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Intellectual Capital and Holism Philosophy

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Abstract: This conceptual review study is based on observation of various researches at different periods of intellectual capital, where intellectual capital is seen as a primary method to raise researchers' comprehension in order to improve the understanding and knowledge of intellectual capital. Over the two past decades intellectual capital of organizations has become a large and vital body of theoretical and empirical researches with a multidisciplinary term in organizational management. One of the most important ways to understand the role of intellectual capital in firms and particularly in intellectual capital studies, is to know its philosophy. This is because disclosure of research philosophy is a crucial part of research methodology in order to study in an effective and appropriate manner. Whenever, there are numerous philosophies both scholars and researchers can reference them for study and research in different area of study. However, the contemporary literature of intellectual capital remains scant on the assimilation of its philosophy. Thus, this study intends to fill an existing gap through comparing the aspects of IC which philosophically deal with holistics. This study also provides a separate, comprehensive explanation of intellectual capital components of holism philosophy. Methodology of this review study is based on content analysis of some articles that have been focused on philosophy of intellectual capital over the past two decades. This study was conducted on "Holism" as a philosophy of intellectual capital which is one of the pioneer ideas to focus on philosophy of intellectual capital. The contribution of this study was the presentation of an overview "Holism" as an appropriate approach of intellectual capital philosophy. Actually, the contribution of this study is the introduction of "Holism" or "Holistic" as an appropriate approach of intellectual capital philosophy.

Key words: Intellectual capital, research philosophy, intellectual capital philosophy, holism philosophy, holism approach

INTRODUCTION

Research philosophy is one of the continuously discussed topics in research methodology of basic researches. Research methodologists stated that understanding research philosophy could influence better management of the researches. Additionally, one of the most important ways to understand the nature of a research, is to know its philosophy. Therefore, many scholars believe that research philosophy is a crucial part of research methodology in order to find an effective and appropriate manner of the research objectives (Curran, 2008; Greene, 2006; Kumar, 2007; Mengshoel, 2012; Remenyi, 2011; Creswell and Plano Clark, 2011; Sekaran, 2006; Cameron, 2011). Philosophy of study is a perspective that is based on a set of shared assumptions, values, concepts, practices. It can be defined as a function of how researchers think about the development of knowledge and research problems (Johnson and Christensen, 2010).

Indeed, researchers convey a commitment to philosophical beliefs even if unintentionally and it remains implicit and unacknowledged. Thus, researchers cannot avoid responsibility for critically examining and justifying the philosophical ideas that their enquiries incorporate. It follows that philosophical reflection and argumentation are central features of the methods and procedures of scientific research (Pike and Roos, 2000). Further, scholars assert that when we are engaged in philosophy of investigation, our interest is not on explanation but understanding. Thus, researchers are involved in an interpretive mode of understanding/theorizing and this theoretical stance to the world sees reality as a social construction.

Accordingly, there are various philosophies or approaches that scholars and researchers are using to design their researches, such as "Positivism", "Epistemology", "Realism", "Postpositivism", "Objectivism", "Pragmatism", "Holism". Saunders *et al.* (2007) believed that each of these philosophies is different

and that these differences will influence the way in which researcher thinks about the research process. In addition, research philosophy/approach is the development of knowledge and the nature of that knowledge. As a research methodologist, Sekaran (2006) asserted that “Research philosophy” can develop new theories and answer specific problems in a particular field which confirms the research strategy and methodology that researcher use in the development of the research.

Among the management subjects, Intellectual Capital (IC) is one of the newest concepts which gradually has become one of the main subjects in management studies early in the 21st century. Accordingly, numerous IC scholars have argued that IC plays a fundamental role in modern enterprise of knowledge-based economy to get better performance (Roos and Roos, 1997; Edvinsson, 1997; Edvinsson *et al.*, 2004; Bontis, 1999; Andriessen, 2004b; Erickson and Rothberg, 2009; Dumay, 2011; Marr and Roos, 2005).

Therefore, the concept of IC is a large and growing body of theoretical and empirical research with disciplinary and interdisciplinary terms in organizational management field (Marr, 2005b). Their growing recognition of the importance of IC as intangible assets is their tacit nature. The desire to understand, what creates a competitive advantage for a firm has stimulated many diverse streams of research on IC management (Augier and Teece, 2005). Thus, an explanation of the philosophy of IC in researches could help researchers to better recognize the roles and effects of IC in firms and firm management.

Based on the importance of “Research Philosophy” which plays significant role in directing researchers to improve their basic researches, IC researchers predominantly deal with the philosophy of IC based on “Positivism” or/and “Post-positivism” approaches. This attempt will try to recognize “Holism” as its own philosophy which underlies IC studies and researches, reflecting the stance of natural and social scientists on the subject. The contribution of this study is to provide an overview on “Holism” or “Holistic” as an appropriate approach of IC philosophy.

