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КЪМ МОДЕЛ ЗА УПРАВЛЕНИЕ И ИЗМЕРВАНЕ НА НЕМАТЕРИАЛНИ АКТИВИ

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TOWARD A MODEL FOR MANAGING AND MEASURING INTANGIBLES

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Abstract

The purpose of this paper is to determine the main problems that represent obstacles for measuring and managing intangibles and to present a suggested model to management of intangibles. The research problem is presented in the need for a method or a model to manage and measure the intangibles. On the base of this determination of the problem, the objective of this research is the suggestion of a model that can participate in improving the performance of the corporate intangibles and making use of them in an efficient way. Then the most important inference of this paper suggests that companies can apply the suggested model by six steps (Intangibles awareness, determining Intangible Structure, determining Intangible components model, measuring and assessing intangibles, managing intangible stock, and managing intangibles flow) in order to contribute in preventing company intangible and in many important processes such as: value creation, radical and incremental change, and positive influence on stakeholders.

Key words: *Brand, Copyright, Goodwill, Intangibles, and Patent*
JEL Codes: *O340*

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1. Introduction

Today the business world is two distinct worlds, the world of atoms, tangible assets in facing of intangible assets embodied in ideas, experiences, and digital world. The first is connected to the industrial revolution and the second is what is connected to the modern economy that is based on knowledge, mind and digi-money. Today the companies are aware of the fact that the competition is not by the hard technology or by substances or data bases and stores that can be generalized, it's first and before anything else by a wide band of intangibles those are the core of the modern companies and represent their remarkable way in accomplishing the value and sustainable competitive advantage that is not. This makes us to think that the time of traditional sources for the competitive advantage is gone and today the concentration is on the new sources. It's the time of the intangibles or intangible assets that can create the hidden advantage or what Low & Kalafut (2002) called Invisible advantage. The largest ratio of the corporate market value (with its tangible and intangible assets) is related to the intangibles that are a lot larger than the paper value (that is represented by the tangible assets) (Lev, 2004). The growing importance of intangible assets has stimulated a lot of research on the subject (Demartini & Paoloni, 2013), then, when companies connect their high investments in computers to increase their market value, they choose inappropriate way to achieve its goal, that in knowledge-based and digital economy, the intangibles assets (software, ideas, and ability to innovate) are more important than all other kinds of resource. The new economy is more than just the availability of computers; it's a new method to do business (Chabrow & Colkin, 2002). That is certainly connected to the intangibles.

If we wanted to issue "a manifesto of intangible assets" in the same way in which Robert Eccles declared a "performance measurement manifesto", Hammer and Champy (1994) in "Reengineering: corporate revolution manifesto" and John Grant in "Brand innovation manifesto", the first paragraph in the proclamation of intangibles should be: we are in need of a new management, new model for measurement and management of intangibles, a sense of intangibles to be able to manage them , to know the motivators of value to turn the intangibles from promises of incomes to become real incomes (Grant,2006). Enron company that is one of the new economy companies kept its basic intangible asset that is represented by superior models for market evaluation, but the scandal of this company did turn the assets into vapor in no time!. The evolution of ideas is a type of business that is the most dangerous compared to the other material fields, because when you spend 20 million dollars for the construction of a building, you will just have a building worth 20 million dollars, but when you spend the same amount of money on research and development you might have a breakthrough that values more than a billion or nothing at all (Murray, 2002). Despite the importance of intangible assets, the ratio of their participation in the company's market value, and their contribution to achieving sustainable competitive advantage, the need is still great in order to develop methods and models for the managing and measuring the intangibles. The problem of this study is to present a model to manage and measure the intangibles. On the base of this determination of the problem, the objective of study is to suggest a model that can participate in improving company's performance through measuring and managing its intangibles in an efficient way.

2. Concept of the intangibles

In the knowledge-based economy, it is necessary in order to achieve a high market value of the company, to focus on intangibles and directing more investments to build them. The importance of intangibles is shown by the increased dependence of companies and countries' economies on them. This explains the enormous investments in them. At the year 1980 the net income of the American economy was determined by 4.9 trillion dollars, and with it they produced 1.3 billion tons of goods, 20 years later the American GPD was doubled to 9.3 trillion dollars, but the production of goods still the same of approximately 1.7 billion tons. This means that the economic activity is close to weakness without any marked change in the production of materials or goods, this is due to the enormous growth was achieved in the weightless elements like information , ideas , and knowledge (Dawson,2005) . A study by Mohr and Batsakis, (2014) shows that the intangible assets either facilitate firms' rapid internationalization and/or push firms towards rapid internationalization, because they allow firms to reduce or compensate the costs associated with overcoming their liability of foreignness. Also their findings provide evidence that intangible assets are also important to determine speed of nationalizing the mature firms.

Financial statistics indicate the growing importance of intangible in the US economy. Nakamura (2001) estimated that from 2 trillion for business investment about the half (that is one trillion) was invested in the intangibles. These large investments were directed to the basic intangibles (e.g. research and development, advertising that is the producing force of the brand, and software), which represented driving mind of the digital world).

The terms of intangibles, knowledge assets, and intellectual capital are used interchangeably. Intangibles are widely used in the accounting literature, knowledge assets by economists, and intellectual capital in the management and legal literature, but they refer essentially to the same thing: a nonphysical claim to future benefit (Lev, 2001). Some would see a difference between these terms, and this is what David Teece mentioned when he said that the intangibles are the widest category and the knowledge assets are a part or subcategory of the multiple subcategories of the intangibles (Teece, 2000).

