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Intangible capital: A strategic lever for value creation

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Abstract. The main objective of this article is to examine the interactions between the different components of intangible capital as well as their effects on the creation of business value. To do this, we start with a review of the literature around the concept of intangible capital, its components, and its direct or indirect impact on companies. Then, an empirical study based on a field survey relating to a sample of fifteen companies located in Tangier allows us to see more clearly the effect of intangible capital on the creation of wealth.

Keywords. Intangible capital, Intellectual capital, Goodwill management, Intangible capital evaluation, Valuecreation, The components of intangible capital.

JEL. G11, G17, C53, C58.

1. Introduction

The revolution in information and communications technologies, the increased importance of knowledge, the importance of innovation as a determinant of competitiveness, etc. have meant that the rules and the requirements of the market have changed.

The company is thus faced with increasingly fierce competition in terms of new productive capacities and distinctive skills. Responsiveness, creativity, anticipation, being attentive to the customer, improving quality, reducing costs and response times... are the current requirements of the competitive environment.

Certainly, we cannot ignore sales revenues, profits and results. They are the ultimate measure of success and the starting point for any measure of business value. However, there are other factors that influence the performance, competitiveness and value of a business which is based on financial valuation, to which is added a much more subjective part which is the intangible capital.

Our work is part of a fairly recent and rich field of research and deals with a topical subject little treated in Morocco. Demonstrate that the intangible capital, is the genesis of material capital, allows an organization

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to function, grow, and prosper. The real value is therefore by definition invisible, which is difficult, but necessary to measure.

So the interest of our subject relates to the valuation of intangible capital in order to highlight its place within the company as well as the prospects for the future within our country.

While traditional methods manage to estimate tangible assets almost optimally, they find it difficult to find a way to control and enhance the intangible part which constitutes an average of 80% of the company value. The starting question of our research is to understand how to value the intangible capital of a company? It is then a question of highlighting its hidden values, of analyzing them, then of being able to measure them.

Once the valuation process has been elucidated, this natural path opens the doors to further reflections in terms of business management. It is interesting to ask what is the added value of such an approach from a managerial and organizational point of view.

Subsequently, it is highlighted how the consideration of the intangible capital can positively contribute to the creation of value and, therefore, the evolution of our economy? Here, we analyze the context allowing a good understanding of socio-economic reality. Far from the claims of a developed and civilized society, we face a number of economic and social challenges. Studies now prove that progress unfolds on several levels, allowing the elaboration of an overview of the major trends and changes taking place. This evolution of our society requires a new way of measuring, but above all of perceiving value. Human capital therefore deserves to be also highlighted.

To answer to the central problem, we organized our work in three points. The first point, "Theoretical framework and concept of intangible capital", seeks to identify the emergence of the concept of intangible capital as well as its components and the different interactions and synergies linking the three main components of intangible capital.

Then the second point, "Intangible capital and creation of value", aims to explain how the dynamics of intangible capital acts on the value of the company by explaining the place of intangible capital within companies, business management through the intangible capital, the analysis of its impacts and future prospects and the transition from a traditional economy to an intangible economy.

Finally, the third point, "The place of intangible capital in the Moroccan economy: an empirical approach", attempts to identify the challenges of intangible capital and its implications both at the macroeconomic and microeconomic levels. It is for this reason that this last point is structured around four interdependent subtitles. The first aims to situate Morocco's positioning in terms of intangible capital and its perception by the Moroccan financial market. The second addresses the question of the relevance of the concept of intangible capital as a tool for steering public policies in Morocco. The third addresses the question of integrating intangible capital into the management of the company and its impact on

its performance. Finally, the fourth is devoted to the empirical study consisting of a field survey of certain public and private organizations.

2. Theoretical framework and the intangible capital concept

2.1. The emergence of the intangible capital concept

The notion of intangible capital was born out of the need to conceptualize the "hidden value" of the company which does not appear in its balance sheet (Montalan & Vincent, 2010). Intangible capital is a factor that influences the value and competitive advantage of a business. Thus, a modern company derives more its economic power more from its intellectual capacities and its services than from its tangible assets. Edvinsson & Malone present the qualitative and intangible aspect as a vital source of value, improving performance and competitiveness of companies.

