep confidentiality.

Furthermore, it is essential that for an item to be recognized in the annual financial statements as an asset, the item should meet both the definition of an asset and asset recognition requirements. In addition to the control by an entity of future economic benefits that may flow from the asset concerned, the recognition requirement also refers to the reliable measurement of its value (IASB, 2010: A839–A840). However, the

measurement of human capital involves a great degree of subjectivity, and a significant application of estimates. Companies invest in human capital first and foremost through employee training and development programs (Bontis, 1998). Nevertheless, the value of human capital lies in its use and not in its cost. In other words, the cost of acquiring knowledge and competences and the potential of this knowledge and competencies to generate profits are unrelated. Measuring the salaries, wages, and the costs of recruitment and training is quite easy, but calculating its value to the growth and accumulation of employee knowledge is a far more difficult task. Accordingly, the spending on staff development and training does not necessarily create value and it is only when the benefits from such expenditure, in the form of increased innovation and productivity, exceed the cost needed to create that asset or value, thus resulting in a beneficial investment (Moolman, 2009). Accordingly, the challenges encountered in estimating cash flows make it difficult to determine the actual value of human capital.

This absence of a reliable value in terms of human capital makes it difficult to monitor the performance of an organization based on the employment of its human capital. This, in turn, makes it harder to compare the performance of the organization in question with the performance of other organizations performing in the same industry. In addition to the challenges involved in obtaining a reliable value, the uncertainty regarding to the control and measurement of future economic benefits relating to human capital, makes it impossible to acknowledge human capital in the annual financial statements. On the other hand, the acquisition of better information about their human capital may enable an organization to allocate its human resources more effectively, and to identify gaps in the skills within the organization (Moolman, 2009).

I.2.2 Structural Capital

Structural Capital comprises factors such as the quality and reach of Information Technology systems, company images, hardware, software, databases, organizational structure, patents and trademarks. Structural Capital can be owned and traded by a company (Edvinsson, L & Malone, M S, 1997).

In other words, this structural capital refers to the knowledge that is retained within a company after the employees have left the company at the end of each working day, and also when they have resigned from the company. A company can have a high level of Human Capital, but if the organization has poor systems to track and manage the members of the organization, the overall Intellectual Capital will not reach its fullest potential (Bontis, N, 1998). The difference between human capital and structural capital lies in the fact that human capital refers to the knowledge that belongs to the employees of an organization while structural capital refers to that knowledge which is created by the human capital that belongs to the organization.

According to Moolman (2009) structural capital makes people work smarter and become more productive. A company with weak structural capital will not be able to turn its human capital into value. This view supports the conclusion that the value creation process is a process that transforms human capital into structural capital, and that, at the same time, structural capital supports human capital in the value creation process. The effective coordination between structural and human capital, makes possible that a company develops good relations with its stakeholders in the form of relational capital. Structural capital is stored in organizations files and archives for further use in the processes within the organization. Certain types of structural capital are protected by copyrights, thus rendering them easy both to identify and to measure. Structural capital includes the use of technology and structures in order to enhance the knowledge flow,

organizational routines, procedures, systems, cultures and databases of an organization (OECD, 2006). In other words this class of intellectual capital resembles the organizational know-how which is focused on converting knowledge and skills into intellectual capital. This organizational know-how is reflected in the organizational routines, strategic documents, and rules of the organization concerned. Knowledge and information as part of structural capital increases a company's ability to compete within the industry in which it operates (Moolman, 2009). The survival of any organization depends mainly on whether the organization is able to compete effectively within its industry. In order to do so and to increase its competitive advantage an organization relies mainly on its structural capital. According to Moolman (2009), structural capital is considered to be the backbone of an organization. Structural capital may be divided into two categories, namely, the infrastructure of an organization (strategies, processes, and policies) and the intellectual property of the organization which consists of copyrights, patents, and other legal rights. Based on their nature, infrastructure assets are generated internally and they form part of what is termed internally generated goodwill in terms of IAS 38 ASB, which consists of management philosophy, corporate culture, management processes, information systems and financial relations (2010:A 847).

Intellectual property assets refer to those intangible assets such as copyrights and trademarks which are legally protected. In terms of internally generated, intangible assets there exists the challenge to determine whether or not the asset concerned is an identifiable asset that will generate expected future economic benefits. This makes it difficult to assess whether an internally generated, intangible asset qualifies for recognition (IASB, 2010: A845–A846). In addition, the value of intellectual capital lies within its use and it is not possible to measure this value in a reliable way. In order to

determine value in use it is necessary both to determine and to measure the future cash flows from the asset concerned. Accordingly, challenges in respect of the measurement of future cash flows from intellectual capital make it difficult to determine the value of the asset. These challenges, together with the non-existence of an active market for such assets, disqualify them from recognition in the annual financial statements of an organization. The strict requirements for the recognition of internally generated, intangible assets and the measurement challenges make it difficult to recognize the infrastructure assets of an organization in the financial statements of the organization. Intellectual property, on the other hand, arises from the contractual and other legal rights of a company. These contractual and legal rights render these assets identifiable and, thus, the assets concerned meet the recognition criteria of IAS 38 as issued by the IASB. In other words, these assets meet the definition of an asset that should be recognized in the statement of the financial position of a company (IASB, 2010: A838).

I.2.3 Relational Capital

Relational Capital, the third component, is frequently categorized under Structural Capital, although in some models it is a separate category, equivalent to Structural and Human Capital. Relational Capital is the relationship capital developed with key customers (Edvinsson, L & Malone, M S, 1997).

According to Moolman (2009) relational capital is defined as the knowledge embedded in the relationships of an organization with its customers, suppliers, stakeholders, and strategic alliance partners. The exchanges across these relationships are strategic and are developed for a specific purpose with a view to strengthening the competitive advantage

of the role players. In order to achieve a competitive advantage, long term and strong relationships with rich knowledge and information exchanges are necessary.

In practice, these relationships may be strengthened by signing service level and other documented agreements. These agreements ensure the effective monitoring of the relationships that exist between the organization and its customers and suppliers.

According to IFRS 3 of the IASB (2010: A839) relationships with customers obtained in the business combination comply with the definition of an intangible asset if such relationships are the result of a contract. Nevertheless, non-contractual customer relationships acquired in the business combination are in accordance with the definition of an intangible asset if these relationships. Purchase and sales orders meet the contractual legal criterion for identification as intangible assets as arising from a contractual agreement, and may be recognized in the annual financial statements of a company. Organizational relationships with customers and suppliers that meet the criterion in respect of recognition in the financial statements of an organization are disclosed separately from the goodwill in the group financial statements (IASB, 2009:1923). Purchase and sales orders serve as binding contracts between customers and suppliers. These assets are identifiable and their values may be reliably measured based on the value of the order.

Relationships based on customer loyalty, links with suppliers and other similar relationships are not identifiable, and it is not possible to measure their value reliably. In addition, in common with all intellectual capital categories, the absence of an active market for relational capital is an inherent challenge in respect of this type of capital (Moolman, 2009).

The inability to enter into legal contracts with the parties in relationships units and networks in respect to the expected outcomes of these relationships make it difficult for

companies to exercise control over future benefits that may flow from these relationships. In addition to these challenges, as with all other types of intellectual capital, relational capital is a significant aspect of the value creation of a company. It is, therefore, necessary to report them to the users of financial information and other stakeholders.

I.3 Intellectual Capital Measurement

Naturally, the question related to the way we measure intellectual capital and the method we measure something that is invisible, contained inside the human brain, databases, processes, culture, and products arises when discussing intellectual capital measurement. The response to this question is that we do not measure it. Defining the knowledge level or the intellectual capital you possess in calculating the amount of computers or the most important employees, is not the ultimate goal of measuring the intellectual capital., but on the contrary, the level of effectiveness the organization is based in creating value from it. Measuring the effectiveness of different forms of Intellectual Capital in attaining the organization's goals, in boosting it's innovative and competitive capacity, and in renewing and growing its IC, is essential to IC measurement. Measuring the value of intellectual capital is not easy, but there exist methods of conducting this process.

A balanced scorecard which can be used to measure intellectual capital was designed by Kaplan and Norton (2004). Nevertheless, measuring intellectual assets calls for considering the value added by the company, which can be reported in the form of a value added statement. Performance measurement, which stems from the early period in the twentieth century, offered an appropriate framework for most of the IC measurement

models. In order to measure performance in all areas, management would necessarily be extended just a little throughout an organization, hence reducing the human resources of management, which would end up in confusion and a vague sense of direction throughout the organization. Management has been discontented with the use of financial measures per se to supervise business future performance. Some scholars think that they almost don't monitor the characteristics that generate an organization's competitive advantage.

In order to indicate the areas that management should concentrate to drive future competitive performance, financial measures (e.g., ROI) are very general. Since the nature of financial measures is retrospective, they do not manage to serve likewise as predictors of actual problems faced by the organization.

Management accepted since the onset of the industrial revolution the fact that financial reporting provides very little and very late and built up performance measures. The earliest were observed in the manufacturing industry. The indicator of the financial reporting called "units per hour" indicator measured production performance. Bed occupancy rates were used by hotels and hospitals, whereas graduate employment rates were reported by universities.

Five most important reasons were pointed out by Marr & Moustaghfir (2005) to respond to the question, why firms measure their intellectual capital. A number of the reasons are interior reasons of the company and a few are external. Those reasons are as below:

The first and foremost reason is that it aids an organization to design the strategy of a business. An organization may possibly ensure a competitive advantage through identification and development of its intellectual capital. The second reason is related to the fact that measurement of the intellectual capital might enhance essential performance

indicators which will aid in assessment of the strategy implementation. Even in the cases when the intellectual capital is measured correctly, it is of very little value if it is not related to the strategy a firm has, in accordance with what Edvinsson and Malone (1997) recommended.

The third reason is that one can measure intellectual capital in order to aid in assessment of mergers and acquisitions, especially to determine the prices paid by the purchasing companies. The fourth reason is that utilization of non-financial measures of intellectual capital can be related to the motivation and compensation plan of an organization. The last reason is to communicate to stakeholders outside the company the intellectual property the company possesses.

Improving internal management, satisfying constitutional and transactional factors and enhancement of the external reporting are the reasons why firms measure their intellectual capital.