The copyright and the patent are the products of knowledge work. Brand also started from the accumulation of the costumer's experience in it and ending in the company plan in supporting its brand is also a knowledge work in its core and in most of its sides. This is why we prefer to use these terms and expressions (Intangibles and IC) as synonyms can't be discriminated easily except by researcher's preferences or their desire to differentiate one experience from the other. Europeans discovered the intellectual capital in the work of Edvinson Leif the manager for the first intellectual capital department in the world at Skandia the Sweden Company that present annual reports for the intellectual capital for audience at 1995 when the Americans discovered the intangibles in the work of Baruch Lev.

According to the Webster's dictionary, the intangible asset (like the Goodwill) is not material or sensual. This distinction of the intangible asset is indicatively different from the tangible-material. The asset is a promise of future benefits (value or better money income), and because the assets are of two types: tangible or intangible, the definition is applied to both of them. Therefore, we can define the intangible asset as the non-material asset that provides a promise of future benefit or value. The comparison between the tangible and intangible assets exposes the great importance of both and the resemblance between them in providing company demands. Even though there still are a number of important differences between the two types of assets (see table 1).

Table no.1- The tangible and intangible assets

Tangible asset / Machine	**Intangible asset / Human power**
Advantages	**Advantages**
- Owned exclusively by the company - The book value is limited - Lower market value usually - Two values : use and exchange - Technical efficiency - Easy to measure and manage	- High flexibility - Higher Market value usually - High leverage - The development and improvement is not limited - Long productive age

Disadvantages	Disadvantages
- Less flexible - Less liquidity - High sinking cost - Obsolescence (with the technological development) - Limited improvement of the machine itself - Limited productive age	- The ownership is to the employees first then to the company - one value : Replaceable on use - Drain from the company - Can transplant in the competitor companies - Difficult to manage and measure - Larger sinking cost

Researchers presented many classifications for the intangibles and the table (2) shows samples of those. And for the purpose of the study we can define two types of intangibles those are:

1. Fixed (hard) legal intangibles: This represents the rights that enjoy the legal protection in relation with stakeholders. Many examples are present such as patent, copyright, trademark and goodwill.
2. Variable (soft) Intangibles: these intangibles such as (human capital, customers loyalty, customers menu, and long-term relationships with suppliers… etc.) is represented by company's ability and relation with different groups of stakeholders where their inexistence means extra cost carried out by the company. This type of intangibles still has neither legal protection nor financial and accounting recognition according to (GAAP).

Table no. 2- Determination and Classification of the intangibles

Author	Contents	Notes
Traditional accounting	- The Brand - Copyright - Parent - Goodwill	- Faces increased criticism because it became like a sun watch at night doesn't give a clue about the company value.
financial and accounting standards board 142 (FASB 142)	- Legally based intangibles - Based on contracts - Based on technology - Based on work power - Based on organization - Based on the customer - Based on the market	- All the seven types consist of a number of components, for example the one based on contracts includes: licenses, agreements, loyalty, use rights, alliances. - The two basic standards (141) and (142) represent the FASB vision and a side of the accounting obstacle in dealing with these seven types of intangibles.
Sveiby, 1997	-Employees competency	-Contributed to the formation of

	- Internal structure - External structure	Conrad group to develop unforeseen total budget (Intangibles)
Lev,2001	- Organizational intangibles - Human intangibles - Innovation intangibles	- Took part in two important projects in the US, the American Brooking institute and European Meritum Projects.
Jarboe,2005	- owner able assets - controllable and separable assets - uncontrollable assets	- The ability to own, control, separate and sell is important, and represents a challenge to the company.
Hoskisson *et al.* 2004	- Human resources - Innovation resources - Reputation resources	- Ascertain that the intangible assets are today more capable of creating a value whether new business models, products improvement or current company activities.
Standfield, 2005	- Intangibles without ownership - Intangibles with legal ownership - Financial intangibles	- The competitive intangibles are those suffering from the accounting and measurement problems and therefore difficulty to manage.
Reilly & Schwiehs 1999	- Self valuable intangibles - Intangible related to tangibles	- Some of the intangibles have self-based value; others have values associated with a tangible value.

Erickson and Rothberg (2016) stressed that intangibles are harder to grasp because of their characteristics of aspects of the mind (creativity, brand image), or their outputs (knowledge, brand equity). Meanwhile other researchers presented many definitions for intangibles; table (3) shows some of these definitions available in literature.

Table no. 3- Selective definitions of intangibles

Authors	Definition
IAS38 cited in Barzotto, et al., 2016	An intangible asset is an identifiable nonmonetary asset without physical substance, and a resource that is controlled by the entity as a result of past events and from which future economic are expected.
Barzotto, Coro and Volpe, 2016	An intangible asset is a resource that is controlled by the entity as a result of past events (e.g. purchase or self-creation) and from which future economic benefits (inflows of cash or other assets) are expected.

Battagello, Grimaldi and Cricelli,2015	The main “knowledge-based” source of value creation and performance.
Madhani,2009	Non-physical resources of value (claims to future benefits) generated by innovation (discovery), unique organizational designs, or human resource practices.
IASB, 2006	The contractual promise that has the capacity to give rise to cash inflows or a reduction in cash outflows.
Cohen, 2005	Probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.
Merriam-Webster’s Collegiate dictionary, 2001,citd in Cohen, 2005	The entire property of a person, association, corporation, or estate applicable or subject to the payment of debts, or as an advantage or resource as in his wit is his chief asset.
Daum,2005	Immaterial resources that, as a factor of production, play a fundamental role in the value creation process of an enterprise and that enable it to compete successfully.
Diefenbach, 2004	Non-monetary asset without physical substance, identifiable, controlled by an enterprise as a result of past events, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, from which future economic benefits are expected to flow to the enterprise, the costs of the asset can be measured reliably.
Scott, 2003	A mining claim that has no physical properties.
Lev, 2001	A claim to future benefits that does not have a physical or financial embodiment.
Canibano *et al.*,2000	Non-monetary sources of probable future economic profits, lacking physical substance, controlled by a firm as a result of previous events and transactions and may or may not be sold separately from other corporate assets.