IMPORTANCE OF RESEARCH PHILOSOPHY

When researchers begin their study, it is essential to consider different research paradigms which by necessity involve ontology and epistemology (Justarius, 2007) as these parameters identify philosophy, beliefs, assumptions and the nature of reality and truth knowledge of that reality. Researchers could influence the best way in which the study is undertaken from design

and style through findings of studies. Therefore, it is important to recognize and focus on these aspects of a research to ensure that approaches congruent with the nature and aims of the specific questions are adopted and also to ensure that investigator biases are comprehended, subjected and minimized. Jalali *et al.* (2013) carefully considered that researchers should pay attention to inherent preferences of philosophies that are likely to shape research designs. In addition, Flowers (2009) described these aspects as part of a series of choices that the researcher must consider and showed the alignment that must connect these choices back to the original research problem. In fact, the scholar asserts that if this is not achieved, methods incompatible with the researcher’s stance may be adopted, with the result that the final work will be undermined through lack of coherence.

However, Flowers (2009) had argued why these aspects are strongly related to social scientific discipline, since the humanistic element introduces a component of “free will” which adds a complexity beyond that observed in the particular natural sciences and others. For instance, Hatch and Cunliffe (2006) focused on the point that different paradigms “Encourage researchers to check phenomena in various ways”, in order to explain in detail numerous organizational phenomena from three different perspectives therefore, highlighting exactly how different types of knowledge could be derived through observing a similar phenomenon through different philosophical perspectives. In addition, to stimulating discussion, Denzin and Lincoln (2011) emphasized how these various positions can lead to significant tension among academics.

Based on above explanations, the next area is considered as the “Research paradigm” by Blaikie (2000) and also as the “Research philosophy” by Saunders *et al.* (2007). Research philosophies are formed from basic ontological and (the related) epistemological positions which have developed in both classical and contemporary forms to effectively classify different research approaches. Further, to disclose the importance of philosophy/paradigm of researches, Denzin and Lincoln (2011) described a research paradigm as “an interpretive framework” as a “basic set of beliefs that guide’s action”. Therefore, researchers can design their researches by using of “research philosophy” through choosing one or more appropriate approaches among various existing philosophies such as Positivism, Epistemology, Interpretivism, Post-positivism, Realism, Objectivism, Pragmatism and Holism. This kind of consideration to research design by selecting “research philosophy” will also help to better understand the phenomenon of their studies. Since, based on Saunders *et al.* (2007), that they

significantly differ from each other will influence the way in which researcher thinks about their research process.

Furthermore, some research methodologists believed that research philosophy can establish new theories to answer specific problem in a particular field related to the area of the study. However, research philosophy also confirms research strategy and methodology that the researcher had used in the development of the research in different fields (Saunders *et al.*, 2007; Creswell, 2009; Sekaran, 2006).

For example, in the field of accounting, Sofian (2005) argued that the “Positivism approach” is concerned with explanation and prediction of what “does” and “will happen”. The tradition of positive economics theory had a great influence on accounting research. Jensen (1986), as cited by Sofian (2005) said: “Positive theories are concerned with the way in which variables interact in the real world and are quite separate from the normative dimensions which are the province of individual decision-makers”.

Other examples of using another philosophy on different subject is Total Quality Management (TQM) studies. According to Kumar *et al.* (2009) and Demirbag *et al.* (2006), TQM is a “Holistic Philosophy” aimed at continuous improvement in all functions of an organization and it involves all employees under the leadership of top management to produce and deliver products/services that get ahead of competitors to meet customers’ needs or requirements and organizational objective. Similarly, Oakland (2014) defined TQM as a “Comprehensive approach” to improve competitiveness, flexibility and effectiveness by planning and organizing every activity as well as involving everyone regardless of their position within the organization.

Consequently, based on the above discussion, as respectful of researchers to influence of research philosophy on their studies, they should pay attention to “Research Philosophy”, because it plays a significant role in scientific studies and could be as director of researchers to improve doing their fundamental study.

INTELLECTUAL CAPITAL

At the beginning of 21st century, many of the researches in business and management disciplines argued that intellectual capital plays a fundamental role in modern organizations in a knowledge-based economy (Roos and Roos, 1997; Edvinsson, 1997; Edvinsson *et al.*, 2004; Bontis *et al.*, 1999; Andriessen, 2004b; Erickson and Rothberg, 2009; Dumay, 2011; Marr and Roos, 2005). Generally, IC has been defined by most scholars as intangible assets or invisible capital of an organization

(Bontis, 1999; Edvinsson, 1997; Erickson and Rothberg, 2000; Stewart, 1997; Sullivan, 1999). However, IC concept is still considered to be in its “Embryonic stage” which explains this vast divergence. For evidence Andriessen (2004b) who has contributed many studies to the literature of IC, stated that each IC scholar only wanted to express a particular message that is essential from their view point. The focus of some scholars on the meaning of IC is the significance of value creation (e.g., Edvinsson, 1997; Stewart, 1997), while some such as Edvinsson and Sullivan (1996), Edvinsson and Malone (1997), Andriessen (2001, 2004a, b), Bontis (2002), Marr (2005a) among others emphasized the importance of value extraction.

