

Managers' perceptions of intellectual capital: An empirical study in the Tunisian context

Mohamed Ali Boujelbene^{a*} and Habib Affes^b

^aPH.D. Student in Accounting and Financial Methods, University of Sfax, Tunisia

^bProfessor in management accounting, University of Sfax, Laboratory of Research: LARTIGE- Faculty of Economics and Management Sciences Sfax, Tunisia

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ABSTRACT

The purpose of this exploratory research study is to examine the extent of recognition of the concept of intellectual capital in the Tunisian context and to identify the perceptions of managers concerning the accounting treatment and disclosure of this hidden concept. A survey questionnaire was conducted among 51 Tunisian managers. The results of this survey argue that the majority of respondents perceive the elements of intellectual capital as important value drivers for their business. This study shows that managers are aware of the shortcoming of the present accounting system and they approve previous studies that propose voluntary disclosure of information relating to intellectual capital as a solution to compensate for the loss of relevance of traditional accounting information. The present study presents a significant interest in the accounting literature and provides whether it would be appropriate for the Tunisian accounting standard setter to ask companies to disclose more intellectual capital information.

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1. Introduction

Recent years have witnessed a considerable growth in the significance of intangible in driving business success. In fact, the shift from industrial age to the information age is changing the structure of global economy, and highlighting the importance of intangibles or intellectual capital. The role of intellectual capital in organisations has attracted substantial interest. There seems to be general consensus that intellectual capital is an integral part of a firm's value-creating processes and is important for creating and maintaining competitive advantage (OCDE, 2006; Holland, 2006; Wagciengo & Belal, 2012).

Despite the increase awareness given to intangibles, there is a collective lack of understanding and difficulty to link with financial reports (Lev & Zambon, 2003). Therefore, the study of intangibles or intellectual capital has become an important accounting issue in both academia and practice. Despite

*Corresponding author.

E-mail addresses: boujelbene.medali@gmail.com (M. A. Boujelbene)

all the interest in this concept, a plethora of terminologies are used in discussing the intellectual capital in the literature (Zeghal & Maaloul, 2011). Terms generally used are “intangibles”, “intangible assets”, “knowledge assets”, “intellectual capital”, “intangible capital” “intellectual assets” “intangible resources” and “knowledge resources”. However, there seems to be a consensus in the accounting literature that intellectual capital is defined as “non-physical resources of value generated by innovation, organizational structure and human resource practices” (Lev, 2001).

It is made of three major categories: human capital, structural capital and relational capital (Guthrie & Petty, 2000; Lev & Zambon, 2003; Boedker et al., 2005; Abeysekera, 2008; Mangena et al., 2010). This is the classification used in this study. Human capital is recognised as an important firm resource and is viewed as covering training, experience, intelligence, relationships and insights of individual managers and workers in the firm (Marr et al., 2004; Sonnier, 2008). It therefore includes the knowledge, professional skills, experience and innovativeness of employees within an organisation. Structural capital made up of the structures and processes employees develop and deploy in order to be productive, effective and innovative (Boedker et al., 2005). This includes, for example, patents, organisational culture, management philosophy, new product development, information systems and processes. Relational capital captures the knowledge of market channels, customer and supplier relationships, and governmental or industry networks. Hence, it relates to the organisation’s relationships with external stakeholders be they suppliers, customers or others (Guthrie et al., 2007; Marr et al., 2004).

The accounting treatment of intellectual capital raises many questions at different levels of analysis (Skinner, 2008). Sullivan and Sullivan (2000) showed that traditional accounting principles, which are based on tangible assets, historical cost accounting and prudence, would be unable to evaluate intellectual capital which is the most valuable asset for many companies. Indeed, the conventional accounting remains focused on tangible assets. Like many researchers in financial accounting, we will consider in this study, the term "intellectual capital" as the set of elements not taken into account in accounting. In order to compensate the loss of relevance of financial information, several researchers in this field have presented the voluntary disclosure of information on intangibles as the solution (Zeghal & Maaloul, 2011).

In this field of research, several studies have examined various issues concerning the importance and contribution of intellectual capital to the success of a business (Steenkamp & Kashyap, 2010). Other studies have addressed the issue of the role of voluntary disclosure of the hidden capital to overcome the loss of relevance of accounting information. The majority of this research has been conducted mainly in large companies in countries of Europe and America. However, there is limited evidence as to whether this assumption and argument is valid for small and medium firms in developing countries (Stenkamp & Kashyap, 2010).