A term derived from the economy, intangible capital is distinguished from material factors such as land and natural resources and all physical factors of production (factories, machines, etc.) previously considered to be the key factor of performance and success (Pépin, 2006). Intangible capital, according to several authors, is synonymous with intellectual assets (Abeysekera, 2006).

Scientific research and professional experiences have made it possible to define intangible capital as the sum of human, structural and relational capital that a company owns (Edvinsson & Malone, 1999; Gallego & Rodriguez, 2005; Green & Rayan, 2005). Crosby & Johnson (2004) define this variable as follows: intangible capital includes patents, inventions, formulas, processes, designs, know-how, copyrights, trademarks and trade. This set corresponds to industrial property. The second group includes franchises, licenses and contracts. The third set includes methods, programs, systems, procedures, studies, forecasting, client lists, and technical data. Finally, the last group concerns networks of relationships, legal or financial arrangements, these can give a lot of value to a company, especially in the field of the new economy.

Based on these definitions, we will further support the different components of intangible capital.

2.2. The components of intangible capital

Although the different definitions are not identical, there is a certain convergence in the authors' ideas concerning the decomposition of intangible capital. . It is divided according to (OECD, 1999) into human capital (HC) and structural capital (CS) (Edvinsson, 2000), which includes customer or relationship capital and organizational capital.

A group of practitioners and management researchers, Hubert Saint-Onge, Leif Edvinsson, Gordon Petrash, offer three categories of intangible assets: client and relational capital, organizational capital and human capital.

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Annie Brooking (1996) presents intangible capital as follows:

- People-centered assets (HC): qualifications, skills, expertise, problem-solving skills, leadership style.
- Infrastructure (CS): all the technologies, processes and methodologies that help the company to operate, patents, know-how...
- Market assets (CC): brands, customers, customer loyalty, distribution channel, etc.

For Roos & Roose (1997), we must add the importance of culture in intangible capital, which is presented as follows:

- Human capital: competence, attitude, intellectual ability...
- Organizational capital: innovation, process, intellectual property and culture,
- Renewable capital: new patents and training efforts...
- Relationship capital: relationships that include internal and external stakeholders

Stewart (1997) breaks down intangible capital as follows:

- Human capital: employees are the most important assets of the organization
- Structural capital: knowledge in the form of information technology, intellectual property: patents, plans, etc.
- Customer capital: market information used to attract and retain customers.

Bontis (2001), on the other hand, excludes intellectual property from intangible capital because it represents protected assets and has a legal definition, unlike intangible capital. The breakdown of intangible capital is therefore as follows:

- Human capital: the individual level of knowledge that each individual has.
- Structural capital(non-human assets): the organizational capacities used to meet market requirements
- Relationship capital: the customer's capital represents only part of the organizational relationships.

Calvalcanti *et al.*, (2006) add a fourth dimension to intangible capital, namely social capital: It is the set of networks of social relationships from which an individual can benefit. In the enterprise, organizational social capital is characterized by associability (willingness and ability to set up joint projects) and trust. (Silem *et al.*, 2010).

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Table 1. *Classification of intangible capital according to different authors and years*

Authors	years	Classification of intangible capital
Brooking	1996	- Human capital - Structural capital - Marketassets
Edvinsson & Malone	1997	- Human capital - Structural capital
Sveiby	1997	-Individualskills -Internal structure -External structure
Roos	1997	- Human capital - Organizational capital -Renewable capital -Relational capital
Stewart	1997	- Human capital - Structural capital -Customer capital
Bontis <i>et al.</i>	2000	- Human capital - Structural capital - Relational capital
Meritum	2002	- Human capital - Structural capital -Customer capital
Calvalcanti	2006	- Human capital - Structural capital -Customer capital -Social capital

So we can say that the distinction between the three forms of intangible capital seems to be the subject of a consensus between several authors, namely: human capital HC "Man in the company"; (experience, training, ability to management, interpersonal relationships, motivation, etc.), structural capital SC "All that remains in the company at the end of the day"; (company culture, internal communication, organization, innovation, etc.) and CC or relational customer capital "Everything that links the company to its environment"; (relations with shareholders, partners, customers, suppliers, society, etc.). But there is still the breakdown of each capital which differs from one author to another.