3. Main problems of intangibles

Even though, tangibles and intangibles both promise future benefits, future benefits of intangibles, from accounting perspective are uncertain and difficult to measure when are compared with tangibles. This difficulty should indicate the need to develop rational measurement and assessment methods, not to leave them unrecognized or put aside from company's financial records under the influence of strict accounting which can only be understood as a form of accounting myopia and inability to catch up the renewed needs to develop the accounting principles and practices. Young (2007) talked about three dimensions of accounting myopia mentioning that the accounting professional vision towards intangibles suffers from three basic determinants. First; most discussions about intangible assets until now were interested in a small group of company's intangibles. Second: accounting has failed in looking outside its field as an alternative to the narrow view used which prevented developing what is necessary to deal with intangibles and that's what made accounting looks like the seven blinds and the elephant or the tower of Babel. Third: accounting didn't pay much effort in developing well accepted intangibles principles, and that's what we are confirming that the accounting parties clang in some principles and benchmarks that are not suitable for the new properties of value engines, fortune creation, and competitive advantage in companies.

Traditional accounting, under the influence of more than one argument and justification, has been criticized and described being failed in the response to the new needs. This is also found in human resource accounting, and with the application of just in time system (JIT) and lean manufacturing (Ferguson, 1989), or in the way of dealing with defect which pushed Peter Drucker to describe the traditional cost accounting as a dial (sun clock) which gives the time in a sunny day (production of quality) and gives nothing in a cloudy day or in the night (when defect occurs) (Drucker, 1990). This made a lot start talking about "Good Bye Standard Costs", others talked about "Hello Lean Accounting" (Maskell & Baggaley, 2004), or in environmental accounting, where traditional accounting ignores external costs related to company's pollutants that they are entries of another system outside the company(Freedman & Jigga, Eds 2006). Robert Costanza, an environmental activist, described traditional accounting carelessness, the one based on natural capital, as Enron accounting style, where natural capital exhaustion is considered as external costs and thus it is added as company's profits. Certainly, these calculations are false (www.grist.org). Other development is related to the digital accounting, electronic business accounting and the influence of information technology and networks (Deshmuth, 2006). Finally, i accounting of ntangibles, where the intangibles, specially the soft ones, cannot be determined, measured, or reported effectively using the traditional rules and methods. This gave the International Intangible Management Standards Institute (IIMSI) a push to issue a collection of standard benchmarks, 31 standards (Standfield & Torre, 2002).

The accounting problem is represented in the market value which is for some of the company's intangibles is big however, in the company's records it represent zero since it isn't registered as an asset. The intangibles recognized by accounting are: patents, brands, copyrights, and goodwill. Everything else is neglected despite the high value in the market until it occurs, i.e. takes place, since taking place in other words the company's decision to sell for registering and since it didn't happened actually this value is considered virtual rather than real. Several problems face intangibles can be summarized as follows:

i. Zero value fear: the market value as way to measure intangibles is unreliable since it greatly swings and prone to collapse and zeroing as for the case of Enron and because of having no junky value it becomes zero.

ii. The traditional obstacle: This is the obstacle of preferring to deal with the usual tangible asset. This obstacle limits the ability to deal with intangible which cannot be seen, weighted, carried and most importantly all our experience tends to reduce its value and limits the dependency on it. Thus, if a company where put in a position to choose between two things such as: a training program or buying a machine, emotional intelligence or a computer, employee's straightness or tool's quality, it would always choose the second choice since it is tangible, measurable, and can be registered as an asset in the company's balance where the first is rarely considered as an asset.

iii. Difficult measurement of intangibles: when you buy a tangible asset you usually have different choices and all of these choices adopt some common standards, however when you ask for a consult from a consulting company then you cannot talk about a standard consult. Many researchers reached to a conclusion that the non-financial items have qualities that are difficult to measure (Catalfo & Wulf, 2016).

iv. The difficulty of determining the ingredient responsible for the expected and the current incomes of intangibles: this difficulty can be clarified through talking about research and development which is one of the main areas of expenditure on intangibles. The project of research and development consists of five ingredients of expenditure: materials and equipment, engaged individuals, R&D services contracts employed by others, reasonable or justifiable allocation of any related indirect costs. Being unable to know the ingredient responsible for the expected incomes led the FASB to adopt that the research and development costs are spent instantaneously, and this means that the five components of research and development are all responsible for making it happen, the incomes (Baginski & Hassell, 2003).

v. Market failure: the intangibles suffer from what is called a market failure, so when the government intervenes in protecting the prices of certain goods for social reasons it prevents the market mechanisms from working to find the balance prices between the curves of supply and demand which eventually leads to a market failure. A market failure shows at the socially efficient level or Parito's optimal level of outputs which differs from the balance of competitive market. The increased or decreased production of the good or service might be the result that the customers and producers are not taking the external costs into account, leakage in competitive markets or governmental policies which prevents the market from achieving the efficient level of outputs. Intangibles when not measured and then entered into the costs of producing goods or providing services in a precise manner, will eventually leads to a market failure due to lack of information or high fluctuations in the market value of these intangibles. The market may find a solution to this if it manages to determine the market value of the company through the share value; however. The company's being unable to enter and register this value in its records leads to a market failure.

