

A Study and an Evaluation of Intellectual Capital in Business Organizations in India

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ABSTRACT

Intellectual Capital is one of the basic resources of modern organizations in the age of the knowledge economy. No organization in any sector, whatever its size, would have achieved a competitive advantage without it. In the past, the tangible resources were the true wealth of organizations. However, the intellectual capital resources have become the cornerstone of all modern strategies in management. The organization's intellectual capital consists of human capital, structural capital and the relational capital or customer capital. This research paper is a critical analytical study of intellectual capital, its components, divisions, methods of measurement and the bases adopted in the measurement process. It is also a serious attempt to review these methods and determine their advantages and disadvantages for the purpose of determining the most effective method of measuring intellectual capital in business organizations. The study concluded that intellectual capital needs deeper studies to solve the problems of measuring methods. Many elements and components of intellectual capital are not accounted for by specific constraints and are thus estimated in a rough and subjective method. Organizations still do not rely on any formula to determine their intellectual capital

Keywords: Intellectual Capital, Human Capital, Methods of Measure, Characteristics of Intellectual capital, Indian Companies.

INTRODUCTION:

The beliefs of the last century were that the assets of organizations consisted only of tangible assets such as equipment, buildings, and land. There was no interest in the human element in those companies and the focus was on production. The emergence of the term intellectual capital dates back to the 1990s when the term is used by the author Edvinsson in one of his books in 1993. In 1994, Forbes magazine published an investigation that the Scandinavian countries begin to processing their intellectual assets (Soli, 2014). Now, in the age of technology and knowledge, the human element has become highly influential, where it is the one who determines the value of the organization and its ability to the competition and the continuation in the market. Where the Human capital started to play an important role in the service of economic and social development in all countries of the world without exception. The Human capital is the most important resource of organizations in the wake of the international trend towards globalization, which requires quantitative and qualitative accumulation of human capital, as a result of its rare characteristics. Especially the scarcity and difficulty of simulating or imitating by competitors, which leads the organization monopoly to distinguish it from other organizations.(shubair, 2015). The success of organizations and communities depends on the human element. (Dahan, 2010). With the beginning of the nineties in the last century, the term "intellectual capital or knowledge" has begun spread in the economics literature. Where it represents a very high percentage of the total value of business organizations, i.e. up to (90%) of the total market value of the business organizations. If it is the tangible capital is governed by the foundations and theories, controls, accounting records and

procedures and re-evaluated annually by specific criteria, but it is difficult to apply the theories and the foundations and accounting procedures for the intellectual capital. If the market value of Microsoft is estimated by the US \$ 115 billion, the tangible assets are only 10% and the rest is intellectual capital or intangible assets. The question here is what should the organizations' administrations do to maintain the market value of intellectual capital? Thus, we say that there are business organizations that can be termed cognitive. (Youssef, 2005) .

So this paper came under the title of study and evaluation of intellectual capital in business organizations in India to give the solutions and the suggestions that help these organizations to develop and maintain intellectual capital.

Questions of Study:

Is the Indian's organizations evaluation their intellectual capital and what the methods that used?

How can the business organizations invest the intellectual capital and maintain their market value?

Significance of Study:

The importance of this study has come in its handling of the intellectual capital and its growing importance in the business organizations and the economy in general, where it has become the lifeblood of business organizations and acts a key role in the survival, sustainability and determining their competitive position in the market. Therefore, this paper will attempt to discuss with theoretical conceptions about the intellectual capital and accounting inputs that can be adopted in their measurement.

OBJECTIVE OF STUDY:

- To give an overview of intellectual capital, elements and its significance.
- To review of traditional and the modern accounting approaches for measuring intellectual capital.
- To demonstrate the difficulties faced by accountants in measuring the intellectual capital.
- To find the appropriate way to develop and maintain the intellectual capital of business organizations and provide appropriate solutions and suggestions.

RESEARCH METHODOLOGY:

This study is a theoretical study in which the researchers used the analytical, descriptive methods to analyze the ideas, opinions and theories presented in relation to intellectual capital. The researchers used the books, magazines, and previous researches that were made available, in addition to the use of many websites.

LITERATURE REVIEW:

Brennan &Connell, (2000) this study reveals that the traditional accounting method is useless to estimate the actual influence of intellectual capital. It concluded that international accounting standards should be established to deal with it. It also discussed the guidelines used to guide the disclosure of intellectual capital. (Petty & Guthrie, (2000) this study showed that intellectual capital is considered mainly in determining the value of the organization and the performance of the national economy and also addressed the tools used to disclose it.