Complementing financial measures, provision of a feedback mechanism for actions, provision of information to develop new strategies, assistance in taking into consideration various courses of action and enhancement of the management of the entire business are the effects of the good measures of the Intellectual capital undertaken by companies.

In cases when good measures of Intellectual Capital are not available, It is recommended that indicators should be utilized as a means of signaling that IC is present or expanding.

In general, the role of measurement is to offer a framework to concentrate attention on what thing you aim to monitor. Being as such, measurement provides management as a powerful instrument that can have an impact on the behavior and action of an organization.

One can not fully rely on the maxim that what gets measured gets managed because it is not completely true. In this case one can say that what is measured is taken into consideration by senior management and consequently they do something about it. Hence, monitoring and measuring the most important success enablers is of an utmost importance.

The concept of Intellectual Capital appeared in the 1970s after numerous efforts to measure human capital. Endeavors to measure employee contribution in dollars by the Human Resources Costing and Accounting were not successful.

Customer satisfaction is an additional measure of Intellectual Capital. Lot of businesses and organizations developed ways to measure customer satisfaction since they believed that customer satisfaction is the best indicator of customer loyalty to the business. While the first Customer Satisfaction Barometer was issued in Sweden in 1989, other countries in Europe and the United States realized customer satisfaction indexes to monitor customer satisfaction in several industries.

These endeavors to measure customer satisfaction were not successful in establishing a system that is comprehensive and also based on the model of the Intellectual Capital as a model that can be utilized to monitor the creation of values from Intellectual Capital Management.

Despite the fact that it is necessary to monitor all forms of Intellectual Capital might be monitored in order to have an improved business performance, it is necessary for the organization to concentrate their attention and resources on managing and measuring only the items of the Intellectual Capital that are very important regarding the success of these organizations. Several measurement systems of Intellectual Capital appeared in the

1990s, in order to assist management with this role, while some of them are based on the IC models previously discussed. These systems comprise the Balanced Scorecard (BSC), the Intangible Asset Monitor (IAM) developed by Sveiby, and the Skandia Navigator (Edvinsson, & Malone, 1997).

The existence and use of intellectual capital should be properly managed in order to derive maximum benefits from it. In addition, the effective management of intellectual capital also helps in the measuring of these assets (Knight, 1999).

The objective in measuring intellectual capital has both internal and external purposes. In terms of internal purposes, a company would measure intellectual capital in order to manage its resources more effectively, and, thereby, minimize costs. On the other hand, measuring intellectual capital for external purposes would require verifiable information that signals the expected growth of the company to existing and potential investors, and to other external users of the information. The process of measuring intellectual capital involves using both financial and non-financial measurement methods (Moolman, 2009).

I.3.1 Financial measurement models for Intellectual Capital

The existing financial measures used to assess the market value of an asset address the financial contribution made through intellectual capital. Researchers have identified a number of financial measures that include, inter alia, the discounted cash flow technique (DCF), relief-from-royalty, comparable transactions, avoided cost, adjusted present value, economic value added, value chain scoreboard, market-to-book ratio, and the capital asset pricing model. These financial techniques are used to measure the market value of a company for different purposes. Financial measures involve assigning a

number to a company although the resultant value is not disclosed in the financial statements (Moolman, 2009). Nevertheless, this value may be reported in the contextual disclosures of the corporate annual reports to communicate the unreported value of the organization.

I.3.1.1 Discounted cash flow model

DCF is normally used by management for internal reporting purposes. Intangible assets such as technology, software, customer relations, covenants not to compete, strategic agreements, franchises and distribution channels are assessed by utilizing this method. The DCF model is also used mainly to evaluate mergers and acquisitions in order to determine the value of the business (es) concerned. It is currently also used for strategic decision making purposes. The use of the DCF model to measure intellectual capital is appropriate for the annual reporting of the true value of the business to all users of information (Moolman, 2009).

I.3.1.2 Relief-from-royalty

This model is more applicable to the measurement of an aspect of intellectual capital, namely, intellectual property. In order to value intellectual property such as trade names and trademarks, the relief-from royalty model is used. The royalty rate is implemented to the anticipated revenue linked to the asset.

However, in view of the fact that the intellectual property assets meet the requirements of an asset prescribed by the IASB and are measured in terms of IAS 38, this method

may be used for a reasonableness test of the value of the intellectual property disclosed in the annual financial statements and for internal reporting purposes only (IASB, 2010: A838).

I.3.1.3 Comparable transactions

Intellectual capital forms part of the internally generated, intangible assets of a business and it is not possible to distinguish intellectual capital from the cost of establishing the business as a whole. The internally generated, intangible assets include market-related assets such as internally generated brands, mastheads, customer lists, and internet domains. However, these assets are not recognized in the financial statements and neither is their value recorded on the statement of financial position of the business. The comparable transactions model is suitable to measure such internally generated assets.

When utilizing this model, the value of the intellectual asset is based on the actual prices paid or the expenditure incurred for assets with functional or technical qualities analogous with the subject asset. Discounts and premiums can be utilized to achieve at the final value given that no two assets are perfectly analogous (IASB, 2010: A847).

I.3.1.4 Avoided cost model

The value of intellectual capital is part of the goodwill purchased in a business combination. This goodwill is represented by the excess of the cost of the business combination over the net fair value, including the contingent liabilities of the business (IASB, 2010: A106). The avoided cost model is exactly similar to the calculation of the purchased goodwill - it uses the historical information readily available within the

company and it does not apply subjective assumptions. Under this method the value of the intangible asset is based upon calculation of costs disregarded by an acquiring company when getting an existing intangible asset rather than sustaining costs in generating the asset. The avoided cost method uses the economic principle of substitute in terms of which an knowledgeable buyer would pay more for the asset than the cost of producing or generating a substitute asset (IASB, 2010: A106).

I.3.1.5 Value chain scoreboard

According to Moolman (2009), the value chain scoreboard is similar to the value added model which was discussed in the previous paragraph, with the difference that the value chain scoreboard uses both comparisons between normalized earnings of the company and the expected rates of return on the company's tangible and financial assets recorded on the statement of financial position. The value added model, on the other hand, uses the periodic earnings to determine the added value in a business. With the value chain scoreboard the normalized earnings are based on three years of historical core earnings, and three years of consensus analyst estimates. The comparison between these two figures is intended to ascertain the portion of normalized earnings for a given period that exceeds the expected return on book assets. This difference represents the earnings derived from assets not recognized in the books of a company. The value of the intellectual capital is then measured as the discounted present value of all future earnings from the intellectual assets (Moolman, 2009).

I.3.1.6 Value added approach

Intellectual capital forms part of the business value creation process. It is not possible to separate these assets from the other assets of the company. In addition, intellectual capital may be used together with tangible and intangible assets in the value creation process. When calculating the return of assets ratio (ROA) management takes into account only those assets recognized in the statement of financial position while the earnings taken into account include income generated by intellectual capital. The value added by intellectual capital in the value creation process may be determined by using the value added model or approach.

The value added model encompasses a framework consisting of two parts. The first one results from the concept of the value chain as well as from the principle that raw materials enter from the end of the value chain and while they undergo a transformation process that transforms them in finished goods, value is added up to them. The additional value of the output represents the value contributed by the intellectual capital assets.

The second part of the value added model refers to the economic value added (EVA). EVA was introduced by Stern, Steward and Co in the 1980s as an instrument to aid corporations to follow their financial directive by adding in the maximization of shareholder wealth. It involves subtracting operating expenses, taxes and capital charges from net sales. The model is, thus, a measure of the surplus value created on an investment (Moolman, 2009).

I.3.1.7 Market-to-book ratio

At face value intellectual capital is measured as the difference between the market value and the book value of a company at a given point in time. However, it is not possible to

attribute this difference to the existence of intellectual capital alone. The reliability and usefulness of this model may be enhanced by converting it into a ratio and utilizing a market to net book value ratio. A market to book value ratio compares two different types of valuations: the company valuation as reflected by the share price and the book or accountant's valuation as reflected in the financial statements (Housel and Nelson, 2005).

The ratio is calculated by dividing the market capitalization by the shareholder equity. A calculated ratio that is greater than one indicates that the company holds intellectual capital which is not recognized in the financial statements. A calculated ratio that is less than one suggests that the intellectual liabilities exceed the value of the intellectual assets.

I.3.2 Non-Financial measurement models for intellectual capital

In the previous sections the different financial measurement models that may be implemented to measure the value of intellectual capital in a business were discussed. However, these measures have certain limitations and it is not possible to apply them to the different categories of intellectual capital. One of the reasons for this is the fact it is not possible to identify intellectual capital or to separate it from the business as a whole. Calculating a value for each category of these assets is, thus, problematic. In view of the difficulties in finding financial measures suitable for measuring the value of intellectual capital researchers such as Robert Kaplan and David Norton, as well as Leif Edvinsson, developed non-financial measures such as the balanced score card and Skandia navigator in order to balance the need to report on these assets and the challenges involved in measuring them. Accordingly, the information obtained using these non-financial

measures complements the information disclosed in the financial statements. Certain of these non-financial measurements relate to measuring the different categories of intellectual capital, thus making it easy to report the value pertaining to each category.

Housel and Nelson (2005) refer to the non-financial measures as perceptual, process and system measures. Perceptual, process and system measures refer, on the other hand, to the identification of those mechanisms by which value is created and transformed rather than accounting for the way in which the value of a company may be presented in terms of one number only. It is, therefore, about what creates value and about the way the resources of a company are created and utilized in order to create value (Moolman, 2009). Perceptual and process measures are more qualitative than quantitative. Qualitative information is necessary to complement the quantitative information disclosed in the annual financial statements and, hence, the IASB has recently issued the Exposure Draft on management commentary (IASB, 2009).

Perceptual measures focus on the perceptions of employees and the necessity of employees for a system of knowledge measurement that is effective. Employee perceptions of top management commitment, the necessity for knowledge sharing and knowledge management, and perceptions of the value addition and of equitable reward structures are aspects of these perceptions. Process and systems measures involve the establishment and mapping of current processes as well as the predicting of future performance and infrastructure needs. In view of the fact that perceptual measures deal with knowledge and skills management they are clearly the most suitable measures with which to measure human capital while process and systems measures are more suited to the measurement of structural and relational capital (Moolman, 2009).