vi. The special properties of intangibles: the company's usage of intangible doesn't limit its ability to grant licenses for one party or multiple parties. The same can be said with the brand that works here (in this market or country) and works there (in another market or country) without being on the expense of its ability to work there. It is the availability properties which were called in the digital economy as the digital assets law (Rayport & Sviokla, 1995). Digital assets are not consumed as for the case of tangible, thus companies can create value by using these assets in infinite number of deals which of course requires changing the competitiveness mechanism in its field. In reality, the company will carry out the initial preparation cost of the information so that its digital reproduction cost approaches zero (Carr, 1999). In what is called pure profit or pure benefit which is usually mentions by the saying "If you can sell air then you are creating pure profit". This actually reflects the law of increasing incomes in digital assets fields versus the law of decreasing incomes which is related to tangible assets.

4. International projects to measure and assess intangibles

There have been many attempts, and many projects were adopted in order to reach the optimal method to measure intangibles and register them on micro-level i.e. companies, and to work on determining the appropriate polices related to the accounts of the gross national product (GNP) to support measurability and manageability of intangibles on macro-level i.e. the country. On other hand, Visconti (2012) claims that valuation is one of the central issues in intangible property because it has immaterial features which are abstract, and no active markets exist for this kind of property. The current attempts and for years showed that there is no specific path but regional properties and preferences marked and characterized these attempts. In fact this characterization refers to two main issues. (a) Intangibles are a wide subject so it can be seen from different perspectives, and this is what we find for the American way of dealing with intangibles which differs from the European way; (b) The accounting and financial obstacles and objections along with the traditional mental collection which is based on dealing with tangibles gets a higher priority than dealing with intangible assets, all those couldn't stop the wheel of development and the attempts to increase the interest in intangibles, to measure it, to develop the principles to deal with it, the skills and experiences to manage it, and its relationships with the financial policies on the macro level.

Intangibles, in these current attempts which we will consider their leading ones in here, are assets of the future and they are the most able to create value and achieve business goals. Thus, it shouldn't be kept out of the company's financial records which clearly describe the company, its operations, and results. In this context we consider the projects that worked to review the principles and the ways of dealing with intangibles.

5. The need for management of intangibles

The management of intangibles problem is not limited to the accounting issue in which only some of the intangible assets are considered, but it also linked to the managerial operation. The management, in its decisions and practices, is generally used to deal with money and tangible assets and exceptionally with sentimental values. Our previous managerial experience is not neutral in what it seeks to deal with and to be proficient in. Even the most professional and experienced managers in things management (money, stock, machines, and even shares) may face difficulties in management of intangibles. Therefore, we need a new pattern of management, a new managerial school, which is the school of management of intangibles.

Management of intangibles is actually hard components management (copyrights) and soft components (all the intangible materials except the hard ones). Thus management of intangible is:

- A management of vision, strategy, and long-term goals related to value creation from the company's intangibles and achieving a competitive advantage that is based on intangibles.
- A management of hard intangibles (copyrights intangibles: patents, copyrights, brand, and goodwill).
- A management of soft intangibles represented by thoughts, knowledge, and experience.
- A management to transform intangibles into intangible assets.

- A management of employees trust, relationships and norms (social capital) and individuals properties, their hopes, and optimism (psychological capital) in order to maximize the value of the company.

Management of intangibles in its narrow sense is management of the above listed intellectual property intangibles. This management is common somehow in companies. Most companies have their own plans and experiences in managing their licenses and patents long time ago. However, management of intangibles in its wider sense is one that requires new, innovative managerial efforts to measure it, assess it, and then effectively manage it. Here, we present two examples describing the complicated problem that the management of intangibles faces: the leadership problem and the organized learning problem.

a. The leadership problem: the leadership considers the most effective factor that influences on company's success or failure. This is the common picture in companies and the proof to support leaders to gets the large salaries. For example; the total salary that is paid for the top managers in S & P 500 list for the year (2010), as an average overall compensation (10.9) Million dollars (Balsam, 2012). Simons and Davilla talked about the return on management (R.O.M) in the same manner the way accountants and financials talk about the return on investment (R.O.I) (Simons & Davila, 1998). Hubbard (2005) talked about the investment in leadership depending on that leadership affects the organizational behavior in the competitive economy in which the demand on high performance is increasing. Fulmer & Bleak talked about leadership being one of the company's strategic powers and competitive advantages and that great leaders achieve great results (Fulmer & Bleak, 2008). Though, the defenders of leadership, in all its traditional types, may still face the reality that traditional leadership is bureaucratizing imagination which in turn will transform the company into a hallow company as Waren Bennis says. (Bennis, 2009), or depleting the company's vitality and spirit because of getting engaged after establishment in building the official structures, according to Harison Owen (Owen, 2000). The leadership, in its types the old ones such as the natural leadership, or the new ones (the contingent leaders, the ones that the business machine creates them according to the conditions), finds it is easy to say that leadership is positively affecting the organizational behavior but it is too difficult to determine "how affective they are" or what is the percentage of this affection in the company's performance. This for sure is a problem of management of intangibles rather than a problem of leadership, in another words, it is the leakage in methods, tools, and models necessary to manage intangibles including the tools to measure and assess the contribution of each the intangible components.