The current study attends to this gap and investigates the level of recognition of intellectual capital on the one hand and the importance of disclosure of information relating to this capital in the Tunisian context, which is based especially on SMEs.

In other words, the key issues addressed by this study are:

- Do managers aware of the growing importance of intellectual capital as a major source of value creation?
- If so, does managers persuaded that the traditional accounting model fails to present the concept of Intellectual capital?
- Do managers agree in the role of voluntary disclosure as the solution to compensate for the loss of relevance of accounting information?

Thus we study the practical approach of intellectual capital through a questionnaire survey to identify the perceptions of Tunisian managers to the importance, the accounting and disclosure of this concept.

This paper is structured as follows: Firstly, we propose a review of the literature that shows the importance and contribution of intellectual capital in business success on the one hand and the relation between accounting and intellectual capital on the other hand. We then present the research methodology. The results will then be discussed. Finally, we conclude with a conclusion in which we try to highlight the academic and managerial implications of our research and its limitations.

2. Literature Review

2.1. Importance and contribution of the intellectual capital

It is argued that IC is one of three vital resources (the other two being physical and financial assets) of organisations (Marr, 2008). In addition, several researchers and professionals show that intellectual capital assets become the main source of value creation by firms in the new economy based on knowledge (Bontis et al., 1999; Lacroix & Zambon, 2002; Chen et al., 2005; Kong, 2008; Haji & Ghazali, 2012). Several research studies affirm the importance and contribution of intellectual capital to business success (Edvinsson & Sullivan, 1996; Prokopeak, 2008). However, empirical studies that have examined the perceptions of managers of the importance and contribution of intellectual assets are limited (Steenkamp & Kashyap, 2010). Hall (1992) conducted a questionnaire survey among 847 UK Chief Executive Officers to determine the relative importance of the contributions that each provides intellectual asset for the success of the company. The response rate in this study was low (11% or 95 respondents). Intangible resources were ranked in order of importance. The company's reputation, product reputation, expertise of employees and culture presented the most important elements for business success.

Mazars (2000)¹ conducted a survey of 450 executives in order to identify their perception on intellectual capital. As a result, nearly 90% of those interviewed confirmed their interest in the strategic importance of intellectual capital. Research center in human capital (CCHCR) also conducted empirical studies on this topic (Litschka et al., 2006). They conducted two surveys, one in 2000 and another in 2004. In both periods, Austria 300 managers were asked to describe the importance they attach to the intellectual capital of their company and the exact meaning of the term they perceive "human capital". In the 2000 survey, 60% attach great importance to intellectual capital and 58% of respondents had no idea what the "human capital" means (Litschka et al., 2006). In the 2004 survey, most managers better recognize the term human capital. In fact, 67% of respondents attributed the skills and knowledge to human capital, 56% perceive the human capital as human resources (personnel) and 44% admit that intellectual capital means human capital. The percentage of respondents who have no notion attributed to human capital is negligible (Litschka et al., 2006).

On the importance of human capital for their businesses, on a scale of 1 to 5 (1 = not important and 5 = very important), the average perceptions of managers was 3.8. This is a low value taking into account the transition from the industrial economy to the knowledge economy and information where the key to business success is largely based on innovation, competence and men intelligence. DiPiazza and Eccles (2002) argue that managers consider non-financial indicators (such as product quality and service, customer satisfaction and loyalty, and operational efficiency) greater than the current accounting results, but they also give high priority to these indicators in determining future financial results. Recently, Steenkamp and Kashyap (2010) used a questionnaire to survey New Zealand SMEe managers to determine their relative perceptions about the importance of and the contributions that intangible asset components make to their businesses, and to assess their familiarity with the term intellectual capital (IC) and their preferences in using the term IC versus intangible assets. The response rate of this study was low (10 per cent or 30 respondents). The results document that intangible assets are important and are value drivers of business' success for small and medium

¹ Cited by Escaffre (2002)

enterprises. The majority of respondents perceive intangible asset components to be essential, very important and important to the success of their business and that these components collectively make several contributions to their businesses. Intangible resources were ranked in order of importance. The most important to business success were found based on average rating are customer satisfaction, customer loyalty, corporate reputation, product reputation and employee know-how. A minority of respondents indicated that only a few components are not very important and not important at all, the least important component being distribution agreements, followed by employee education and relationships with investors. The majority of respondents are familiar with the term IC, and the same number prefer to use the term “intangible assets” as those preferring to use the term IC.