The studies on intellectual capital measurement have produced a number of measurement approaches that aim at synthesizing the financial and non-financial information. The measures developed include the balanced score card, Skandia navigator, value chain scorecard, and human capital accounting. As a result, efficient non-financial measures of intellectual capital shall add to financial measures, offer a feedback mechanism for actions and the information to design new strategies, aid in taking into consideration various courses of action, and improve the management of the organization. Non-financial measures of intellectual capital, in turn, provide information that will assist potential investors and other stakeholders as well as other users of the information, to make informed financial decisions relating to the company (Housel and Nelson, 2005).

I.3.2.1 Balanced scorecard

Robert Kaplan and David Norton developed the balanced scorecard model in the early 1990-s. The model provides management with useful information on value creation by means of the following four dimensions-financial performance, customer perceptions, internal processes and internal learning and growth:

- Financial measures reflect the position of a company in terms of both its financial performance and its ability to improve shareholder wealth.
- Customer measures involve the measurement of increased customer value and the value delivered by new goods and services.
- Internal processes deal with and measure operational excellence, customer intimacy, and product leadership. It is not the assets per se that create value but rather the deployments

and configuration of these assets as well as the interactions between these assets and the transformation process from inputs into outputs.

- Learning and growth measures involve the measurement of the innovative abilities of the company's employees, their competencies and the corporate culture.

However, apart from its ability to measure financial performance and strategic management the balanced scorecard model lacks the general measurement ability needed for assessing a company within its specific industry and, therefore, lacks comparability. Nevertheless, the balanced scorecard does provide the users of corporate annual reports and other stakeholders with key information about both the value creation process and the strategic position of the organization. In addition, the model is the ideal measurement model to evaluate the value of intellectual capital as it includes all areas including the strategic position of the business. Its use explains the links in business processes and the total assets of the company (Moolman, 2009).

I.3.2.2 Skandia navigator

This model is comparable to the balanced scorecard model and it links past measures to current and future measures. The model suggests that there is a room for new developments in the current measurement models. Like the balanced scorecard the Skandia navigator model links intellectual capital to the strategy of the business (Edvinsson, L & Malone, M S, 1997).

The Skandia navigator was developed in 1994 by Leif Edvinsson who was a corporate director at Skandia in the 1990s. The model describes the presence of substantial and non-substantial assets, and the transformations of these assets in accordance with the

company's strategic objectives. In other words, the model provides management with information on both the value creation process and the link between financial and non-financial information in this process (Moolman, 2009).

The figure depicts the way in which the Skandia navigator model links the intellectual capital to the overall strategy of a business and reflects five key dimensions of the business. In addition, this model suggests that, in the past, the performance measurement of a business was based only on financial information. Other business areas were not measured. The model further suggests that, although not fully utilized, performance measurements currently include customer and other relations, human resources and business processes. There are developments striving to improve the current performance measures for future reporting and, thus, the renewal and development focus is critical for sustainability (Moolman, 2009).

I.3.2.3 Human resource accounting

The development of human resource accounting, although not widely used, was a breakthrough in the measuring of human capital. In addition to describing the financial accounting aspect of capitalizing the expenditure incurred in respect of recruitment, training and development, the goal of human resource accounting is to calculate the economic value of the human capital of a company. The model includes assessment of the probability of staff exit together with probabilities regarding promotions, mortality and salaries in the future. The human resource accounting is utilized for internal reporting to offer feedback to the management of a company in respect of the attainment of its strategic goals. Human resource accounting functions as well as an initial point of designing future plans and strategies by identifying the key competencies innate in the

intellectual capital of the company. The use of human resource accounting will, therefore, assist in the development of the strategies necessary for key staff retention (Knight, 1999).

Nevertheless, this model provides the users of corporate annual reports and other stakeholders with very useful information on both the value creation process and the strategic position of the company. In addition, the model is the ideal model to evaluate the value of intellectual capital as it includes all areas, such as the strategic position of the business. Its use explains the links in business processes and the total assets of the company. The human resource accounting model is based on a number of assumptions, and its measures tend to be subjective and to lack reliability. This subjectivity and unreliability this model means that it is not suitable for external reporting. It is relatively new and may be used for internal reporting (Guthrie et al, 1999).

I.3.2.4 Intangibles asset monitor

Intellectual capital may also be referred to as intangibles and, in some cases, these terms are used interchangeably. The view that intellectual capital comprises a sub-set of intangibles is adopted in this research. A number of non-financial models were developed to address the challenges in respect of the inability to measure intellectual capital with the intangibles asset monitor being one of these models. The intangibles asset monitor refers to intangible assets rather than intellectual assets, and it is internally focused. The purpose of the monitor is to obtain a broad picture on the intellectual capital of a company. The model presents three distinct indicators of intellectual capital:

- External structure
- Internal structure

- Individuals' competences

The model is a qualitative measure of the performance of a company and is utilized as a management and communication instrument more than a valuation instrument. Nevertheless, it may be utilized to complement the financial information and to offer a broader picture of the performance of a company. Financial measures and non-financial integration as qualitative measures will aid the accounting of every specific function in the value chain, and it will aid as well the identification of the critical factors which may have an impact on the efficiency of the intellectual capital (Moolman, 2009).

I.3.2.5 Knowledge assets map

Knowledge assets can serve as well to refer to the intellectual. Knowledge assets consists of human capital, structural capital and relational capital. These knowledge assets can be measured by utilizing a model called the knowledge asset map model. This model offers a framework that enables a company to recognize the key knowledge areas in the company and it offer to the managers a larger framework of organizational knowledge either from external or an internal perspective. The model is based on the interpretation of the intellectual assets of a company as the total of human capital, structural capital and relational capital. The knowledge asset map helps to identify intellectual assets and may constitute the basis for representing the way in these assets are interrelated and may be transformed in order to satisfy stakeholder needs. The use of the knowledge assets map will assist the users of the information to understand how the company uses its intellectual capital in the value creation process (Moolman, 2009).

I.4 Ten Principles for managing Intellectual Capital

Stewart (1998) refers to some fundamental principles of intellectual capital management resulting after a careful observation of human, structural and customer capital:

1. Human and customer capital cannot be owned by companies, but ownership of these assets can be shared with the employees in the case of the human capital and it can be shared with their customers and suppliers in the case of customer capital. Only by recognizing the shared ownership of these assets, companies can manage and benefit from them. A relationship with employees that is quite different from the one mentioned, can result in short-term benefits but it has negative impact in the wealth by destroying it.
2. Encouraging teamwork and communities of practice and other social forms of learning is necessary to be done by a company as a means of creating human capital. Although one appreciates persons who are talented, these persons may leave the company sooner or later, thus corporate distinguished talent, the same as movie stars, have to be managed carefully since they are the most valuable assets. Talents are identified, formalized, and capitalized by interdisciplinary teams, since only by doing so this human capital is shared and becomes less dependent on individuals. Whenever a group member decides to leave, the knowledge is retained.
3. Organizations must reasonably accept the fact that some employees do not constitute an asset despite their level of intelligence and talent they have got if they want to efficiently manage and improve human capital. The wealth of a company is created based on these skills and talents that are first and foremost proprietary, which means that they are the best and secondly, company is based on human capital that is considered strategic, which means that the work these employees do creates the value for which the customers pay. People having these talents are valuable assets for investment. While

others constitute costs necessary to be reduced in the business, these skills could serve as assets for someone else as well.

4. The intangible asset possessed directly by the companies is the easiest to be controlled by managers since it is the structural capital of a company. Nevertheless, this intangible asset is the least the customers care about, while these customers are the money generator of the company. For this reason, the company should be managed in the way that is makes possible for the customers to work easily with the company's employees.

5. The function of the structural capital is twofold: it accumulates knowledge which assists the work appreciated by customers, and to disperse the information within the company. A lesson learned by the manufacturers is that inventories done in time are more efficient if they are compared to the warehouses, which contain an enormous stuff one uses just-in-case of necessity. This means that what one needs must be ready-in-hand and what one may need ought to be effortless to offer.

6. Expensive physical and financial assets can and ought to be replaced by knowledge and information. Organizations ought to examine their capital spending and put forward the question if inexpensive intangibles can carry out the function of costly physical assets.

7. Knowledge work is an everyday asset. Mass-produced solutions are not a source of high returns. Even businesses characterized for a long time by mass production, have chances to create unique relationships, often by offering management services that generate value and good returns for the company and the company's customer.

8. Organizations ought to reexamine the value chain of the industry they are part of, starting from the acquiring of raw materials, to end user, so that they can identify the

most essential information. For knowledge work, It is commonly found downstream, in the direction leading to customers.

9. Companies ought to be concentrated first and foremost on the information flow, not the flow of materials. The “real” economy ought not to be confused with the “intangible” economy whether the company is looking at human, structural or relational capital, or their interrelation.

10. It is not sufficient to invest in people, systems and customer separately because human, structural and relational capitals work together. They may mutually assist one another or detract from each other. This is the reason why it is important to list some of the ways in which this interaction occurs. (Stewart, 1998).

CHAPTER II

LITERATURE REVIEW

Healthcare policy makers are internationally concerned about ageing and recession as the most important factors regarding the sustainability of healthcare expenditures during the future decade. Healthcare is anticipated to consume 20% of GDP by 2017 in many OECD countries. Governments are worldwide engaged to rationalize, or minimally control healthcare expenditure, enhancing changes in technology and the organization. (Mura, Lettieri, Spiller, Radaelli, 2012).

Regardless of these efforts, health cost per capita is constantly increased during the last decades. Healthcare is influenced by the cost increase and therefore healthcare can not improve the average productivity regardless of the adoption of new technologies or changes in the organization. This happens because healthcare is very labor-intensive and only a major change of the behavior of the health care employees can enhance productivity in the future. Several researchers during the recent decades, started to explore the ways to enhance performance of healthcare organizations and deliver more for less. Some of them claimed that healthcare organizations are knowledge-intensive organizations and therefore improved dynamics of the knowledge assets would be able to make possible the upgrading of the performance.