b. The organizational learning: it is one knowledge management fields in sharing experiences, innovation publishing in the whole company, and it is also a source for competitive advantage especially when it is more intensive and more rapid than competitors. In a paper published by Ari de Geus in Harvard Business Review titled "Planning as Learning", he confirmed on a basic and a new idea in his time that is he only competitive advantage that the company enjoys is its leaders' ability to learn faster than its competitors (cited in, Stewart, 2004). The organizational learning, in a new pattern of organization called the learning organizations, occurs at different rates. Some of those patterns are shallow or cloning and creates a dependency from one company on another. Another type of this pattern is described as being learning with improvement as Drucker described it; the Japanese learning is "Innovative imitation". Also there is the learning that is the completion of the innovation process and new knowledge creation according to Nonaka's knowledge creation model, where the upbringing, the first stage in the model, which is the base to create and share implicit knowledge between individuals (Takeuhi, 2006). The learning curve as a function of the experience that is transformed into higher performance, and the strategic learning of the company's distinction pattern in facing the competitive environment and learning faster than the competitors so that it becomes the competitive advantage in the market, which represents, in all its different shapes and forms, the effectiveness of this intangible source. Even though we still unable to measure, assess, and manage it according to some clear and efficient basis as we do for building management or machine management and even employee management when asked to commit the work standards or to omit them.

These two examples are not the only ones, since all soft intangible resources, which is many and varying, suffers from management of intangibles weakness although these intangibles has become, and in an increased manner specially in the age of knowledge economy, the most contributive source in creating the competitive advantage. In the vision based on resources, the intangibles are the internal resources (talented individuals, patents, brand, trade secrets, and the distinct way of working) and the external (relationships, licenses, franchises, supply contracts, and long-term agreements) represents a strong source for competitive advantage. In the vision of innovative and knowledge intensive corporations, intangibles are the knowledge, experiences, Know-How, and the intellectual capital with its three components: human capital, structural or organizational capital, and the customer or relational capital. However in the interconnected business environment, the supply chain supporters confirms the role of front and back integrative relations as the most comprehensive source in value creation along the chain and building the relations capital. We also find that e-commerce and trade supporters the confirmation on the digital capital and the influence of distant networks and relations in anytime, and in anyplace, any time (7/24) with the existence of the Internet which the most superior and globalized technology. The financial and accounting vision of intangibles is basic (hard) assets that are subject to registration after verification. This is what we are trying to submit in this paper which it is also an invitation for corporations to adapt management of intangibles.

Management of intangibles can be defined according to International Intangible Management Standards Institute (IIMSI) as the process of transferring the possible intangibles and the ones that are able to achieve the actual results through the effective financial value management, financial registering of the knowledge assets, relations and emotions, and peak time (www.standardInstitute.org). This definition is widening the intangible assets, however it still maintains the financial approach in transferring the predicted into an actual values and register it and this is narrows the intangibles and its management.

We present our definition that management of intangibles is a methodological process related to intangibles vision, determination, operation, maintaining, and developing it with what is consistent with the corporate strategy in creating value and achieving the competitive advantage. We can observe from this definition, the following:

a. Management of intangibles is an organized systematic process: thus it requires a collection of steps taken by the corporation in order for the intangibles to be part of the corporate strategy and policies.

b. It requires intangible vision: this vision is the one that inspires everyone in the company toward the new direction in dealing with intangibles, to devise the values from, and achieving the competitive advantage through it.

c. Determining the company's intangibles structure and organize them according to their importance and operability: every company has a long list of intangibles but this is just not enough anymore. The relative importance order of these intangibles should be considered in the total performance of the corporation. In later stages; the relative important of the intangibles in each function, process and product, for improving and dealing with intangibles being one of the main value drivers in the company. The activation of intangibles and using them shows the possible uses for each intangible asset.

d. Development of intangibles: the password for the development of intangibles is to invest in it. Corporations should use to invest in intangibles such as training, licenses, public relations campaigns, and bringing the professional individuals, to develop the corporation's intangibles.

e. Consistency with the strategy: every company has a one corporate strategy as every business unit has a strategy unit business that is consistent with the grand strategy. This is what applies on the expected development that comes by the company in the field of management of intangibles.

6. Management models of intangibles

Management of intangibles needs to be considered by the corporate's leadership so that it directs the company and its resources toward value creation from these intangible resources. It also needs to a model for managing intangibles (mental design for the intangibles). There are many models for management of intangibles has been developed. Bounfour (2003) suggested the spiral model with four stages: questioning and problematizing, modeling of understanding, measuring corporate performance, and management of corporate overall performance. This model tries to be realistic in representing these stages, and its sequential feature makes it appear like being out of synchronization in motion. Companies use the model to develop what is more responsive to its inner circumstances and the business environment that it works in.

The second model is the international intangibles standards (IIS2001) presented by Ken Standford, president of Intangible Management Standards Institute, based on that intangibles have three stages. First level of resources: it is the legal property rights, IIS2001-D1, defines the legal property rights as the rights that are owned characterized by being specific and separate such as patent, copyrights, it also enjoys the legal protection and control, and having a specific value (determined by the financial transactions). Second level of resources: these resources represent the legal intangibles defined as the property rights that is done by the law, the national and international agreements, and creates the legal property represented in the intangible competitive right. Third level of resources: the resources in this level represent the competitive intangibles which are defined as the source that is used to create the legal intangibles (Second Stage Resources), maintain, and to be bought and developed in time (Standfield, 2005). When intangibles come within the accounting definition to the intangibles, it represents the legal intangibles, but when it comes outside the accounting definition it represent the competitive intangibles according to the international standards of intangibles.