Kamath,.G. Barath. (2007) the article attempts to measure and analyze the Value Added Intellectual Coefficient (VAIC™) for assessing the value-based performance of the banking sector of Indian for a period of five years from 2000 to 2004. The paper emphasizes the being of large differences in the performance banks of Indian in various sections.

THEORY BACKGROUND:

The Concept of Intellectual Capital:

Though many authors and researchers affirm the significance of intellectual capital, several managers of companies, particularly in the developing countries, as yet have no rational answers about what intellectual capital is and how it can be developed. However, the concept of intellectual capital in developed countries has become more mature and many researches have been published on this subject. There are many definitions of intellectual capital where (Bontis, N. 1996) has defined Intellectual capital as the difference between the market

value of the company and the cost of replacing its assets. These are things usually cannot mark, such as experience, knowledge and organizational training capability of the organization. However, OECD has defined intellectual capital as an economic value for two kinds of intangible assets: human capital and structural capital (Bareesh& Gheraia, 2011). While Brooking, (1996) defined it as the integration of the intangible assets of the organization which enables it to perform business. Hansen et al (1999) defined the intellectual capital as intangible competitive assets that can be used as a strategic weapon based on innovation and creativity. It is a means of survival of the organization and its persistence in a rapidly changing business environment.

Elements of Intellectual Capital:

There are a number of views about the determination of the components of intellectual capital and here we will review some administrative and accounting views. Intellectual capital, according to Guthrie & Petty (2000), consists of the following elements:

- The internal structure is structured capital (structural).
- The external structure is the capital of customers (relationships).
- Employees' efficiency is represented by human capital.

However, Luiza, &Malhorta (2015) divide the capital into the following components:

- The customers capital
- The process capital.
- Human capital.
- The innovation and development capital.

Stewart (1997) shows that intellectual capital formed of three major elements:

- Human capital.
- Structural organizational capital.
- Customer capital. (Ebeid &others 2014).

Table No (1): The components of intellectual capital as classified Birari

Human Capital	Structure Capital	Customer Capital
Knowledge	Business process	Customer relations
Competence	Manuals/policies	Customer loyalty
Skills	Information systems	Repeat business
Individual and collective experience	Research findings	Relation capital
Training	Trademarks	Relation with vendors
Communities of practice	Brands	Investor trust and feedback

Source: (Birari, A. 2015)

The Role of intellectual capital on the value of Company:

Investing and managing intellectual capital in the right way by the company leads to the following:

- Making profits.
- Achieving competitive advantage by increasing creativity and innovation.
- Improve relationships with clients and suppliers.
- Improve productivity and reduce cost.
- Improve staff attitudes and create a good reputation for organization.

Al-Ajmi, 2015 believes that intellectual capital is the most important source of competitive advantage for contemporary organizations because achieving excellence comes from innovative ideas of the human capital. (Al-Rashidi, 2017)

The Characteristics of the Intellectual Capital:

Intellectual capital is characterized by a set of features that distinguish it from others.

Al-Hilali (2013) considers that the characteristics of intellectual capital are divided into:

Organizational Characteristics: It means the availability of intellectual capital at all administrative levels.

Professional Characteristics: Intellectual capital is characterized by high skills and experience and a great enjoyment of the process of organizational education, training and self-education.