2.3. The interaction between the different components of intangible capital

A good knowledge of the interactions between the components makes it possible to better understand what creates value in companies.

Chen, Zhu & Xie (2004) found, from a study of 60 Chinese high-tech companies, that there is an interaction between the different components of intangible capital. Their conclusions on this relationship are presented in the figure above.

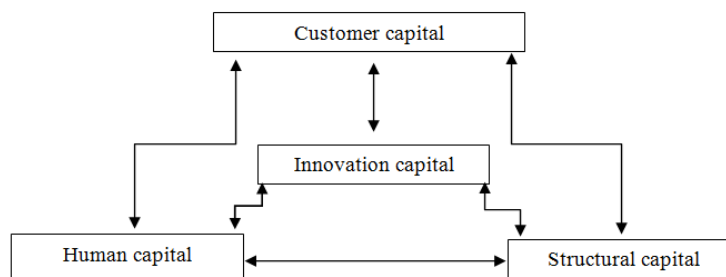


Figure 1. *The interrelationships between the components of the intangible asset (Chen, Zhu & Xie, 2004).*

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Innovation capital is supported by the company's technology as well as by existing knowledge and know-how in terms of human capital, structural capital and relationship capital.

Innovation capital also makes it possible to create new products that meet the needs of customers through new organizational procedures, new techniques and new knowledge in terms of human capital.

Companies that lose their employees also lose this knowledge, they have to transform it into a more explicit form to integrate it into structural capital, hence the relationship between human and structural components.

In addition, Chen *et al.*, (2004) have shown that there is a positive relationship between the components of intangible assets taken together and the overall performance of the company. They claim that the innovation capital created by the interaction of the various components of the intangible asset is the main source of performance. These authors explain how these components interact. Solleiro & Castanon (2005) add that the formation of intangible capital allows companies to innovate and be competitive in an increasingly dynamic environment.

3. Intangible capital and value creation

3.1. The value of the company

How to estimate the value of a business? Many companies are well aware that the data and figures in their annual financial reports do not fully capture the "essence" of their business.

Several types of actors are interested in the value of the company: managers; shareholders; those who wish to buy stocks; those who wish to buy or take over the entire business; as well as the Tax Administration. These actors have the following information: the accounts (balance sheet and operating account) drawn up by the accountant and supplemented by the auditor's report; studies carried out by financial analysts in connection with mergers and acquisitions, but the distribution of which is limited; published analysts' studies; articles by specialist journalists, often inspired by analyst studies.

The value of a business is what makes it up. These are all its properties, all its accounts, all its employees, and all the elements that participate in its activity. Thus the immaterial observatory has calculated that more than 80% of the value of a company is "hidden" in its share of intangible.

3.2. The value of the company and intangible capital

Intangible capital represents the roots of a company's value (Edvinsson & Malone, 1999). Indeed, with the metaphor of the company like a tree, Edvinsson and Malone explain that what we describe in the organizational charts, annual reports, quarterly statements and other documents constitutes the trunk, the branches and the leaves. But to think that these only visible elements constitute the whole of the tree would be a manifest error. They explain that an important part of the tree is underground and therefore in the roots. We can conclude from the health of the tree at the

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present moment by looking at the color of the leaves or the quality of the fruits, but to know the health of the tree in the years to come, it is necessary to know what is happening in its hidden part therefore in the roots.

Intangible capital is therefore important because it provides the enterprise with the possibility of creating new products and services, new processes, new forms of organization, etc., therefore intangible capital provides the enterprise with value in two forms: an economic and financial value and a strategic position which is more qualitative.