The third model is our proposed model: Vision-usage model, this model consists of two main stages Figure (1):

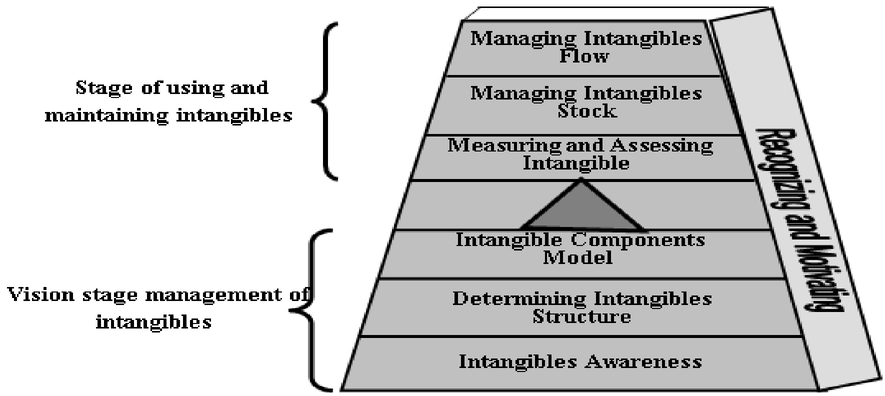
I. Vision stage**:** it is the first stage in forming management of intangibles in the company. This stage consists of three different parts as follows:

a. Sense of intangibles: The common sense in companies and due to the business long history, tends to deal with tangibles and prefers things over implications, machines over skills, machine maintenance over training, products over thoughts, and a bird in the hand is better than ten on the tree, as for the case of physical investment over ten on the tree of the uncertain benefits which the intangibles promise. This is represents the live use of the intangibles and creating a value of them. This is why the company that has a very low intangible value and incapability of handling them, as Lev (2001, pp33, 37, and 43) argued that there are many difficulties to deal with intangibles such as: the ill-defined property rights of intangibles inherent risk of intangibles, nonmarketable intangibles.

b. Defining the intangibles structure: The hard intangibles (Individual property rights) and the soft (intangible resources) are wide and variable in the company that has to identify delicately its intangibles and to put a structure or a pyramidal base according to the importance of these from the company's point of view. A creative effort has to be made for the determination of these assets and resources in a way that guarantees the possibility of making plans and programs for their protection from individuals and other possible dangers, their identification for use, and development to minimize aging and extinction.

c. The development of the company intangible model: the intangible model represents the clear and orientation embodiment for the intangible vision. This model clarify the special method of managing the intangibles in dealing with and using them to achieve the company goals. Every company should have its own special model that determines: what are the company's most important intangibles, the fields of their use, the weakness and strength points, and the results expected from their use.

Figure 1-Suggested model management of intangibles



II. The stage of using and maintaining the intangibles

This stage represent in the continuous managing process that is connected to the measurement and evaluation of the intangibles in their basic two sides: the stock (that is the counted value of the intangibles e.g. Intellectual property of the company) and the flow that:

a. Measuring and assessing: because what can be measured can be managed, and what can be managed can create a value of, the management of intangibles is responsible of measurement and evaluation of the intangibles specially that the intangibles faces the problem of decreased value and non-recordable contents and the company prefers the tangibles over the intangibles because of business traditions. The intangible resources and assets evaluation and measurement requires creative effort with the effect of the current accountant values and principles and the need of the investors to dependable methods in counting the value of these resources and assets. In the past the experience of business shows that what can't be measured of difficult to be measured will be formed when the efforts starts and accumulates for this purpose. And for this reason the important tasks for the management of intangibles at least in this phase is gathering the managerial, financial, and accounting efforts for using the best methods available for this purpose including devisal of new methods that are more appropriate for the company. It's recommended that the company should take in to account the followings during the measurement and evaluation:

First: Making use of the methods those has the interest, disclosure, better results in the measurement and evaluation of the company value in the tangible and intangible sides e.g. the balanced scorecard.

Second: Usage of methods and multiple measurement tools to guarantee higher credibility and avoid the weakness points of each method or a tool with strength points for the other ways and tools. And this is what can be afforded by a method to the measurement tools. Finally the importance of the use of the internal benchmarking (for the illustrative use of the intangibles inside the company) and the competitiveness compared to the best competitive company or companies. This is what makes the company among the flock (inside the sector) in the management of its intangibles and doesn't seem to be working alone without reliability because of the absence of pinch mark or comparison from the opposite companies.

b. Intangibles stock management: the stock is presented by the hard intangibles those are the intellectual property that is disclosed and recorded according to (GAAP) those are the: parent, brand, copyrights and goodwill the license contracts and Excellency.

c. Intangibles flow management: The flow is represented by the soft intangibles those despite their importance and role in the use of stocks and its accumulation and building higher value for the company, they still face obstacles of record and disclosure. In fact the management of intangibles in the process of value creation through company's intangibles or through making new value (Innovation) in its active core is a management of this flow.

We can see that the disclosure and differentiation between employees and motivating them is associated with all the stages of the model, this means that sharing the burdens and carrying the liabilities by the manager and employees, requires sharing of the negative and positive results. What increases the importance of differentiation and motivation is the competition that starts to attract the qualified employees from the competitive companies, that will cause a doubled benefit for the company (hiring a qualified member in the company will improve the weakness of the company itself that reduces its capability to compete, at the same time will weaken the competitors).