Below, a more in depth information will be given, based on prior research made about the field of intellectual capital in different countries of the world and then later the developments made in Albania. Other service industries are included as well since there is a research deficiency regarding intellectual capital reporting in the health care centers.

2.1 Prior Research on Measuring IC of Healthcare Sector Worldwide

The use of intangible resources in the performance management of European hospitals was investigated by Zigan, Macfarlane and Desombre (2007), being the key topic of their research. They investigated in five different private and public sector European hospitals, in which the intangible resources are recognized as performance drivers. Their goal was to enhance the understanding of which intangible resources are of distinct significance in hospitals and to shed light on the level they are integrated in different performance measurement systems.

Having that research goal, they also concentrated on the differences between private and public hospitals and three countries regarding the instruments of the performance measurement. Taking into the consideration the innovation of this area in a health care setting, they chose to utilize an inductive approach by interviewing important informant by using interviews that were open ended and semi-structured.

By utilizing this approach, they had the opportunity of obtaining detailed information about the social setting being investigated by highlighting the contextual understanding of the social behavior, an aspect that was a fundamental component of their research. (Bryman, 2004).

The importance of these resources was fully understood by all the respondents. They all agreed specifically regarding the exceptional role of the human resources in hospitals to guarantee excellence since they are according to them “the most important resource” and given the fact that “everything is determined by the knowledge of the people”. Respondents noticed a fine system of information, in respect of the structural capital, and this system of information was considered as a key resource to guarantee a qualitative data collection and management.

Based on the answers of the respondents, the Norwegian hospital considers itself as a “small university” and they had the sensation that regarding the way that it developed and measured human capital, it was systematic. The data collected showed a insignificant difference between private and public hospitals in terms of the management of intangible resources. They thought that the most important was related to the state’s role in delegating initiatives and targets of management something which created in the hospitals a tradition of waiting to receive directives regarding performance management instead of being active in conducting their performance managements.

Human capital and their relational capital was highlighted in the responses of those from Norway and Germany. They thought that the tools utilized to measure the performance of an individual were very subjective and they were frequently carried out in unsystematically in the majority of the hospitals observed during the research investigation. Human capital, relational capital and individual performance measurement, were the most important themes elaborated during the research analyses.

The fundamental importance of human resources of a hospital was highlighted by all the respondents, but despite this fact, some of them accepted the fact that they were not developed sufficiently since “Human Resources Management maybe was the weakest point of a weak Human Resources system and there was no instrument to monitor this system. (British public hospitals).

Lack of a systematic approach to define and measure human capital was highlighted by the respondents. On the other hand, the respondents of the German private hospital highlighted the relevance of having an early-warning system which enables knowing the kind of experience and capacities possessed by each employee as well as pointing out

issues of unfriendliness by staff members. Target interviews were used with the employees of this hospital in order to collect information about their level of education.

Many respondents had the impression that some hospitals did not appreciate properly the staff development. They thought that the financial aspect and over-reliance on the efficiency of initial professional development for medical staff was the reason. Nevertheless, a different viewpoint was propounded by one respondent who said that employees in the hospital he worked did not get the proper level of opportunity to continue professional development and he clarified that this could cause dissatisfaction on the part of the employees since the government was considered responsible.

There was stated there was a high level of understanding of the importance of human capital by respondents from Norway and Germany who understood likewise the importance of the national capital in management of an effective hospital. These respondents depicted the ways national capital involved the relationships existing with internal and external stakeholders. According to them three levels of working relationships were considered as being important: the first one was the level of relationship with the patients, the second was the level of relationship among various professional groups and the third was that with other hospitals. They stated that the goal of most of these relationships centers was to share and exchange either tangible or intangible resources.

Based on their interviews it was noted that one of the hospitals had adopted approaches to cooperate and network with other counterpart hospitals in order to enable sharing of information among them as well as about the way they did things, how they treated their patients, so that the staff learned from experiences shared. The experience gained served as a feedback mechanism for procedures and routine work of the hospital. In addition, it

they believed that by development of stronger relationships and networks, the personnel members would become more effective in performing their roles in the hospital.

Nevertheless, respondents agreed that the benefits and the value established based on the process of sharing intangible resources were difficult to be measured but they believed that this methodology should be adopted and encouraged by all hospitals.

The respondents talked about the measurement of individual's performance, and declared that their hospitals concentrated on such tools as complaint management, personnel interviews, observations and different forms of evaluations. The satisfaction of patients was considered especially important and an indicator of a good performance since all the respondents mentioned and highlighted the importance of the patient satisfaction surveys.

Patient surveys and complaint management do not concentrate on the measuring the most important intangible resources such as knowledge, motivation and friendliness, was an observation made while another respondent stated that it seems that patients were not aware of published data about either tangible or intangible hospital performance.

Physician's education and qualification status was considered as a reliable indicator for their professionalism and good performance. According to the respondents this meant that very few instruments existed to measure the performance of an individual. One of them declared that individual performance in his hospital was not measured with team evaluations as the focal point of measurement. Patient surveys were referred to as an example which aim at the measurement of the satisfaction with the entire area and not with individual employees. They all highlighted the supremacy of financial indicators regarding measurement of the performance of the whole hospital. The importance of measuring market penetration (the degree of occupancy or the number of patients from a particular area) was described by one of the respondents in a private hospital as an

indicator to catch sight of the way local health economy perceives the hospital's performance.

The following research paper, conducted by Sillanpa, Koskela, Koivula, Koivuaho and Laihonen (2010) was concentrated on the managing intellectual capital in non-profit elderly care organizations. This case study was an exploratory, qualitative one which comprised three Finnish case organizations. Interviews with managers of the case organizations served as the basis of the case descriptions and analyses. Intangible resources were highlighted in the operations of non-profit elderly care organizations, the existing practices with respect to the management of Intellectual Capital factors and the Intellectual Capital needs of management in these organizations were described in the study. Interviews concerned three themes related to the research questions: (1) the recognition of IC; (2) existing practices regarding IC; and (3) future needs regarding IC.

Jyllin Kodit is an old people's home founded in 1965 and owned by the Jalmari Jylli Foundation. *Jyllin Kodit* offers care, nursing, nutrition, research and rehabilitation services for elderly people. It has about 60 full-time employees and a group of volunteers who are active in the operations of the organization. The most essential part of IC is skilled personnel that enable the overall operation of the organization. Clients are another essential resource. There are two types of clients in old people's homes in Finland: actual end-users, who receive the service (personal clients) and municipal and national organizations (organizational customers) that pay for the most of the services. Organizational values that direct all operations are also considered an essential factor of IC. They are defined in the establishment of the foundation, and all actors in the organization from employees to board members are required to follow these values of caring and responsibility. Another important factor related to the organization is the

mode of operation and management, which includes defined processes and low hierarchy, in turn enabling rapid decision-making and flexibility.

Many of the challenges and risks related to IC are posed by the operating environment. Changes in the operating environment require flexibility for organizations and employees, which is challenging. Jyllin Kodit utilizes various methods in assessing and managing its IC. Outcomes of activities are monitored by tests that evaluate clients' physical and mental changes. Customer satisfaction is assessed by customer satisfaction surveys made regularly for the short-term rehabilitation clients. Recently, appraisal interviews for the whole personnel were initiated. Even though Jyllin Kodit utilizes many methods, daily unofficial informal conversations with employees are considered central means of managing IC. According to the managers interviewed, the needs for IC management relate mostly to the personnel of the organization. Human resources are considered as an important target for development. Currently managers need information on employee satisfaction and on the competencies of employees. Another future need concerns information about the reputation of the organization. At the moment the organization reports on its operations to authorities, organizational customers, its owner, financiers and clients.

The Rehabilitation Institute Apila was founded in 1963 and is owned by the Finnish Rheumatism Association. Apila helps people suffering from musculoskeletal diseases by offering short-term rehabilitation. Apila offers recreational activities and rehabilitation services aimed at maintaining and improving an individuals' working capacity. The personnel is deemed the most important IC resource. Professional skills and competencies, as well as the motivation, commitment and friendliness of employees are considered essential factors in this organization. Work atmosphere, a positive and strong

community spirit, flexibility and responsibility were likewise considered important. The organization has a low management hierarchy enabling flexible and rapid decision-making.

Appraisal interviews are held annually and the well-being surveys of employees are conducted every other year. Apila receives customer feedback constantly since customer satisfaction surveys are conducted after each short-term rehabilitation period. These surveys are seen as the best way to assess how well the organization has succeeded in its activities. Outcomes of the service activities are monitored by clients' physical and mental tests at the end of each rehabilitation period.

According to the managers interviewed, there seem to be two main needs in IC management in Apila. The first relates to service outcomes. There is no information available on the long-term effects of rehabilitation services on clients' health and well-being. This would be very important information for the organization in verifying its operations. Another IC management need is for more detailed information on employee well-being to facilitate human resource management in the future. Currently Apila reports on its activities to authorities, organizational customers and the owner of the organization. The organization is very interested to provide information to its present and potential customers, either individuals or organizations, about the development of activities in the future.

HelsinkiMission is a charity organization providing services to elderly people, mentally disabled children, young people with mental problems, and young people with violent backgrounds. HelsinkiMission was founded in 1883 to help poor people without social security in the city of Helsinki.

Organizational values strongly guide operations and therefore they form an essential part of IC in HelsinkiMission. The operating environment of HelsinkiMission requires flexibility and rapid response in the challenges emerging in the field, which sometimes causes chaos in the organization. HelsinkiMission operates with a relatively small number of employees, and there is a risk that too much flexibility will result in personnel burnout.

The needs for IC management in HelsinkiMission relate to the assessment of outcomes. The outcomes of the operations are evaluated by monitoring the numbers of donors and sponsors. HelsinkiMission aims at reducing the numbers of suicides among elderly people, and one principal indicator of the outcome is the number of suicides among elderly people in the Helsinki area. HelsinkiMission reports on its activities to sponsors, donors and financiers.

A framework to perform analyses of company's transformation of intellectual capital into value was provided by Molodchik, Shakina and Bykova (2012). Intellectual capital is used on the meeting point of value-based management and the resource-based view. It offers the framework of intellectual capital transformation analysis by using a statistical approach.