The value created by the intangible is indirect because there is no direct impact on the financial results. Thus, improvements to intangible assets influence financial results through a chain of cause and effect relationships that have two or three intermediaries. The example given on this subject is the impact of employee training which will lead to an improvement in the quality of service. Improving the quality of services leads to greater customer satisfaction. Increased customer satisfaction leads to greater loyalty. Increased customer loyalty leads to higher revenue and margin.

3.3. The roles of intangible capital

The roles of intangible capital are divided into two: value creation and value extraction (Sullivan, 2000). The two forms of value are then the result of the effort of the intangible capital of the company. Value creation concerns the generation of new knowledge and its conversion into innovation with commercial value, hence the importance of human capital. The extraction of value leads to the conversion of the value created into a form useful to the organization therefore the conversion of the innovation of the cash flow firm or into a form of strategic position. The actions associated with extracting value from intangible capital are linked to activities, procedures, decision-making processes, information, etc. and are organized according to common sense.

4. The place of intangible capital in the Moroccan economy

4.1. The challenges of intangible capital and its implications

It should be made clear at the outset that Morocco is among the first countries to have made a voluntary and deliberate choice to conduct an assessment of their global and intangible wealth.

The context of the national debate on intangible capital can be identified by highlighting the Speech from the Throne of July 30, 2014 which gave new impetus to the overall development process of Morocco, by announcing the start of a new evaluation. of the development path crossed by the country, after that led in 2005 within the framework of the report of the fiftieth anniversary. The Royal Speech also highlighted the importance of ensuring collective ownership of the concept of intangible capital, within the framework of a fruitful national debate to which the competent national institutions could make their contribution to the reflection on the levers development of the intangible capital of Morocco, alongside the Economic,

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Social and Environmental Council and “Bank Al Maghreb”. Morocco has embarked on structuring projects, including in particular the operationalization of the 2011 Constitution, which requires the use of new modes of production of public policies, and the profound reform of the education system. These two projects relate to two structuring dimensions of intangible capital, namely institutional governance and human capital, which generally represent 80% of the value of the intangible capital of a country (World Bank, 2006).

In order to assess its global and intangible wealth, Morocco has opted, in a first phase, for the World Bank method, whose approach differs from the classic GDP method. Other methods could be used to examine the question of the equitable distribution of national wealth for the benefit of all populations.

As a reminder, the method developed by this organization has the particularity of allowing:

1. A valuation of wealth in terms of stock and not in terms of flows. It is more structural than cyclical.
2. A better decomposition of the structure of national wealth (natural capital, productive capital, net foreign assets, intangible capital), which favors a careful examination of performance in terms of sources of creation of national wealth.
3. A framework for comparing the performance of countries on the basis of the weight of their intangible capital in overall wealth, just like their intangible capital per capita.

Obviously, this method is not free from shortcomings. It remains perfectible with regard to the conventions it uses. Moreover, the method has been constantly improving since the first report published in 2006, passing through that of 2011. The refinement of the method would make it possible to take into account its results later in the development of the strategic framework that the World Bank carried out with its partner countries.

As mentioned above, the World Bank’s method of calculating intangible capital has the merit of providing a framework for international comparison to assess the performance of countries in general and Morocco in particular. According to World Bank assessments, the overall wealth of Morocco, calculated in constant dollars (2005) per capita, increased by 54% between 2000 and 2013. The intangible capital per capita increased by almost 60% between 2000 and 2013; its share in overall wealth is around 75%. This progression reflects the development of the country during this period. In fact, the World Bank said in its latest report on the wealth of nations that intangible capital grows as the level of development in the country accelerates. (World Bank, 2006).

4.2. Empirical framework

Following our survey which was the subject of how this intangible capital is perceived and evaluated within organizations. This survey was in

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the form of an interview and survey with around thirty organizations of different forms and legal status located in Tangier.

We administered a survey to around thirty public and private organizations located in the Tangier region, comprising four main axes and covering more than twenty open or closed questions of a qualitative and quantitative nature.