7. Management of intangibles and the positive effects

Adoption management of intangibles can be a strong driver to achieve positive effects in the company; this can be explained by the intangibles role in: creating the value; radical and incremental change; and the positive effect on stakeholders.

a. The intangibles and value creation: The intangibles are the main motivators of creating the value and competitive experience; this is what all companies agree on. Even though, the main problem is how to make use of the intangibles in value creation or how to change the intangibles to a financial value? To answer this question we will explain the forms of value creation. Allee (2002) determined two methods to take the intangibles to the market: converting the intangibles into a financial value and relationship barter. In this context, creating value through the intangibles can take many forms. New products and services is one form of the value creation. The innovative ability can be achieved through the technological innovation and the innovation of products and services that achieve a competitive advantage to the company that gives a golden period to gain high profits in the market. Schumpeter mentioned in what he named the short term innovator's profit, were the company is the only one using these new products and gaining all the requests and incomes in the market (Drucker, 2015).

Other form is a long term relationships. The relationship with the costumer can take the shape of a single transaction or the long term relationship. The long term relationship is based on the Law of repeat purchases that states "the more successful you are in getting each customer to buy from you, the more you can increase your long-term profits". The single transaction relationship is full of distrust between the costumer and the company, while long term relationship is based on loyalty. In the same context, some put loyalty as equal to trust (Kotler and Keller, 2006, pp157-8) because the cost or the product is not the base in marketing long term relationships or gaining the costumer who has loyalty it's the trust that is important. This trust is the base in the company policy that is directed toward long term relationship and achieving a lifetime value in the relationship with the loyal customers. Others consider loyalty as equal with the profit, considering that the customer loyalty is the base to success and better profits (Sergeant &West, 2001).

Developing new concepts and methods is the third form of value creation. With knowledge economy, the difference between market value and book value increases continuously under the influence of intangible value generators. Value creation in the company, through intangibles, enables the company to internally be more able to use its resources in such a way that differs and beats its competitors. The managerial innovation leads to new principles and methods thus it isn't of less importance than technological innovation. The managerial innovation which is based on intangibles seeks for the company being the cheapest, the fastest, the best, the smartest and most innovative in its functions, and processes. The new managerial principles and methods are always a source to improve quality and productivity whether in understanding the management to the employee's needs (as in Maslow's hierarchy of needs) or in improving the optimization methods in management decisions, or in measuring and improving the financial analysis and performance of the company (McElroy, 2003).

In reality, the managerial innovation in the field of principles and tools is the widest field since it is constantly enriched with novelty which works on improving the higher, middle, lower management performance and the employees at all levels in the company. The balanced scorecard dashboard; with respect to improving the measurability and assess ability of the companies, with respect to the financial and non-financial standards. The green business which represent managerial options in the transformation of the company into an environmentally responsible company in meeting the customers' needs to environment friendly products and services, all of these are forms of managerial innovation with respect to principles and their applications in different fields. Table (1) presents an important collection of principles and tools that are part of the most influential managerial innovations in business sectors in the past decades, all have the fingerprints of intangibles and their effects in the pot of value and competitive advantage for the company. The many faces and uses of intangibles and maximizing its operation is one of the key methods in improving and employing the company's intangibles in different programs and projects.

Table 1: Intangibles, developing principles and up-to-date tools

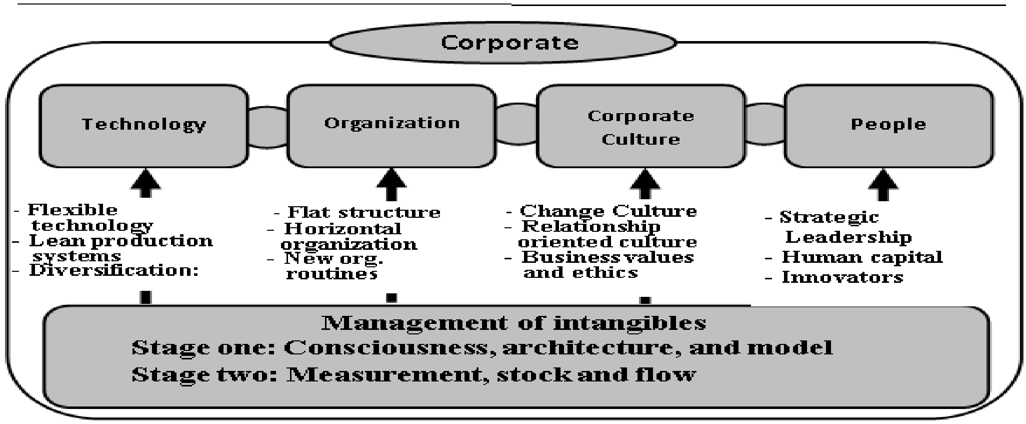
Concept	Intangibles	Meaning
Balanced Scorecard (BSC)	✓	- The four perspectives in Balanced scorecard encompass intangibles such as in the customer, learning, and innovation perspectives.
Business Process Reengineering	✓	- Reengineering is rethinking of all corporate assets whether tangible or not.
Core Competencies	✓	- The core competencies can be tangible as a technology or intangible as a human or knowledge capital.
Knowledge Management	✓	- The major part of KM represented by the intangibles.
Just In Time production System	✓	- It represents managerial innovation to solve many production problems including termination of all form of waste and realizing zero inventories and starting production from the customer.
Mission and Vision Statements	✓	- The mission and vision as an inspiring, motivating and rational factors are intangible in nature.
Offshoring	✓	- It depends on the idea of what is good here is good there, and on knowing the proper environments and relationships, all these are intangibles.
Outsourcing	✓	- Depending on the external relationships with the dependable providers.
Shared Service Centers	✓	- Sharing the facilities, experiences, and methods is a type of the shared experiences and relationships intangibles.
Six Sigma	✓	- Today the Six Sigma is training programs, and in the light of this experiment the Human Sigma was discussed.
Strategic Planning	✓	- The strategy as a process (strategic thinking) and as strategic planning (strategic plan) is one of the most important intangible assets.