Their study emphasizes the ICTEM as an instrument of investment decisions, typically taking into consideration common tendencies, the future development of industries and economies. Companies from various European countries such as Germany, Finland, Denmark, Spain and some others were studied in this research.

The truth is that the analysis made by different important researches do not elaborate on all the challenges emerging regarding management of Intellectual Capital. In addition, some of these empirical studies arrive at contradictory conclusions. It is speculated that

this issue is mostly related to the difficulties to identify and measure Intellectual Capital. This creates the impression that a holistic framework for Intellectual Capital analysis is the subsequent development step in the field. That is the rationale why it was proposed a theoretical background in the intersection of resource and value based views. This theoretical background enables extension of the knowledge of the Intellectual Capital transformation process, aiding to expand our understanding of its characteristics and outcomes' evaluation.

The ICTEM presented in this research is a versatile technique that enables responding to important questions linked with benchmarking of the Intellectual Capital. The ICTEM offers a framework of Intellectual Capital analysis utilizing a statistical approach. This instrument is anticipated to be helpful for the progress of empirical studies and for practical accomplishment too.

The empirical results are mostly in accordance with the preceding studies that identified a constructive impact of Intellectual Capital on the performance of a company, concluding that Intellectual Capital has a fundamental role in establishing value for shareholders and other stakeholders.

This research introduces only a small part of the empirical results offered by ICTEM's implementation. Nonetheless, authors arrive at the conclusion that the model can be utilized for Intellectual Capital transformation assessment since the statistical results are important in terms of regression evaluating.

2.2 Prior Research on Measuring IC of Healthcare Sector in Albania

Health sector, which is defined as a sector of priority in the Albanian Strategy for the social and economic development, according to World Bank (2012) is in the constant

transformation in order to meet the correct standards. In order to conduct the reform in this sector and to aid the decision makers in their decision is needed to possess the correct information about the source of the financing of health sector, on the destination of the expenditure in this sector and their control. Healthcare services in Albania have been improving, but more remains to be done in order to guarantee the access of poor households to a qualitative healthcare.

About 6 % is spent on healthcare in Albania in accordance with the average spent in countries that have similar income levels. The contribution of the public sector is moderately low and well below the average. Due to the low public sector spending, out-of-pocket expenditures at the point of service account for about 60 percent of sectoral funding. The high level of direct household spending shows that the existing healthcare financing system provide for the population of Albania a limited protection against catastrophic illness or injury, and enables modest redistribution of resources to protect from health emergencies the most vulnerable groups.

The poor population faces an economic barrier when it comes to accessing quality healthcare services, a problem that is exacerbated by the lack of total health insurance coverage. The government is committed to making improvements and is currently working to develop a health-financing policy that will address these problems. The bank has supported the healthcare sector in Albania through three projects (Health Service Rehabilitation Project, 1994, Health Recovery Project, 1998, Health System Modernization Project, 2008). Bank funds greatly contributed to enhance the quality of essential preventive and curative health services by means of financing the construction, reconstruction, as well as by equipping one hundred and fifteen centers in the poorest areas of the country. The government built new hospital services in three important cities, and completed the general master plan for the future of development of the only

tertiary hospital in the capital with the assistance of the bank and other donors. The complete renovation of healthcare equipment was supported likewise by the government the same as in the case of the support provided to advance reforms in important policy areas such as decentralization, health insurance and transparency in sector expenditures. The recently closed Health System Modernization Project assisted the government in improving physical and financial access to high quality primary health care services, as well as strengthening institutions. The national plan for development of hospital sector, at national level, has been developed and currently under implementation. All regional hospitals as well as primary health care centers have been supported with main medical equipment. The health insurance institute has been supplied with required IT equipment for the central and regional offices. In addition, a comprehensive range of reforms have been supported through the project. The Social Sector DPL supported reforms to enhance the efficiency and equity of health spending. It also aimed to better protect the poor in times of health emergencies, including health insurance reforms in a fiscally sustainable environment (The World Bank, 2012). Due to the lack of information about IC in Albania, since it is relatively new and a very limited research has been made, a description of the healthcare sector was made and now the human capital will be discussed in detail, and slightly the intellectual property protection in Albania.

In a study conducted by Gerxhi (2010), it is aimed to pick up the transparency and the efficiency in the management of human resource, through the presentation of the state of the Law. For the civil service” in the Republic of Albania and especially in the administration of the local government, recommending some ways to go on in this field, that will be the basis for the good progress in the local government. Five municipalities were chosen to realize this study. Concretely, they are Vlore, Berat, Durres, Shkoder and

Elbasan, where the study visits were applied and then the interviewing of the white collars through questions. Two forms of questionnaires were prepared. The first one for the white collars of different levels and the second is for the responsible administrators for the human resource. By the research conducted it resulted that, Violations of civil service in most cases recorded by lack of precise legal recruitment procedures and therefore cannot protect employees from civil service structure as it does not enjoy the rights of civil servants. Just for this reason in 2005 was the review of complaints from 6 dismissed employees. The study was noticed that the administrations of local government units primarily have:

- Redundant equipment
- Dysfunctional
- Not efficient

This means that the cost to employees does not justify the specific task they perform. By monitoring the accession process in the civil service, these problems were noticed:

- The number of appointments conducted by the heads of municipality free competition is still high, being justified in some cases to act quickly and in some cases for lack of competition.
- Not publicly advertised job vacancies
- Number of competitor generally not exceeding three competitors by eliminating the testing phase in references to Article 13 of the Law “On status of civil servants”
- No time limit complaints respected point 6 of Article 13 of Law 8549, dated -11.11.1999 “On the status of civil servants”
- Legal documents and laws are not recognized by most of the administration of units’ local government.

- The budget of many local governments cannot afford implementation complete schedule or staff recruitment procedures.
- In small units of local recruitment scheme, there are found implementation difficulties because of the lack of education and recorded applicant removal specialists to the major cities, causing the irregular filling of vacancies (Gerxhi, 2010).

According to Mecaj (2011), since the end of 1990 Albanian legislative acts have been continuously under huge changes and reviews. Apart from the big number of laws and other acts approved by the Parliament, the typical fact is that there are two eras of changes divided from the beginning of the legislation transformation. The first one is that of 1990; the new democratic system replaced the authoritarian government, as a result the People Socialist Republic turned into a Parliamentary Republic run by the free plebiscite of citizens. The new system of after-nineties appealed for new dimensional rules needed for the society welfare, combining the political pluralism, the economy and the progress in industry. There were set revolutionary movements in every aspect of public life and private property - the later for the sake of truth was almost inexistent. Extensive changes were transforming the entire structure of our civil legislation, the human rights prospects and the criminal sanctions. In nineties the newly approved laws were completely dictated by the recent governing system in Albanian politics that reflected the needs of new public conduct, and the exigency for establishing the private system. The legislation drafted by that time was indispensable for regulating the politic transition and composing new economic groupings, while in order to make adoption with the uneasy scheme of transition there were approving quantity of laws that were merely modifications of several European countries laws. The conversion from the

totalitarian and dictatorial order to the democratic and capitalist scheme was associated with efforts of surpassing one of the most important social gaps, which is the alteration from the common property form to the real private property structure. Changes begun initially by the system of the organization of politic parties, then passed into the field of private law, with the new Civil Law and Civil Procedure Law, and followed with the setup of Trading Companies Law, rules for the sanction of private real estate property, and so on in every related area. Era of first changes lasted until 1998-1999, time on which the new Albanian Constitution was entered into. Almost one decade later after the falling of the old regime second changes were performed in many dominant laws and this is due to the fact that Albania was intensively becoming part of new international engagements. Memberships in many international and regional organizations were very common and the new standards conferred by those memberships lead not only to amendments of existing laws, but in most of the cases they were the starting point and the major reasons for drafting and approving entirely new and consistent laws. On 8 September 2000 Albania became member of one of the biggest and most powerful organizations of the world, the WTO that is known as the international authority that administers the most important acts that members have agreed to bind to in conjunction to global trade aspects. One of these agreements is the main document for the regulation of Intellectual Property Rights, which settles the rules for strengthening the minimum standards for the administration, maintenance, enforcement, and the substantive obligations. Albania became member of WIPO, which is the international body that administers the legal documents that regulate the Intellectual Property Objects separately. Albania was member of Paris Convention in 1995, of Berne Convention in 1994, Madrid Agreement in 1995, Madrid Protocol in 2003, and many other agreements and conventions after 2000. Another adherence which has seriously impacted the actual

codification that Albania retains finally after many experiences of transitional acts is the EC engagement. Although it started her real commitments with the EC after 2000, it's objectives for becoming a real and equal European country were articulated since in nineties. In the beginning of the transition she was assisted in many programs, mainly in economic and legal area, providing European expertise and experience in the main reforms. And then after the first phase of pure assistance, EC gave the opportunity to sign in several agreements, the most significant of which was the Stabilization and Association Agreement, which was signed in 2006, while the process had started in 2003, and finally entered into in 2009. Being the basic document for the affiliation of Albania with EC, it introduced the very recent standards from now on for about all the courses of political, social and economical directions, in which Albania had to confirm evident progress periodically. Feeling well oriented from this document in Albania was pronounced definitive the objective of implying the latest principles in the newly framed legislation that apparently would be structured basing on the European Regulations sources (Mecaj, 2011).

CHAPTER III

APPLICATION: MEASURING IC IN THE HEALTH CARE SECTOR IN ALBANIA.

As previously mentioned, there is a lack of information regarding the intellectual capital as it is a new and unfamiliar concept also for the health care sector, especially the public one. As such, it will be analyzed more in depth about the recognition and application of intellectual capital in this sector by conducting Likert scale Questionnaire to the six health care centers, 3 private and 3 public. Below, an overview of the health care centers will be given, followed by the methodology used in this research, the Questionnaire used to gather the data, and finally the analysis of this data and the conclusions. But first of all, it will start with an initial approach of how and why this topic was chosen.

3.1 An overview of the health care centers involved

As it is mentioned above, in this study there are six health care centers involved, in order to conduct this research, three of them public and three private. In the section below, an overview of this health care centers is made, in order to have a clear picture of them.