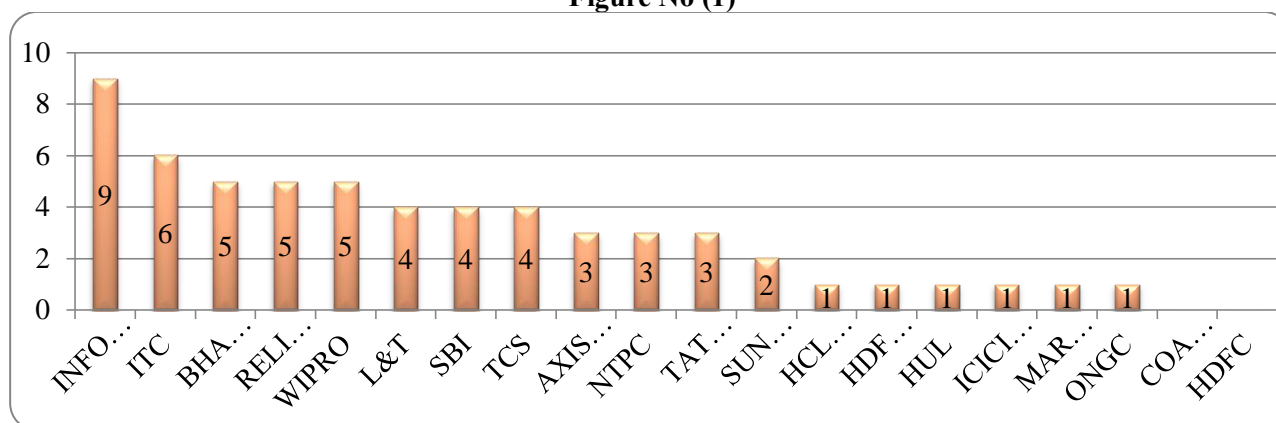
Personal and Behavioral Characteristics: One of the most prominent personal and behavioral characteristics of intellectual capital is the tendency to initiate new ideas and proposals and contribute to solving the problems that face work.

In addition to the previous features, Mursi (2013) also added the Creative Characteristics of Intellectual Capital: the ability to innovation and renewal is one of the most prominent features that organizations are trying to acquire in the modern era. Therefore, these institutions are trying to provide the intellectual capital that gains them these features.

The Reality of Measuring Intellectual Capital in Indian Companies:

Many Indian business companies did not realize the need and significance of intellectual reports and some of them do not have the resource and expertise about measuring and reporting of intellectual capital. According to Birari study (2015), top 20 companies were analyzed for the disclosure of elements of the intellectual capital in their annual reports. Out of the total 37 intellectual capital's elements, the study showed that intellectual capital reporting is very low (43%) i.e. only 15 out of 37 intellectual capital terms were revealed in the yearly report. 22 intellectual capital elements were not at all revealed by any of the firms. Infosys and ITC were the top two firms reporting the highest number of IC terms, whereas Coal India and HDFC didn't report any element. The figure (1) illustrates of revealing the intellectual capital in the Indian's companies.

Figure No (1)



Company Wise Disclosures of Intellectual Capital

Source: (Birari, 2015)

The Measure of the Intellectual Capital:

Companies are continually looking for the best models that can accurately and perfectly estimate of intellectual capital. Harvey and Lusch (1999) confirm that prosperous companies are focused to measure of the intellectual capital, where they consider it one of the important assets in the company. There are many styles used in measuring the intellectual capital as shown below.

Botis Model 1999: Skandia Model Company:

In 1999, Botis developed a model for the measurement of intellectual capital, which he developed while he was working at Skandia Insurance Company. This model is based on four systems:

- **Human Resources Accounting System:**

Sackmann, Flamholz, and Bullen (1989), point out that the beginning of the Human Resource Accounting System was due to Hermannon (1964). This system aims to assess the value of individuals within the organization and this helps to use this value as a basis for administrative and financial decisions.

- **Economic Value Added System:**

Value added is a comprehensive measure of performance. It links financial planning with capital budgeting, setting aims, relationship, and communication with shareholders. Also, it works on performance measurement, compensation and incentive systems, and how these combined variables can lead to a rise in the value of the company (or losses). This system is not directly linked to the measure of the intellectual capital but it emphasizes the want to be taken into account because this will lead to grown economic value added. (Morady, 2013).

• **Balanced Score Card:**

In 1996, Kaplan and Norton proposed this system. This system emphasizes the need for the organization's administration to adopt a multi-dimensional measurement system, capable of measuring performance by focusing on measuring variables and financial and non-financial elements. It should be noted that researchers did not refer to the concept of intellectual capital clearly, but Balanced Score Card takes into account the estimation of intangible elements within the organization such as learning and knowledge and consumer satisfaction and others. (Mohamed, 2017).

• **Navigator Model System of IC:**

This model was developed in the 1990s by researcher Leif Advinsson, director of Skandia Insurance Company. This model has divided the intellectual capital into two elements: structural capital and human capital. The model of the Navigator is based on more than 100 indicators for measurement and evaluation of intellectual capital.