Supply Chain Management	✓	- Widening and integrating of the company’s relationship forward and backward to create a value of all the circles and relationships in this chain.
Digital Value Chain	✓	- The value chain that is based on information creates the value through its alternation between the poles of the supply chain.
Green Business	✓	- Creating value and achieving a competitive value for the company’s environmental responsibility and achieving responsiveness to the green market sections.
Benchmarking	✓	- Internal benchmark is the historical comparison in the company, while the competitive benchmark is the comparison between the best competitors, and the comparison subject can be a tangible or intangible asset.
Strategic Alliances	✓	- Alliances are relationships and integration of the visions and powers for a market value that is based on higher powers and strategic synergy.

b. Radical and incremental change

Today, change is required in everything; it is also required to be radical and deep to achieve the strategic leap. If that was not possible then the partial change or the continuous incremental improvements are relayed on to face the change requirements, competitiveness, and the change-based environments. There are no doubt these intangibles, as a source for company's value, wealth creation, and competitive advantages. The management of intangibles can achieve radical or partial effects on the components of the organizational change process. Figure (2) clarify the effects on these components: individuals, corporation's culture, organization, and technology.

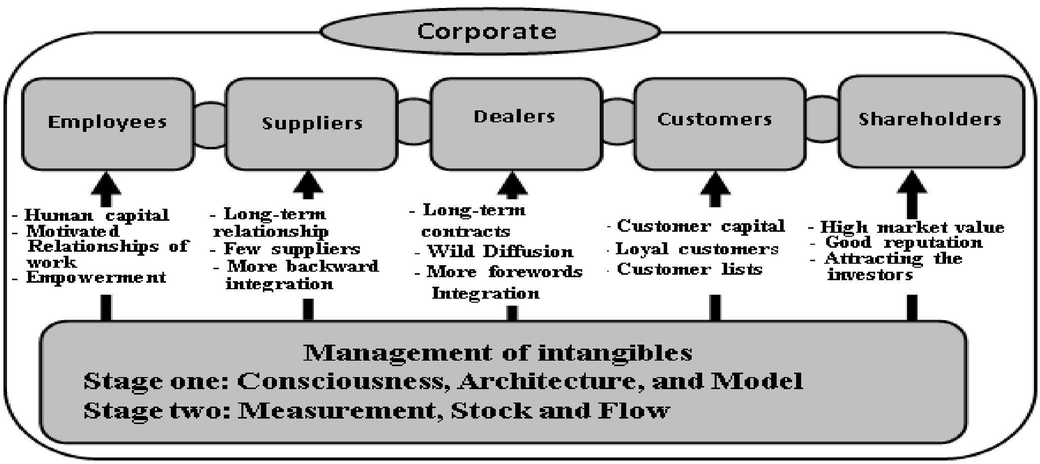
Figure 2: Management of intangibles and organizational change



c. Positive influence on stakeholders

The interest in the influence of management of intangibles on stakeholders and development of positive relations with them is a key task. The essence of management of intangibles is that the key relations should be with the stakeholders. Figure (3) describes the influence of management of intangibles in the field of improving the relations with the employees, suppliers, customers, dealers, and stakeholders.

Figure no. 3- Influencing management of intangibles on stakeholders



8. Conclusions

The company's intangible in the knowledge-based economy and e-knowledge based economy is not an operational or unessential issue that can be left to the current conditions or on a low level of operation. It is a strategic issue that should be part of the company's strategy and the leadership vision in developing the company. Thus, it needs a new pattern of management which is management of intangibles. The management of intangibles as we presented it requires a new ambitious vision for the company to adopt and develop the methods of measuring and using intangibles.

The main intangibles of the company should not stay like "holy cows" that walk around without determining their actual value, components, and value motivators. Therefore, work should be done on an urgent requirement which is: determination of the company's intangibles structure and ordering them according to importance and value. This off course requires finding an organizational unit that is responsible for all the tasks related to determining, protecting, and using the company's intangibles in the current and new fields. This unit should enjoy the sense of intangibles that is based on the mindset which let them deal with these resources in a way beyond the traditional thoughts and principles. Also, working on developing internal accounting rules for the company's intangibles: these rules might be for internal use in the company and provides a base to measure and asses the mastery of management of intangibles. Management of intangibles should periodically assess the value and incomes of the company: this might be taken on the bases of historical comparison (comparison between different periods), or internal benchmarking (between divisions that enjoys some of the company's intangibles) or competitive (the periodic assessment with respect to the main competitors on the total level of intangibles or on the level of each component of its components).

Developing management of intangibles can lead to developing individuals, intangibles managers and intangibles professionals, who represent the human capital which is the most important in the field of intangibles and its renewable resources.

The determination of company's intangibles risks and reduce it is one of the goals of management of intangibles which will have to face the risk of obsolescence, leakage, value erosion, poor usage maximizing with respect to competitors or even with the companies working in different fields. The intangibles of a company may suffer from obsolescence and amortization (the end of the legal protection of the patent), damageable (the company being failed to protect its reputation) or value depreciation (as in ethical scandals) or losing its components (leakage of key individuals) or even the entry of new competitors with new tangibles and intangibles abilities… etc.

All of this requires the company to not only provides methods to protect the current intangibles of the company but also to have plans for determining them and finding new forms for its intangibles. Finally the company should work on supporting the values and business ethics, Loyalty of employees, customers and suppliers.

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