The majority of these studies have been conducted in large companies in developed countries except the study of Stenakamp and Kashyap (2010). However, there is a lack of research in the literature that has examined the importance of intellectual assets in SMEs. However, we were unable to find evidence of research that focussed on the significance of intangible assets applied to SMEs.

Not only that leaves a gap in the literature but rather shows that there is a lack of information, knowledge and understanding of the role of intellectual assets in the process of value creation especially for countries where SMEs make up a significant part of the country’s economy and employment. The current study attempts to fill these gaps

2.2. Failure of traditional accounting to represent the intellectual capital

Despite the growing importance of intellectual capital, traditional accounting remains focused on tangible assets, in fact there is a lack of recognition for intangible assets.

The evaluation of intellectual capital in the accounting framework raises many questions at different levels of analysis (Skinner, 2008). Indeed, accounting standards recognize a shortlist of intangible assets such as research and development costs, patents, trademarks and goodwill for the consolidated accounts. In addition, the integration of these elements in the financial statements (balance sheet) is subject to fairly restrictive criteria that cause the rejection of a large number of tangible and intangible elements of "intellectual capital" of Financial Statements (Bessieux-Ollier et al., 2006).

Sullivan and Sullivan (2000) show that traditional accounting which is based on tangible assets, historical cost accounting and conservatism will be unable to evaluate intellectual capital is the most important asset to the success of any business.

In the same context, Escaffre (2002) shows that the traditional accounting model is based on a strictly numerical modeling through which the elements of intellectual capital, because of their ambiguity, excluded from the accounting representation. These investments in intellectual capital constitute therefore contrary to tangible investment, a “hidden value” for the company in addition to its equity capital (Andrieux, 2005; Audebrand & Tremblay, 2003; Haji & Ghazali, 2012).

This shows that the accounting literature addresses several critical to the traditional accounting model, given its ability to assess companies. Most researchers agree, in fact, that the existing accounting model does not optimally present the intellectual capital because it is based on very restrictive rules and principles that give little space in the balance sheet. It fails to recognise many knowledge-based intangibles. Similarly, users and business leaders perceive that this lack of accounting recognition, adding to the growing role of intellectual capital in the creation of value, means that financial statements conventional financial statements have become less relevant (Skinner, 2008 ; OCDE, 2006). It is therefore necessary to find solutions to these gaps.

2.3. Voluntary disclosure as a solution to palliate the negatives consequences of inadequate treatment of intangibles

To overcome the negative consequences of failure of traditional accounting information, the researchers in this field have presented the voluntary disclosure of information on intangibles as the solution (Zeghal & Maaloul, 2011).

In this sense, several reports (AICPA, 1994; FASB, 2001; FASB, 2001; ICAEW, 2003; OECD 2006) and various works in the prior literature (Lev, 2001; Holland, 2006; Beattie & Pratt, 2002; Garcia Meca, 2005; Sonnier, 2008; Zeghal & Maaloul, 2011) have called companies to provide more disclosure on intellectual capital (know-how, patents, human resources, customers, etc.). These reports and studies document that the information on intellectual capital is the dominant factor in the assessment process undertaken by investors.

In this context, the accounting literature has examined empirically the effect of the voluntary disclosure on the value of the company on the financial market and on the cost of capital.

a) Disclosure and the cost of capital

Reducing the cost of capital has been suggested by scholars (Lev 2001) and accounting bodies and regulators (FASB, 2001; ICAEW, 2003; OCDE, 2006, 2008) as the result of improved disclosure on intellectual capital. The view commonly expressed by academics (Leuz & Verrecchia, 2000; Lev, 2001), practitioners (Levitt, 1998), and accountancy bodies (FASB, 2001; IASB, 2002; OCDE, 2006) is that the improvement of voluntary disclosure reduces the cost of capital. This has been empirically validated by several researchers. For example, Botosan (1997) has developed its own index of disclosure and has been shown to low analysts following American companies; a large disclosure in their annual reports is associated with a lower cost of capital. In this context, Graham et al. (2005) interviewed managers of 312 U.S. companies have also found that 39.3% of the managers interviewed were in complete agreement that the information provided voluntarily to reduce their cost of capital (against 22% do not agree).