American Hospital 1 and 2 are both located in Tirana, but since it is the capital city of Albania, which has a very high population and area, two health care centers were opened, in order to have a greater convenience and to better serve its patients. Although it holds the name American hospital, most of its doctors are coming from Turkey.

Founded in 2006, the American hospital marked the first cornerstone of the private hospital service in Albania. It started working with a team of 72 medical doctors, nurses and workers graduated in Albania, Europe, Turkey and the US and it counts now 700 workers who show greater experience and commitment. In its early activities, the Hospital focused on patients with cardiac issues from across Albania and the region. Currently, the hospital counts 2,300 patients who have been undergoing successful heart surgery treatment. Six years ago, in March 2008, the American Hospital increased the range of its services through the establishment of a polyclinic with 24 specialties which has assisted more than 120,000 patients until early 2012. The increased number of specialties enabled the Hospital to build new cooperation bridges with prestigious universities in the field of medicine, such as AKAHA in Vienna, Ankara University and others that proved useful in exchanging both professional and academic experience. By November 2009, the American Medical Center in Fier was added to the group, whereas by February 2010, another such American Medical Center was established in Durres. Based in two of the biggest cities of Albania, both centers have served as a reference in terms of medical diagnosis and imagery and have further contributed to reduce the burden of patients under hemodialysis, who now receive such service closer to their places of residence.

March 2011 marked the opening of the American Hospital 2, the biggest investment of the group's shareholders in Albania. The American Hospital 2 has focused its activity in pregnancy and birth, gynecological surgery, general surgery, orthopedics, urology and plastic surgery. These, however, are not the only fields of activity. One of the biggest advantages, which makes also a significant part of the new investment, is the Reproductive Health and InVitro Fertilization Centre that is equipped with the first and only Andrology-Embryology Laboratory in Albania.

And they do not stop here... After providing distant services to thousands of Kosovo patients, time came to be present in Kosovo as well, with a well-equipped hospital facility, since March 2012.

Hygeia Hospital Tirana is be the 1st HYGEIA Group hospital in Albania, and, the Group's 1st "Greenfield" project outside of Greece, and its establishment was announced in 11 July 2007. Hygeia was founded in 1970 by a group of distinguished Greek physicians, with the vision of creating a model world-class private hospital. Hygeia Hospital opened in Athens in 1974 as the first major private hospital to operate in Greece. Hygeia's main objective is the provision of high quality services and the development of an integrated network of health services in Greece and abroad, and Hygeia Hospital Tirana started operation on 01 July, 2010. After an investment of €60,000,000 it is intended as a benchmark for South East Europe, providing high quality services in Albania and to the Balkan countries. Hygeia hospital is located at the junction of the main traffic arteries in Tirana and has a usable space of 25,000 sqm. This is a versatile nursing organization, which serves as a General, Maternity and Children's Hospital, is equipped with state of the art medical equipment and is manned with experienced and qualified medical and paramedical staff. Also this maternity clinic offers for the first time in Albania the Family banking of umbilical cord blood & umbilical cord tissue. HYGEIA, MITERA and HYGEIA TIRANA hospitals are among the best hospitals in the world, after receiving the Best Hospitals Worldwide 2014 Certificate by the Diplomatic Council (DC), a foundation that follows the principles of the United Nations Charter. This health care center is proud to announce that has been awarded with the TEMOS Certificate. The TEMOS Organization is the only certification body worldwide assessing and validating the quality of medical service providers regarding the international patients' services. Its mission is to provide high

quality services at the leading edge of medical science and technology; Develop an integrated health services network serving Albania and its neighbors; Demonstrate integrity and social responsibility; Be a reference point for patients, nurses, and physicians; Be a reliable and responsible employer; Create value for our shareholders.

The Central Military University Hospital is a national health institution of the Ministry of Defense of the Republic of Albania, which provides specialized medical assistance to the ranks of the Armed Forces, the structures that provide the status of military and civilian population, polytrauma problems.

Military Hospital is a public health institution that fulfills its mission in support of the Armed Forces health and treatment of polytrauma nationally since 1993 and confirmed by the Council of Ministers no. 357 dated 13.07.2002 where the Central Military Hospital is given the status "University Hospital" and appointed "Military Hospital".

This institution based on its regulation which clearly defines guidelines and basic principles of operation of the institution, divides in order to determine the responsibilities, duties and problems arising in practical implementation of the orders and instructions of the superior structures for the Directorate General Hospital, administration and medical services. The regulation also defines functional duties and rights of inter-hospital structures, personnel and establishes opportunities for independent medical activities, research, scientific, technical and financial. Its elements serve to subordinate structures and all levels of functional rights to increase the quality of care. The regulation also defines functional duties and rights of inter-hospital structures, personnel and establishes opportunities for independent medical activities, research, scientific, technical and financial.

Its elements serve to subordinate structures and all levels of functional rights to increase the quality of care. Regulation harmonizes organizational and pedagogical relations

between constituents and medical services to this hospital. Regulates the didactic relations between the Central Military Hospital and University Faculty of Medicine.

Mission and tasks

Central Military University Hospital is the highest, diagnostic, curative, preventive and training for military medicine. It provides medical support to the Armed Forces in part 3, and trains, prepares the military medical personnel for the role 1 and 2 medical aid, prevention of diseases and epidemics, rehabilitation of forces in peacetime, crisis and conflict of polytrauma management in national level. In cooperation with civil health services, provides medical assistance to populations in disasters and calamities. In this context, it aims to have on a staff composed of 40% civilian and 60% military. Military Hospital is directly under the Minister of Defense and coordinates operational activities with the Ministry of Health, Ministry of Education and Rector of the University of Tirana.

University Hospital Center "Mother Teresa" in Tirana is the largest health institution in Albania and academic health institution is the only one of its kind being classified as the only Albanian tertiary health center.

This health care Center currently provides outpatient health services for approximately 150,000 people per year, hospital service to over 60,000 people per year and emergency service for about 200,000 people a year. The campus is composed of nine hospital facilities, with a capacity of 1,612 beds and offers medical assistance to an average of 400 patients daily spread. Health center is composed of a total of 2,297 employees, of whom 1,664 are medical staff, 266 employees in the services and administrative staff, and 175 are practitioners the Faculty of Medicine. The hospital employs 44 doctors with the title professor, 146 doctors of varying degrees, of whom 128 are doctors' professors at the Faculty of Medicine in Tirana, 1,170 nurses and 63 technicians.

Based on its mission, this medical center has a pretty big activity, not only to provide qualified medical assistance for inpatient, outpatient flow of patients, but serves as a reference center for patients from across the country. In 1928 began the construction project of the Zogu 1st Hospital, named from the king Zogu, which is known today as the University Hospital Center "Mother Teresa". After 1945 the hospital was organized and divided in 5 hospitals, respectively No. 1, 2, 3, 4 and 5 which continue to operate today, but grouped in a general campus with joint administration. As recognized and works today, University Hospital Center "Mother Teresa" was created in 1993 and with the decision of the Council of Ministers no. 352, dated 09.09.1997, item 5 is named "Mother Teresa". The mission of the University Hospital Center "Mother Teresa" is to:

Provide a specialist (tertiary) medical assistance for the whole country and secondary medical service to Tirana, serve with the professionalism by respecting the rules of deontology and ethics as well as maintaining the confidentiality and patient information;

Respect the dignity and personality of patients given psychological state and their physical pain, but also the obligation to serve the sick;

Serve as the basis for the formation of pedagogical students of the Faculty of Medicine, the continuous formation of physicians and trainees as well as personnel of lower medical education;

Serve as a scientific - research in the field of health, in collaboration with the Faculty of Medicine of the University of Tirana.

Regional Hospital Durres has the status of University clinic for surgery and tends to become University Hospital. Durres Hospital mission is to provide health care with the higher quality and increase the confidence of the community in health care that is provided to hospital. With the return of the people of Durres in December 1944, one year after the evacuation of the city, ordered by the German command, the newly formed

government decided to set up a Civil Hospital for the city. Its Vision is the Commitment to excellence in health care, focusing on hospital quality improvement through:

- * Implementation and improvement of medical standards.
- * Expansion of the range of services.
- * Improvement of infrastructure
- * Increase the motivation of staff
- * Inclusion of education and research in care activities.
- * Administration of the resources.

* OBJECTIVES

- * The definition of professional standards for all staff.
- * Improving hospital infrastructure.
- * Making operational protocols of treatment.
- * Expand and increase the range of services.
- * Formation of continuous professional staff.
- * Communication of increasing quality to the community.
- * Improve working conditions.
- * Motivating staff for better pay and incentives for quality work.
- * Implementation of the code of ethics.
- * Improve contract with the Health Insurance Institute
- * To implement the terms of a contract.
- * Improve the budget process
- * Increase secondary income.

3.2 The aim of the research and methodology

The aim of this study which deals with the subject of intellectual capital in the health care sector is to determine the general attitude of the health care institutions' managers and doctors to the intellectual capital assets in Albania. Besides, another aim of this study is to test whether there is a difference between the attitudes of executives (managers and doctors) in public and private health care institutions about the intellectual capital concept and application, in other words, to test the hypothesis that "the level of intellectual capital concept recognition and application of executives between private and public institutions is different.

3.3 Data

A survey has been carried out in order to reach the aim of the study. The scope of the study has been carried out using 3 public and 3 private health care centers, 5 in Tirana and one in Durres which Tirana is the biggest and capital city of Albania and Durres is second biggest city in Albania. As a result 60 questionnaires were made, 30 questionnaires filled out by the executives in private and 30 in the public sectors.

3.4 Research Methods

A survey sheet, which is composed of 7 questions measuring human capital, 7 questions measuring organizational capital and 6 questions measuring relational capital, has been prepared to ask the managers and doctors composing this sample. 5-point likert scale in the form (1= Strongly disagree; 2= Disagree; 3= Undecided; 4= Agree; 5= Strongly agree) has been used in total 20 questions measuring human capital, organizational capital and relational. The survey sheet has been carried out by getting appointment from

the hospital managers beforehand and by talking with them face to face. 60 surveys of which data can be used have been obtained by this way.

3.5 Research Hypothesis

Hypothesis of this research are as follows:

H1 The attitudes of executives in public and private healthcare institutions are different towards human capital.

H2 The attitudes of executives in public and private healthcare institutions are different towards organizational capital.