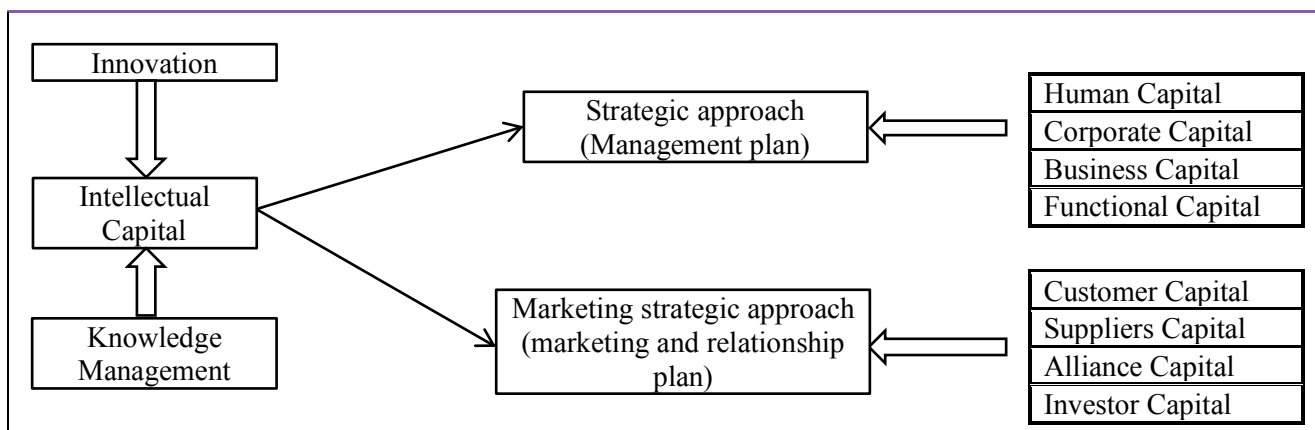
Chen & others' model - (2004):

This model mainly depends on the Botis model. Chen and others' model tries to avoid the shortcomings and weaknesses of previous models of intellectual capital measurement. This module focuses on identifying and providing timely data and information to managers so that they can formulate and modify strategies associated with the intellectual capital. So, that the organization's management can use knowledge and achieve a sustainable competitive advantage. (Chen, Zhu, and Xie, 2004) emphasize that this model focuses mainly on the assessment of indicators and general trends of intellectual capital rather than on economic value.

Lim and Dallimore's Model (2004):

This type is based on the principle that intellectual capital is achieved by the realization of innovation and knowledge management. The intellectual capital is translated into realistic plans that lead the organization to success. These plans are the management or business plan (which it do through the adoption of the strategic management approach), the marketing plan and the building of relationships carry out through the adoption of the strategic marketing approach. Figure (3) illustrates the model.

Figure (2): Lim and Dallimore's Model



Source: (Lim & Peter, 2004).

Three-Way Model Intellectual Capital:

Mouritsen and larsen (2001) believe that intellectual capital can be understood and analyzed through the three-way model of intellectual capital. This model consists three elements Human Capital, Structure Capital, and Customer Capital. The three-way model separates three types of knowledge resources. It shows the differences in them and reveals that the three categories exist as separate functional entities.

Sveiby Model (Intangible Assets Monitor IAM):

It was developed by Sveiby in 1997. This model is based on the assumption that the only source of revenue generation is human capital, which shows its efforts in the structure of internal and external resources of the company. He chose three types of intellectual assets that explain the book value to market value discrepancy in a company's valuation. The remainder, which is not attributable to book value, is attributable to individual staff

efficiency, internal structure and external structure. (Gujan, 2013).

CONCLUSIONS:

The study has reached the following conclusions:

- Companies still lack an approved formula to determine their intellectual capital.
- Many elements of intellectual capital do not deal with a specific accounting entry, so it is estimated by the approximate and objectively method.
- The selection of the market value of the organization as the basis for the measurement of intellectual capital is unreliable because this value fluctuates up and down the impact of many variables.
- There is no specific determination of most elements of intellectual capital in their contribution to the creation of capital.
- Accounting and tax laws still deal with physical capital and neglect intellectual capital.
- A significant part of the intellectual capital of companies is the human capital which clearly emerges in knowledge firms and is not easy to measure and determine this part of the capital.

RECOMMENDATIONS:

- Companies must determine their intellectual capital and components on an annual basis to determine the level of annual growth.
- Companies must determine precise weights for the contribution of different elements in the composition of their intellectual capital.
- The official authorities should identify specific indicators to measure the growth of the intellectual capital in any industry or economic field that can act adopted by the sector companies.
- A conceptual framework of accounting should be developed to make it understand the intellectual capital concepts and to get a clear reference to these concepts.

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