Examining voluntary disclosure of specific information on intangibles in the annual reports of European companies, Kristandl & Bontis (2007) have recently provided convincing empirical evidence for the existence of a negative relationship between the level of disclosure vanguard of intangibles and cost of capital. These results were later confirmed by Orens et al. (2009) have demonstrated that increased disclosure of intangibles by European companies via their websites associated with low information asymmetry, low capital cost and low cost of debt. Mangena et al. (2010) examined the impact of voluntary disclosure on intellectual capital, cost of equity of listed companies in the UK market. They concluded that the level of disclosure on intellectual capital is negatively associated with the cost of equity. Therefore, we can conclude that the information disclosed to the public (non-financial or relating to intellectual capital) can negatively affect the cost of capital for companies.

b) Voluntary disclosure and market value of the firm

Several empirical studies, often conducted within the framework of economic theory (Verrecchia, 1983; Diamond, 1985; Merton, 1987), show that the value of the company on the financial market is influenced by the nature of the information disclosed in the market.

For example, Dumay and Tull (2007) have shown that publication on intellectual capital seems to influence the stock prices of companies in Australia. More specifically, the authors noted that investors in the Australian market are sensitive to information that describes all technology systems, processes and organizational tools, including corporate culture. Similarly, a study by Wang (2008) of 893 electronics companies (S & P 500) between 1996 and 2005 proved the existence of a significant relationship between disclosure on intellectual capital and the value of the company on the financial market. Abdolmohammadi (2005) has provided convincing empirical evidence of the existence of a positive and significant association between voluntary disclosure on intangibles in the annual reports of U.S. companies (Fortune 500) over the period from 1993 to 1997 and their market capitalizations. Recently, Wang and Chang (2008) studied a model describing the relationship between the disclosure of information on intangibles, accounting performance and market value of companies listed on the Taiwan market.

The results demonstrate the capacity of the voluntary disclosure of intangible capital to reduce information asymmetries and remove some of the uncertainties. In a questionnaire sent to a group of financial professionals in Hong Kong, Petty et al. (2008) found that 88% of respondents believe that increased disclosure on intellectual assets would be rewarded by an increase in the share price of the company. More recently, Orens et al. (2009) confirmed these findings in a sample of European firms by showing that the value of the company on the financial market is positively associated with the level of disclosure of intangible assets on its website. Using the scores provided by the AIMR disclosure, Healy et al. (1999) found that the shares of companies that have large and lasting improvements in their quality of disclosure are consistently outperform their peers in the same industry for the current year and the year after increase disclosure. This result was confirmed by Lajili and Zéghal (2006) using the approach of portfolio performance. They showed that companies which disclose more information on their human capital are more efficient than other firms that disclose less information. This indicates of course that this information is relevant for investors. Therefore, we can conclude that the information disclosed to the public (financial or non-specific intangibles) can complete the financial statements, and that financial markets reward companies for increasing the information they disclose.

Pressure from investors and emerging markets, very demanding on the quality of information and analysis on corporate performance have led some groups to voluntarily disclose information explaining their intangible investments. This information completes the financial statements and provides elements of analysis to assess the ability of companies to create value in the future. In this sense, Garcia-Meca (2005) emphasizes that voluntary information on intellectual capital tend to generalize in the annual reports in recent years. Moreover, Abeysekera (2008) reveals an increasing demand for credible communication, useful and understandable. These results should not distort the importance of current financial statements, but simply point out that they can gain more relevance if they are accompanied by non-financial indicators on intellectual capital.

This type of communication is supposed to help non-financial managers to meet the demand for information on intangible capital. As already mentioned, the voluntary disclosure on intellectual capital has several advantages, but this publication suffers from various constraints that may force companies to a notorious reluctance to reveal information about the intangible.

2.4. Barriers to voluntary disclosure of intellectual capital

Voluntary disclosure of intellectual capital is a real means available to managers to meet the information needs of different stakeholders. However, ICDs also come at a cost, such as the cost of gathering, processing and interpreting the necessary data (Vergauwen et al., 2007). These costs are positively correlated with the detail required data related to intellectual capital.