The questionnaire has four main components:

Component 1: The intangible capital concept

Component 2: Collection of intangible capital

Component 3: Evaluation of intangible capital

Component 4: Management of Intangible Resources

In order to enlighten the respondents, we gave the following definition of intangible capital: "Intangible capital refers to the hidden wealth of the business, which means, everything that allows it to create value that cannot be detected on reading his balance sheet.

4.3. Results

After distributing the survey to the organizations and companies under study, we have received the different validated responses, and here are the images of the counting grids taken in order to make their interpretation and analysis in the following part:



Figure 2. *Elements of intangible capital identified*

The two most common types of intangible capital in companies are human capital and relationships.

The organizations that were the subject of our survey all realized the importance of the human factor: knowledge, know-how, know-how of the individuals in their company. All of the companies surveyed believe that they have one of these elements of intangible capital.

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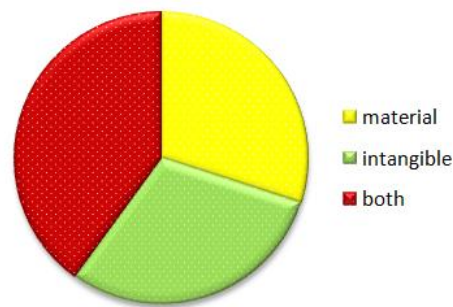


Figure 3. The value of company

It is important to note that no company questioned considers that the value of its business is based solely on its material capital (machine, tools, etc.) or intangible capital (knowledge, interpersonal skills, know-how). A large majority believe that its value is based on both intangible and tangible capital. They believe that their intangible capital is far more important than their tangible capital.

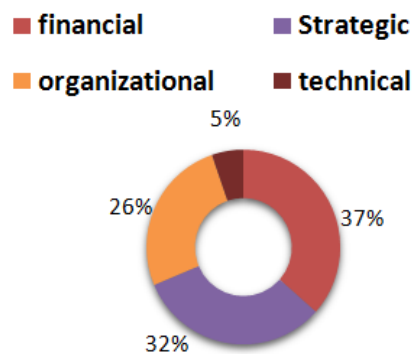


Figure 4. Type of impact

Respondents believe that a threat to intangible capital (for example, failure of human resources, etc.) generally has an impact at the financial level, then at the strategic level, at the organizational level and finally at the technical level.

The survey we carried out allowed us to build up and then develop our theoretical approach. Thus, we were able to better understand our empirical field. The interviews carried out with the various managers, directors and representatives of the organizations surveyed also confirmed our opinion on the need for support from business leaders in terms of decision support in the face of risk on intangible capital.

The majority of respondents agreed that a company that takes intangible capital into account will have a decision-making advantage over another that does not take into account this essential component.

5. Conclusion

The purpose of this research is to study the interactions between the different components of intangible capital and their effect on the creation of business value. To do this, we split our work into three main points:

In point (I), we presented the general theoretical framework of our work. We first defined the concept of intangible capital. In a second step, we sought to identify its decomposition. The third stage was devoted to studying the relationship between the different components of intangible capital as well as with the creation of business value.

At the end of this theoretical investigation, we have identified three main components of intangible capital, namely the human capital which represents man in the company (experience, training, management capacity, interpersonal relations, motivation, etc.), the structural capital which represents all that remains in the company at the end of the day (the culture of the company, internal communication, organization, innovation, etc.) and customer or relationship capital; Is everything that links the company to its environment (relations with shareholders, partners, customers, suppliers, society, etc.).

The second point was devoted to explain how the dynamics of intangible capital affect the value of the business. After having well explained the value of the company and intangible capital as well as the place and the management of the intangible capital within its latter, we came to conclude that the valuation of the intangible allows to have a global vision of the company, highlights its potential, which allows it to better adapt its strategy in a changing environment. However, the value created by intangible assets is intimately linked to the context in which the company operates. In any case, it is essential that investment in intangible capital is aligned with strategy so that it can bear fruit. Also, isolating an intangible asset is of little interest because it is the good articulation of the intangible assets between them that will make the financial performance of a company. It should never be forgotten that if a company can improve the social conditions that surround it, it will systematically improve working conditions and inevitably trigger a virtuous circle improving the economic conditions of the company. Obviously the valuation of intangible capital has drawbacks. The biggest disadvantage is the influence of individual perceptions when developing the survey. In this case the choice of actors involved in the valuation is of paramount importance. In addition, even if the valuation reflects the economic reality at a given time, this value will no longer be valid from one week to another because of the volatile nature of the intangible and its constant evolution. Finally, only few economic actors are aware of the strength of the intangible capital.