H3 The attitudes of executives in public and private healthcare institutions are different towards relational capital.

3.6 Data Analysis

To better understand the composition of the respondents, several demographic related questions were asked.

As noted from the table (1), 38% of them hold a Ph.D degree whereas 45% of the respondents hold a Master degree. While regarding their experience in the health care center, the major part of the respondents, 48.3% have worked for more than 10 years in the health care. As for the institution type, in order to make a more accurate difference among the private and the public sector 30 questionnaires were distributed to the private institutions and 30 to the public ones. And finally the gender of the respondents holds a slight difference of 31 male and 29 female.

Table 1: Respondents Demographic

| Variable | Variable categories | Frequency | % |
|-------------------------|------------------------|-----------|------|
| Education | Bachelor | 10 | 16.7 |
| | Master | 27 | 45.0 |
| | Doctorate | 23 | 38.3 |
| Experience | less than five years | 15 | 25.0 |
| | between 5 to ten years | 15 | 25.0 |
| | more than ten years | 29 | 48.3 |
| Institution type | Private | 30 | 50 |
| | Public | 30 | 50 |
| Gender | Male | 31 | 51.7 |
| | Female | 29 | 48.3 |

3.7 Descriptive Statistics

3.7.1 Human Capital

Table 2: Human capital mean and standard deviation

| Statements | Mean | Std. Deviation |
|--|------|----------------|
| The top managers personal relationships are always proactive, collaborate together to set direction, create alignment and gain commitment among employees, partners & stakeholders as they seek to provide safe, high quality patient care. | 3.63 | 1.073 |
| Organizations and individual leaders have a clear picture of how leadership skills match up with organizational priorities. | 3.62 | 1.027 |
| The top priority of leadership development in the healthcare sector is to improve the ability to lead employees and work in teams. | 3.87 | .929 |
| Healthcare leaders and medical staff have gaps in several areas that are essential for learning & long term success. Organizational training and development, succession planning and individual feedback, coaching & development efforts should address these gaps. | 3.90 | .933 |
| The ability to adapt to change and to meet business objectives are strong points of healthcare leaders. The ability to adapt to change and to meet business objectives are strong points of healthcare leaders. | 3.75 | 1.052 |

| | | |
|--|-------------|-------------|
| Organizations should understand the leadership behaviors and skills that are needed for long term health of the organization and find ways to accurately measure them. | 4.10 | .602 |
| Take an active role in reward and recognition programs to reinforce high performance and a patient and health care focus. | 4.30 | .830 |
| TOTAL FIELD | 3.88 | 0.92 |

As it can be seen from the table above, relating with the attitudes of the respondents about the human capital, they are obviously positive. The most positive feedback has been received in the last two questions with a mean of (4.10 & 4.30) and also the lowest std. deviation of (0.602 & 0.830). It seems that the health care representatives in Albania are more familiar and place higher importance to understanding the leadership behaviors that are needed for long term health of the organization and find ways to accurately measure them and secondly taking an active role in reward and recognition programs in order to reinforce high performance, which in Albania seems to be missing. But also, the first two questions of the human capital are the ones with the lowest mean and std. deviation. They are an essential part of it since they involve the personal relationships between managers, whether they are proactive and collaborative in order to set direction, create alignment and gain commitment among employees whereas the second question asks whether the organizations and individual leaders have a clear picture of how the leadership skills match up with organizational priorities. Both of them are very important components of a healthy institution, but in Albania it is still a vertical hierarchy and it is not much collaboration and alignment among departments in the health care centers.

In other words, the arithmetic means of the respondent's answers of this field are reached to (3.88), and the standard deviations were (0.92).

3.7.2 Organizational (Structural) Capital

Table 3: Organizational capital mean and standard deviation

| Statements | Mean | Std. Deviation |
|--|-------------|-----------------------|
| It is imperative to establish the team and define the company's attitude towards risk. | 4.27 | .710 |
| Education can guarantee that the board of trustees and other seniors are aware about the benefits of effective capital structure management to the organizations financial performance. | 4.10 | .706 |
| Teamwork is very important and collective decisions should be taken on all equipment management matters. | 4.30 | .743 |
| Physical assets such as facilities & healthcare technology are the greatest capital expenditure in any health sector. Thus it makes financial sense to manage these valuable resources and ensure that healthcare technology is selected appropriately, is used correctly and to maximum capacity, and lasts as long as possible | 4.42 | .591 |
| Create and promote a culture of patient safety. | 4.72 | .490 |
| Transparency in operations of your governance board should include your internal controls on governance processes. | 4.08 | .850 |
| The focus should be on features that affect patients and stakeholders preferences and loyalty – for example those features that affect their view of clinical and service quality and differentiate your services from competitors offering similar healthcare services. | 3.78 | 1.027 |
| TOTAL FIELD | 4.24 | 0.73 |

In the table (3) there are provided the results of the questionnaire concerning the attitudes of the executives about the organizational capital, which are more positive than their attitudes about the human capital. The table shows that the overwhelming majority of the respondents consider factors such as: creating and promoting a culture of patient safety, which has the highest mean (4.72) and lowest std. deviation (0.490) and also

managing the physical assets such as facilities and healthcare technology which are the greatest capital expenditure and should be selected appropriately, used correctly and to its maximum capacity. As mentioned also in the first chapter, organizational capital is what remains inside the company when the employees are gone, such as technology, innovation, differentiation etc, and that's why the respondents place more emphasis on this part.

So the arithmetic means of the respondent's answers regarding the organizational capital field are the highest (4.2385) and the standard deviations lowest, (0.731)

3.7.3 Relational Capital

Table 4: Relational capital Mean and standard deviation

| Statements | Mean | Std. Deviation |
|---|------|----------------|
| Areas of social contributions and community support might include your efforts to improve the environment (eg. To conserve the environment and natural resources), strengthen local community services, education and health. | 3.92 | .809 |
| Use of social media and web based technologies to listen to patients and stakeholders provides a newer mode of gathering insight into their perceptions of all aspects of your involvement with them. | 4.08 | .944 |
| Community relations involve public interests as well as organizational objectives and healthcare organizations must respect the responsibility of community relations professionals to find an appropriate balance among the many values involved | 4.07 | .660 |
| Media relations directly reflect the attitude of the organization toward it's community and play an important role in establishing the trust that is essential to a cooperative relationship. | 3.93 | .899 |
| Government relations are conducted with a sense of a greater public interest in mind, not just the immediate interests of the organization. | 3.97 | 1.041 |
| In order to avoid the appearance of conflicts of interest, the healthcare executives | 3.97 | 1.025 |

| | | |
|--|-------------|-------------|
| demonstrate the upmost integrity and embrace the need for transparency in interactions with suppliers. | | |
| TOTAL FIELD | 3.99 | 0.90 |

In the above table concerning the relational capital, there is a slight difference with the attitudes of the respondents about the human capital, meaning that the respondents were more positive regarding the field of relational capital than they were for the human capital, but also more positive for the organizational capital than for the other two. The most supported statements were the ones regarding the use of social media in order to receive feedback from the customers and stakeholders, and in the era of globalization and frequent use of internet everybody is familiar with it.

Also for the field of relational capital, the arithmetic means of the respondents' answers are highly reached to (3.99) and the standard deviations were (0.90).

3.8 Testing the Research Hypothesis

The second objective of the study was to examine whether the attitudes of executives in public and private healthcare institutions are different towards human capital (H1), organizational capital (H2) and relational capital (H3), which are the alternative hypothesis of this research. This section reports the results of testing the research hypothesis using the Sig. (2-tailed), which also shows the confidence level, which should be above 95% in order to accept the alternative hypothesis, so the Sig. (2-tailed) should be below (0.05). Also, 1 question at the human capital table and 2 questions at the relational capital table are eliminated due to their exceeded skewness and kurtosis values.

Table 5: Independent Samples Test for human capital

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|----|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
| | | | | | | | | | Lower | Upper |
| q1 | Equal variances assumed | 3.107 | .083 | 4.054 | 58 | .000 | 1.000 | .247 | .506 | 1.494 |
| | Equal variances not assumed | | | 4.054 | 56.001 | .000 | 1.000 | .247 | .506 | 1.494 |
| q2 | Equal variances assumed | .023 | .881 | 5.325 | 58 | .000 | 1.167 | .219 | .728 | 1.605 |
| | Equal variances not assumed | | | 5.325 | 57.428 | .000 | 1.167 | .219 | .728 | 1.605 |
| q3 | Equal variances assumed | .044 | .835 | 2.955 | 58 | .005 | .667 | .226 | .215 | 1.118 |
| | Equal variances not assumed | | | 2.955 | 57.790 | .005 | .667 | .226 | .215 | 1.118 |
| q4 | Equal variances assumed | 11.005 | .002 | -.550 | 58 | .584 | -.133 | .242 | -.619 | .352 |
| | Equal variances not assumed | | | -.550 | 43.737 | .585 | -.133 | .242 | -.622 | .355 |
| q5 | Equal variances assumed | .555 | .459 | 6.070 | 58 | .000 | 1.300 | .214 | .871 | 1.729 |
| | Equal variances not assumed | | | 6.070 | 54.888 | .000 | 1.300 | .214 | .871 | 1.729 |
| q6 | Equal variances assumed | 9.104 | .004 | 1.744 | 58 | .086 | .267 | .153 | -.039 | .573 |
| | Equal variances not assumed | | | 1.744 | 52.772 | .087 | .267 | .153 | -.040 | .573 |

The alternative hypothesis of the research about human capital, which states that “The attitudes of executives in public and private healthcare institutions are different towards human capital”, is accepted, being well below the conventional threshold of < 0.05 . Just the questions 4 and 6 do not support the alternative hypothesis, by a Sig. (2-tailed) of (0.584) & (0.086).