Moreover, Vergauwen and Van Alem (2005) identify three other opposing factors for IC disclosure, such as:

- (a) The transparency drawback in competitive markets;
- (b) Regulatory barriers; and
- (c) Auditor conservatism (Vergauwen et al., 2007)

a) The transparency drawback in competitive markets

The main cost of the voluntary disclosure of intellectual capital is the cost related to the disclosure of strategic information to competitors.

Since the information disclosed in the annual reports are public, competitors can use for their own purposes (Vergauwen & Van Alem 2005). According to Verrecchia (2001) the disclosure of sensitive information may cause negative externalities and business disadvantage compared to its competitors.

b) Regulatory barriers (risks of misunderstandings and lawsuits increased)

Voluntary disclosure of certain information relating to intangible assets may, in some cases, unduly harm the image of the company.

Thus, managers may not disclose such information because such disclosure could lead to litigation costs or political costs.

- The cost of litigation: the voluntary disclosure of certain information may result in legal action if information are wrong. Therefore, managers should ensure that they make disclosures based and fair.
- The political costs: the political costs generally refer to the effects to be very visible to the public and pressure groups (unions, government agencies, etc.).

c) The auditor's conservatism

The conservatism of the auditor may be, as an argument against voluntary disclosure of intellectual capital. Clarkson et al. (2003) showed that international audit firms present conservative audit behaviour to protect their reputation capital and to avoid risk of litigation. Conservatism can be clearly stated in the voluntary disclosure of intangible capital, because of the vague and contradicting regulations in this area (Vergauwen & Van Alem, 2005). The auditors support the least amount of risk when the audited financial statements are stated strictly in reference to accounting regulations and auditing standards. We can see that the voluntary disclosure of intangible capital has two conflicting issues which conciliation is not certain. On the one hand, voluntary disclosure of intellectual capital has several benefits for the company, on the other hand it can be inhibited by additional costs.

Having presented throughout the first part, the theoretical foundations on the importance of intellectual capital for the success of the company on the one hand and the role of voluntary disclosure on intellectual capital as the solution for the complete financial statements and compensate for the loss of relevance of accounting information on the other hand. We study in the second part of this research the practical approach of intangible capital, through a questionnaire, to see the perceptions of managers in our Tunisian context to the importance, the accounting and disclosure for this hidden capital. The research method of the current study is discussed in the following section.

3. Research Method

3.1. Data collection

Our exploratory investigation presents a collection of perceptions of respondents on intellectual capital and their level of awareness of the failure of financial accounting to this concept and proposed solutions. The survey was conducted using a questionnaire². The questionnaire was built on the basis of the results of our theoretical work. Indeed, the literature has allowed us to collect a set of concepts, methods and tools that we wanted to test in the Tunisian context. The target population consists of managers (CEO, CFO and accountant) as a responsible for the financial reporting of companies, particularly regarding the accounting and disclosure of information on intellectual capital. Thus, the questionnaire includes 11 questions divided into three parts. In addition to questions about general information of the respondents, the questionnaire contains 8 questions divided into two parts.

The first part (B) focuses on the perception of the importance and contribution of intellectual capital for the success of the company. It includes items on the elements of intellectual capital whose responses are recorded on a five-point scale ranging from 1 to 5. We asked participants to indicate, using a scale of 1 to 5, the importance of each of the 23 components to the success of their business.

The scale indicates the following: 1= not important at all, 2 = not very important, 3 = important, 4 =, very important and 5 = extremely important (Essential). The results are summarised in Table 3. We used use items developed by Steenkamp and Kashyap (2010). The second part (C) focuses on the role of voluntary disclosure on intellectual capital to overcome the failures of financial accounting (question 6-11). The survey was pilot-tested with seven managers from our sample. Generally, they viewed that the questionnaire was understandable and they proposed some amendments in order to be adopted in the Tunisian context. The collection of the survey questionnaire consists of two ways: The

² An English version of the questionnaire used in this study is shown in Appendix 1

first is data collection through visiting the selected companies. For the part that we have not been able to speak directly, we sent the questionnaire to 200 companies via e-mail that we have arranged with the site of the industrial promotion agency (IPA) www.tunisieindustrie.nat.tn.³

3.2. The sample

The phase of data collection allowed us to collect 59 questionnaires. Of 200 questionnaires sent by internet, we were able to recover only 13 questionnaires with a response rate for this type of data collection in the order of 6.5%. Regarding the method of collection through moving companies in the sample, we distributed 75 questionnaires and we could recover 46 questionnaires with a response rate of approximately 61.33%. Some observations have been eliminated and the elimination concerned not fully completed questionnaires and questionnaires with respondents having no more than one year of experience in the business. This elimination leads to the reduction of the number of observations from 59 to 51. The following table outlines **Executive and managerial positions of respondents**.