The last point is based on an empirical study. The comparison of our theoretical model with field data was carried out by administering a research survey to a sample of companies, which operate in Tangier region, selected according to their sizes and their juridical nature that has strengthened our model.

References

- Abeyssekera, I. (2006). The project of intellectual capital disclosure: researching the research, *Journal of Intellectual Capital*, 7(1), 61-77. doi. [10.1108/14691930610639778](https://doi.org/10.1108/14691930610639778)
- Bontis, N. (2003). HR's role in knowledge management. *Canadian HR Reporter*, 16(5), 8-9.
- Brooking, A. (1996). *Intellectual Capital: Core Asset for the Third Millennium*. Cengage Learning.
- Chen, J., Zhu, Z., & Xie, H.Y. (2004). Measuring intellectual capital: a new model and empirical study. *Journal of Intellectual Capital*, 5(1), 195-212. doi. [10.1108/14691930410513003](https://doi.org/10.1108/14691930410513003)
- Edvinsson, L. & Malone, M. (1999). *Le Capital Immatériel de L'entreprise: Identification, Mesure, Management*. Paris: Éditions Maxima.
- Edvinsson, L. (2000). Some perspectives on intangibles and intellectual capital 2000, *Journal of Intellectual Capital*, 1(1), 12-16. doi. [10.1108/14691930010371618](https://doi.org/10.1108/14691930010371618)
- Gallego, I., & Rodriguez, L. (2005). Situation of intangible assets in Spanish firms: an empirical analysis. *Journal of Intellectual Capital*, 6(1), 105-120. doi. [10.1108/14691930510574690](https://doi.org/10.1108/14691930510574690)
- Green, A. & Ryan, J.C.H. (2005). A framework of intangible valuation areas (FIVA): aligning business strategy, *Journal of Intellectual Capital*, 6(1), 43-67. doi. [10.1108/14691930510574654](https://doi.org/10.1108/14691930510574654)
- Montalan, M.-A., & Vincent, B. (2012). Proposition d'un modèle d'évaluation du capital immatériel pour les organisations transversales à l'hôpital: le cas des Equipes Mobiles de Gériatrie (EMG). In 31e Congrès de L'association Francophone de Comptabilité, (pp.10-12), mai 2010, Nice.
- OCDE, (2000). Une nouvelle économie? Transformation du rôle de l'innovation et des technologies de l'information dans la croissance, OCDE, Paris. [[Retrieved from](#)].
- Pépin, J. (2006). Capital immatériel, 7 jours pour comprendre, journées d'étude. CIGREF. [[Retrieved from](#)].
- Roos, G., & Roos, J. (1997). Measuring your company's intellectual performance, *Long Range Planning*, 30(3), 325-426. doi. [10.1016/S0024-6301\(97\)00022-8](https://doi.org/10.1016/S0024-6301(97)00022-8)
- Solleiro, J.L., & Castanon, R. (2005). Competitiveness and innovation systems: The challenges for Mexico's insertion in the global context. *Technovation* 25(9):1059-1070. doi. [10.1016/j.technovation.2004.02.005](https://doi.org/10.1016/j.technovation.2004.02.005)
- Stewart, T.A. (1997). *Intellectual Capital: The New Wealth of Organizations*. New York: Doubleday.
- Sullivan, P. (2000), *Value-Driven Intellectual Capital How to Convert Intangible Corporate Assets into Market Value*, John Wiley and Sons, New York, NY.
- World Bank, (2006). Where Is the Wealth of Nations? Measuring Capital for the 21st Century. Washington, DC: World Bank. [[Retrieved from](#)].



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