Table 6: Independent Samples Test for organizational capital

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
|-----|---|------|------------------------------|-------|-----------------|-----------------|-----------------------|---|-------|-------|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | Lower | Upper | |
| q8 | 2.333 | .132 | Equal variances assumed | .361 | 58 | .719 | .067 | .185 | -.303 | .436 |
| | | | Equal variances not assumed | .361 | 53.045 | .720 | .067 | .185 | -.304 | .437 |
| q9 | 2.685 | .107 | Equal variances assumed | 2.271 | 58 | .027 | .400 | .176 | .047 | .753 |
| | | | Equal variances not assumed | 2.271 | 57.797 | .027 | .400 | .176 | .047 | .753 |
| q10 | .544 | .464 | Equal variances assumed | -.692 | 58 | .492 | -.133 | .193 | -.519 | .253 |
| | | | Equal variances not assumed | -.692 | 55.813 | .492 | -.133 | .193 | -.520 | .253 |
| q11 | .048 | .827 | Equal variances assumed | 3.032 | 58 | .004 | .433 | .143 | .147 | .719 |
| | | | Equal variances not assumed | 3.032 | 55.420 | .004 | .433 | .143 | .147 | .720 |
| q12 | 13.604 | .000 | Equal variances assumed | 1.882 | 58 | .065 | .233 | .124 | -.015 | .481 |
| | | | Equal variances not assumed | 1.882 | 50.797 | .066 | .233 | .124 | -.016 | .482 |
| q13 | .470 | .496 | Equal variances assumed | 2.027 | 58 | .047 | .433 | .214 | .005 | .861 |
| | | | Equal variances not assumed | 2.027 | 56.176 | .047 | .433 | .214 | .005 | .862 |
| q14 | 4.451 | .039 | Equal variances assumed | 3.096 | 58 | .003 | .767 | .248 | .271 | 1.262 |
| | | | Equal variances not assumed | 3.096 | 52.638 | .003 | .767 | .248 | .270 | 1.264 |

The second alternative hypothesis, whether “*The attitudes of executives in public and private healthcare institutions are different towards organizational capital*” it seems the results obtained show some increase in the Sig. (2 tailed) compared to the human capital. However, just 3 of the 7 questions reject the alternative hypothesis, respectively by (0.719), (0.492) & (0.065). Thus, the Alternative hypothesis relating the organizational capital is supported.

Table 7: Independent samples test for Relational capital

| | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | | |
|--|---|------|------------------------------|----|-----------------|-----------------|-----------------------|---|-------|--|
| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | | |
| | | | | | | | | Lower | Upper | |

| | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference | |
|-----|--------|------|-------|--------|-----------------|-----------------|-----------------------|---|-------|
| | | | | | | | | Lower | Upper |
| q17 | .820 | .369 | 1.177 | 58 | .244 | .200 | .170 | -.140 | .540 |
| | | | 1.177 | 57.941 | .244 | .200 | .170 | -.140 | .540 |
| q18 | 2.775 | .101 | 1.151 | 58 | .254 | .267 | .232 | -.197 | .730 |
| | | | 1.151 | 52.612 | .255 | .267 | .232 | -.198 | .731 |
| q19 | 1.315 | .256 | 5.002 | 58 | .000 | 1.133 | .227 | .680 | 1.587 |
| | | | 5.002 | 52.991 | .000 | 1.133 | .227 | .679 | 1.588 |
| q20 | 13.763 | .000 | 6.622 | 58 | .000 | 1.333 | .201 | .930 | 1.736 |
| | | | 6.622 | 42.462 | .000 | 1.333 | .201 | .927 | 1.740 |

The third alternative hypothesis states that *“The attitudes of executives in public and private healthcare institutions are different towards relational capital”*. By looking at the Sig. (2-tailed) column at (table 7), 2 questions accept the alternative hypothesis and the 2 others do not (0.244) & (0.254). So the alternative hypothesis is rejected, meaning that the attitudes of the executives of the public and private healthcare institutions are similar towards the relational capital and the null hypothesis is accepted.

CONCLUSION AND RECOMMENDATIONS

The aim of this study which deals with the subject of intellectual capital in the health care institutions is to determine the general attitude of the health care center’ managers and doctors to the intellectual capital assets in Albania. There is a lack of information regarding the intellectual capital in Albania as it is a new and unfamiliar concept also for the health care sector, which is defined as a sector of priority in the Albanian Strategy for the social and economic development, according to World Bank (2012) is in the constant transformation in order to meet the correct standards. The healthcare sector in Albania is

the one concerning to all, since it is suffering more from the lack of development and the differences consisting in the healthcare conditions in the private and public health care institutions. This is due to the low wages of the clinical personnel, including the nurses and doctors leading to high levels of corruption in this sector. Also in the public health care institutions it is observed a lack of infrastructure, medicine and hygiene due to the lack of investment from the government. On the other hand in the private health care institutions, it is a more dedicated staff, optimal hygiene and modern equipment, but at very high prices, unattainable for the lower levels of society, which cannot afford them. Besides, the second objective of the study was to examine whether the attitudes of executives in public and private healthcare institutions are different towards human capital (H1), organizational capital (H2) and relational capital (H3), which are the alternative hypothesis of this research.

A survey has been carried out in order to reach the aim of the study, with the survey sheet composed of 7 questions measuring human capital, 7 questions measuring organizational capital and 6 questions measuring relational capital. The scope of the study has been carried out using 3 public and 3 private health care centers, 5 in Tirana and one in Durrës. To better understand the composition of the respondents, several demographic related questions were asked. The results showed that, 38% of them hold a Ph.D degree whereas 45% of the respondents hold a Master degree. While regarding their experience in the health care center, the major part of the respondents, 48.3% have worked for more than 10 years in the health care. As for the institution type, in order to make a more accurate difference among the private and the public sector 30 questionnaires were distributed to the private institutions and 30 to the public ones. And finally the gender of the respondents holds a slight difference of 31 male and 29 female.

As a result 60 questionnaires were made, 30 questionnaires filled out by the executives in private and 30 in the public sectors.

In the descriptive statistics, it was noted that the respondents were more positive about the organizational capital, where the arithmetic means of the respondent's answers are the highest (4.2385) and the standard deviations lowest, (0.731), then comes the relational capital, and lastly the human capital, which scored the lowest, with an arithmetic mean of (3.8814), and the standard deviations of (0.9208).

As regard to the second objective, the result of the Sig. (2-Tailed) revealed that the attitudes of executives in public and private healthcare institutions are different towards human capital and organizational capital, but they had some similarities towards the relational capital attitudes.

According to my researches made in this field, it is the first time that a research about Intellectual capital is conducted in Albania, which is one of the main reasons why this topic was chosen, hoping that it will create a path for future researches in other sectors also, to conduct researches about this relatively new concept, in order to help the Albanian companies be familiar with it, improve their performance and reputation, creating a benefit for the entire society.

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APPENDIX A

LIKERT SCALE QUESTIONNAIRE SAMPLE

Part A

For statistical purpose only. Please a tick where appropriate.

| Qualification | High school | Bachelor's degree | Master's Diploma | PhD |
|---------------|-------------|-------------------|------------------|-----|
| | | | | |

| | | | |
|--------------------------------------|-------------------|-----------|--------------------|
| Experience in the health care | Less than 5 years | From 5-10 | More than 10 years |
| | | | |
| Type of health care | Private | Public | |
| | | | |
| Gender | Male | Female | |
| | | | |

PART B

Following the above mentioned survey objective, for each of the statement below, please indicate the extent of your agreement or disagreement for each items by placing a tick in the appropriate box.

| Question | Strongly disagree | Disagree | Neither agree or disagree | Agree | Strongly agree |
|--|-------------------|----------|---------------------------|-------|----------------|
| 1 The top managers personal relationships are always proactive, collaborate together to set direction, create alignment and gain commitment among employees, partners & stakeholders as they seek to provide safe, high quality patient care. | | | | | |
| 2 Organizations and individual leaders have a clear picture of how leadership skills match up with organizational priorities. | | | | | |
| 3 The top priority of leadership development in the healthcare sector is to improve the ability to lead employees and work in teams. | | | | | |
| 4 Healthcare leaders and medical staff have gaps in several areas that are essential for learning & long term success. Organizational training and development, succession planning and individual feedback, coaching & development efforts should address these gaps. | | | | | |
| 5 The ability to adapt to change and to meet business objectives are strong points of healthcare leaders. | | | | | |
| 6 Organizations should understand the leadership behaviors and skills that are needed for long term health of the organization and find ways to accurately measure them. | | | | | |
| 7 Take an active role in reward and recognition programs to reinforce high performance and a patient and health care focus. | | | | | |
| 8 It is imperative to establish the team and define the company's attitude towards risk | | | | | |
| 9 Education can guarantee that the board of trustees and other seniors are aware about the benefits of effective capital structure management to the organizations financial performance. | | | | | |

| | | | | | | |
|----|---|--|--|--|--|--|
| | | | | | | |
| 10 | Teamwork is very important and collective decisions should be taken on all equipment management matters. | | | | | |
| 11 | Physical assets such as facilities & healthcare technology are the greatest capital expenditure in any health sector. Thus it makes financial sense to manage these valuable resources and ensure that healthcare technology is selected appropriately, is used correctly and to maximum capacity, and lasts as long as possible. | | | | | |
| 12 | Create and promote a culture of patient safety. | | | | | |
| 13 | Transparency in operations of your governance board should include your internal controls on governance processes. | | | | | |
| 14 | The focus should be on features that affect patients and stakeholders preferences and loyalty – for example those features that affect their view of clinical and service quality and differentiate your services from competitors offering similar healthcare services. | | | | | |
| 15 | Areas of social contributions and community support might include your efforts to improve the environment (e.g. To conserve the environment and natural resources), strengthen local community services, education and health. | | | | | |
| 16 | Use of social media and web based technologies to listen to patients and stakeholders provides a newer mode of gathering insight into their perceptions of all aspects of your involvement with them. | | | | | |
| 17 | Community relations involve public interests as well as organizational objectives and healthcare organizations must respect the responsibility of community relations professionals to find an appropriate balance among the many values involved. | | | | | |
| 18 | Media relations directly reflect the attitude of the organization toward its community and play an important role in establishing the trust that is essential to a cooperative relationship. | | | | | |
| 19 | Government relations are conducted with a sense of a greater public interest in mind, not just the immediate interests of the organization. | | | | | |
| 20 | In order to avoid the appearance of conflicts of interest, the healthcare executives demonstrate the upmost integrity and embrace the need for transparency in interactions with suppliers. | | | | | |