Table 1
Executive and managerial positions of respondents

Department	Number	Percentage %
Financial director	27	52.94
Chief Accountant	12	23.52
Administrative and financial director	8	15.68
Director	4	7.8
Total	51	100

Through a descriptive analysis of information on the responsible participants in the survey, we found that the average years of work of the respondents in their company is 6 years while they were in their current position for an average of 4 years. 76% of respondents are holders of a degree in finance or accounting. These results reinforce the reliability of our sample because the respondents are familiar with financial reporting and have the enough experience to adequately respond to our questionnaire. Based on these statistics, it was deemed that the respondents were indeed appropriate to answer the questionnaire. It should be noted that in terms of industry, our sample is more or less diversified. The managers represented 42 companies from different Tunisian sectors (See Table 2).

Table 2
Distribution of firms by sector

Activity sector	Company	Percentage %
Food	6	14
Plastic	4	9.5
Pharmaceutical	5	0.11
Chemical	3	7.14
Clothing industry	4	9.5
Metal	5	11.9
Households goods	6	14
Information Technology	9	21.42
Total	42	100

4. Discussion and results

This study does not attempt to generalize the results, however it can provide some descriptive statistics on the perceptions of managers to the importance of intellectual capital, its recognition and voluntary disclosure of information relating to this hidden capital.

The results are presented and discussed separately for the two sections of the questionnaire.

³ The web site of the Agency for the Promotion of Industry and Innovation is the following : www.tunisianindustry.nat.tn

4.1. Recognition and importance of the elements of intellectual capital

According to statistics obtained, we found that the degree of recognition of the concept of intangible capital by various respondents is quite high, it is 92% (Answer yes).

Just 8% of respondents do not have any idea about this concept, they are therefore eliminated from the analysis of the rest of the questionnaire. Thus, it appears that the majority (92%) of respondents are familiar with the term intellectual capital.

They are aware of the importance of intellectual capital in the process of value creation. Table 3 presents the responses regarding the importance of various elements of intellectual capital.

In interpreting this table as a whole, nearly 81.8% of all respondents perceive 23 items as "extremely important" (62.5%) and "very important" (19.27%).

Table 3 shows that customer satisfaction, expertise of employees, employee creativity and experience of the employees are the most active perceived as essential to the success of the company.

Table 3
Responses about importance of intellectual capital components

Components of Intellectual Capital	(1)Not important at all	(2)Not very important	(3)Important	(4)Very important	(5)Extremely important (Essential)	Total
Relational Capital						
1) Customer Satisfaction	1	1	3	6	40	51
2) Customer Loyalty	2	5	9	10	25	51
3) Distribution Agreements	2	3	6	9	31	51
4) Brands	2	3	5	12	29	51
5) Corporate reputation	1	2	4	11	33	51
6) Product reputation	1	3	4	12	31	51
7) Supplier know-how	2	1	3	12	33	51
8) Distributor know-how	1	2	4	11	33	51
9) Relationship with suppliers	2	3	4	12	30	51
10) Relationship with investors	2	2	5	10	32	51
11) Relationship with other stakeholders	1	4	6	11	25	47 ^a
Human Capital						
12) Employees Innovativeness	2	3	2	6	38	51
13) Employee Know-how	1	1	4	6	39	51
14) Employee Work Experience	2	2	3	5	39	51
15) Employee education/qualifications	1	2	4	8	36	51
16) Employee job satisfaction	1	1	3	11	35	51
17) Employee loyalty	2	1	7	9	32	51
18) Training of employees	1	2	5	10	33	51
Structural Capital						
19) Databases	3	4	5	11	28	51
20) Intellectual property	3	4	6	12	24	49 ^a
21) Management systems	4	3	7	9	28	51
22) Technological processes	5	2	8	10	21	46 ^a
23) Corporate culture	1	1	9	9	31	51
Total	41	60	110	224	727	1162

^aNot all respondents answered these questions

Table 3 reveals also that respondents attach more importance to human capital comparing to other categories of intellectual capital. Indeed, 70% of respondents perceive the elements of the human capital category as "extremely important" and 61% against 55.2% for the other two components of intellectual capital (relational capital and structural capital respectively). In the category of human capital, several factors are considered "extremely important" and "very important" (85.6% in total) against (81.8%) for relational capital and (76%) for the structural capital. Moreover, only (2.8%) of the elements of human capital were perceived as being "not at all important" compared to (3.05%) in the category of relational capital and (5.64%) in the category of structural capital. The descriptive results

confirm the consciousness of Tunisian managers regarding the importance of the contribution of different components of intellectual capital to the success of their businesses.

4.2. Accounting and intellectual capital disclosure

Concerning the accounting treatment of intangibles, 86% of respondents strongly agree that financial accounting suffers from a lack of recognition of the intellectual capital components, despite the increasing importance of intangibles in the new knowledge economy.

Furthermore, 77% of respondents strongly agree that voluntary disclosure on intellectual capital could palliate the shortcomings of financial accounting. Only 7% of respondents answered "not agree" with this proposal. These managers can motivate their views by the difficulty of identifying and properly valuing intellectual capital on the one hand and the confidentiality of such information which may have an impact on corporate transparency.

In general, we can conclude that the respondents are aware of the loss of relevance of accounting information and they perceive voluntary disclosure on intellectual capital as a solution to overcome the accounting difficulties and to complete traditional accounting information. This corroborates the previous literature on this topic. Regarding barriers to the disclosure of information relating to intellectual capital, our survey finds that 51.3% of respondents perceived that the costs of the disclosure of information on intellectual capital are reasonable while 35.7% believe that these costs are high. In the same context, 71% of respondents find that the expected benefits of disclosure of information on intellectual capital in relation to the costs of its preparation. About the role attributed to external auditors, 52% of respondents think that the conservatism of these auditors presents an obstacle to the disclosure of information relating to intellectual capital.

Regarding the impact of voluntary disclosure on the major source of value creation for the company, 67% of respondents believe that the disclosure of such information may harm their position on the market, and this also may threaten their competitive advantage of firms. We can see that the managers interviewed are aware of the benefits of voluntary disclosure on intellectual capital on the one hand, they perceive that the production of such information requires additional costs by the company on the other hand. Faced this situation, the question arises as regards the manner of reconciling the benefits and costs of disclosure relating to the intellectual capital. It thus seems necessary to have a cost-benefit balance. Disclosed information relating to intellectual capital must normally obtain a higher interest cost of production.

To conclude, we can see a causal link between the responses to Part B of the questionnaire (perceptions of the importance of intellectual capital items) and Part C of the questionnaire (role of voluntary disclosure to compensate for the loss of relevance of accounting information).

Indeed, the perception of the importance of intellectual capital can explain the respondents' views on the shortcomings of traditional accounting and the role of voluntary disclosure to compensate for the loss of relevance of accounting information.

5. Conclusion

The purpose of this research was to explore the Tunisian managers' perceptions of the importance of intellectual capital, accounting and disclosure related to this hidden capital. Overall, this exploratory study reveals that there is a raising awareness among Tunisian managers that the intellectual capital components are important, value drivers and give their businesses a competitive advantage. It presents an empirical validation of the importance of intellectual capital to business success and in particular gaps such evidence for firms in the Tunisian context which is mainly based on SMEs. This study adds to the limited prior descriptive evidence in the area of the importance and contribution of intangible asset components (Hall, 1992; DiPiazza & Eccles, 2002; Litschka et al., 2006; Steenkamp & Kashyap, 2010). It documents that managers of Tunisian SMEs consider that the majority of the components of intellectual capital as "extremely important" and "very important" to the success of

their businesses. The elements that the majority of respondents rated as "extremely important" to the success of the company are: customer satisfaction, expertise of employees, employee creativity and experience of employees. Moreover, this study provides evidence that Tunisian managers are aware of the shortcoming of the traditional accounting system regarding the intangible elements which are the main sources of value creation in companies. To fill this information void, the proposed solution in the literature is to prepare and disclose voluntary information on their intellectual capital. Respondents support the role of disclosure to compensate for the failure of accounting to consider the intangibles in the financial statements.

Despite these contributions, our study is subject to several limitations. First, the sample size is small (51 managers). This is justified by the non-cooperation of a large number of managers that we have made a remarkable effort to facilitate the participation of the latter in our survey. A second limitation is on the non-representativeness of our sample. Indeed, it is restricted to the Tunisian industrial sector. Therefore, it is unwise to assume and questionable generalization of the results to other areas. Finally, new avenues of research can be traced and the extension of our results and conclusions. This is among other things to explore like management practices and reporting of Tunisian SMEs concerning their intellectual assets. We also propose to conduct a content analysis to determine the extent of the disclosure of information relating to intellectual capital in annual reports of companies in Tunisia. Indeed, the Tunisian literature suffers from a lack of research on voluntary disclosure in general. We hope this research have at least introduced the subject to motivate other researchers to engage in this area. Indeed, our research can be a beginning for launching the debate on intellectual capital which issues are important and complex.

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Appendix 1: Questionnaire in English

A: General Information

Corporate Name
Industry
Legal form
Employees
Turnover

1. What is your current position?

Financial Director	<input type="checkbox"/>
Financial and administrative director	<input type="checkbox"/>
Chief Accountant	<input type="checkbox"/>
General Director	<input type="checkbox"/>
Others

2. How many years, you occupy your current position?

Less than 1 year	<input type="checkbox"/>
from 1 to 5 years	<input type="checkbox"/>
More than 5 years	<input type="checkbox"/>

3. What is your academic training?

Baccalaureate <input type="checkbox"/>	Licence <input type="checkbox"/>	master <input type="checkbox"/>	Doctorate <input type="checkbox"/>	<input type="checkbox"/> Others: to specify.....
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B) Importance and contribution of intellectual capital on the success of the company

4. Have you an idea about the intellectual capital?

frequently	<input type="checkbox"/>
always	<input type="checkbox"/>
Rarely	<input type="checkbox"/>
Never	<input type="checkbox"/>

5. Please comment on a Likert scale of 1 to 5 points ranging from “Not at all important” to “extremely important” the degree of importance of the items mentioned below for the success of your business:

Components of Intellectual Capital	(1)Not important at all	(2)Not very important	(3)Important	(4)Very important	(5)Extremely important (Essential)
Relational Capital					
1) Customer Satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) Customer Loyalty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Distribution Agreements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4) Brands	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5) Corporate reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Product reputation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Supplier know-how	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8)Distributor know-how	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Relationship with suppliers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Relationship with investors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) Relationship with other stakeholders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Human Capital					
12) Employees Innovativeness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Employee Know-how	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14) Employee Work Experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15) Employee education/qualifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16) Employee job satisfaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17) Employee loyalty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18) Training of employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Structural Capital					
19) Databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20) Intellectual property	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21) Management systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22) Technological processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23) Corporate culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C) The role of Intellectual Capital Disclosure

6. Do you believe that the current accounting system suffers from shortcomings regarding the accounting treatment of the elements of intellectual capital?

(1) Strongly disagree	<input type="checkbox"/>
(2) Disagree	<input type="checkbox"/>
(3) Neither agree nor disagree	<input type="checkbox"/>
(4) Agree	<input type="checkbox"/>
(5) Strongly agree	<input type="checkbox"/>

7. Do you think that voluntary disclosure on intellectual capital could overcome the failures of financial accounting?

(1) Strongly disagree	<input type="checkbox"/>
(2) Disagree	<input type="checkbox"/>
(3) Neither agree nor disagree	<input type="checkbox"/>
(4) Agree	<input type="checkbox"/>
(5) Strongly agree	<input type="checkbox"/>

8. How do you judge the costs of disclosure on intellectual capital?

Small	<input type="checkbox"/>
Reasonable	<input type="checkbox"/>
High	<input type="checkbox"/>

9. How to evaluate the costs related to advantages of intellectual capital disclosure?

related	<input type="checkbox"/>
Not quite related	<input type="checkbox"/>
Costs in excess	<input type="checkbox"/>
Benefits in excess	<input type="checkbox"/>

10. Does the intellectual capital disclosure have an impact on the transparency of the company? (Competitive advantage)

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>

11. Does the auditor conservatism can present an obstacle towards the intellectual capital disclosure

Yes	<input type="checkbox"/>
No	<input type="checkbox"/>
Explain	<input type="checkbox"/>