Further, based on the results of the IC studies, IC has become more significant in determining the performance of enterprises in today’s global economic system (Andriessen, 2004b; Augier and Teece, 2005; Bontis *et al.*, 2000; Cabrita and Bontis, 2008; Chan, 2009a, b; Diez *et al.*, 2010; Erickson and Rothberg, 2009; Tam, 1997; Zigan and Zeglal, 2010; Andriessen, 2004a). Starovic and Marr (2003) argued that currently IC is essential to both companies and society. Some of the IC authors believed that even the board of directors style is influenced by IC components which directly boosts financial and non-financial performance of firms (Jamshidy *et al.*, 2014). On the other hand, intellectual capital can be a main source of competitive advantage for businesses and also encourage innovation in organizations (Andriessen, 2004b; Edvinsson *et al.*, 2004; Lindgren *et al.*, 2009; Kong, 2010; Andriessen, 2004a; Polit and Beck, 2012; Karchegani *et al.*, 2013). Thus, to determine the success of a company at all levels intellectual capital as an intangible asset often plays a more crucial role than material in organizations (Liu, 2010).

Edvinsson (1997) formulated IC into three basic insights, that are used as a starting point in further interpretation of the term IC:

- IC is supplementary to financial information; it is not subordinate information
- IC is non-financial capital; it depicts a non-visible difference between book value and market value
- IC is a debt issue, not an asset issue

On the other hand, IC scholars have presented different perspectives to identify and recognize IC in organizations. For example, from “Economics Perspective”, Augier and Teece (2005) provided an historical overview of the growing significance of knowledge, while IC is a driver for innovation and development activities. Johanson (2005) described the role of IC in a “Human-Resource Management

Perspective” and defined IC in this context and then discussed various tools developed to manage IC.

Further, Marr and Roos (2005) in “Strategic Perspective” on IC stated the strategic importance of IC resources and differentiated between the “Static” and “Dynamic” nature of assets. These proponents of IC, outlined the development of strategy from a market-based to a resource-based paradigm. Additionally, authors explained that IC incorporated intellectual material such as knowledge, information, expertise, intellectual property rights and experiences that create wealth in companies. Thus, for corporations and in the macro view of societies, IC is essential for a smooth transition from the industrial era to the information and knowledge era (Iswatia and Anshoria, 2007).

It seems that there is no universally accepted definition of IC. In a nutshell, IC is a multidisciplinary concept that has been extended to many functions and disciplines. However, it has equivocal nature due to interdisciplinary perspectives (Marr, 2005b). In addition, applicable tools for exploiting this concept in organizations are still vague. Based on comparison of numerous IC definitions, most definitions are based on a more or less similar classification. Logically, the frameworks have indicated that IC is a result of the inter-relation between three main components of intangible assets which include Human Capital, Structural Capital and Relational Capital (Bontis, 2002; Edvinsson and Malone, 1997; Mouritsen *et al.*, 2001).

On the other hand, Stewart (2002) claimed that IC is the third “Big idea” of the two past decades of management theory besides the “Total Quality Management” and “Re-engineering”. From another point of view, Wiig (1997) asserted that enterprises with better management of IC have gained a competitive advantage over those enterprises which place relatively less importance on IC management.

Therefore, based on the discussion above which illustrates a sample of efforts by the scholars and researchers to describe IC over the past twenty years, it may be concluded that for researchers to better understand the nature of IC they must focus on IC philosophy in their studies, as it could help them to better disclose, measure and report to influence of IC management.

HOLISM PHILOSOPHY AND INTELLECTUAL CAPITAL

According to Farlex (2014) as a philosophical identification, “Holism Philosophy” is any doctrine that a system may have whose properties are above and beyond

those of its parts and their organization. While, as a research philosophy, it is one of a number of methodologies that holding that the significance of the parts can only be understood in terms of their contribution to the significance of the whole and that the latter must therefore be epistemologically prior. According to the dictionary definition, “Holism” is “The theory that the parts of any whole cannot exist and cannot be understood except in their relation to the whole”. Further, it is important to know that “Holism” holds that the whole is greater than the sum of its parts (Farlex, 2014).

“Holism” or “Holistic” in science is identified as a quality of complex adaptive of self-organizing systems. “Quantum theory” argues that the physical world changes as it is being observed (House, 1984). Some scholars stated that the relationship between the different parts of the system is an internal holism, because this relationship helps to define not only the system but also to give final form to the parts themselves (Miller *et al.*, 1984; House, 1984). House (1984) considered organizations from the quantum view. The scholar believed that it should be noted, how significant is the concept boundaries.

For example, whether the boundary of a business organization should be expanded to include its natural environment, its local community, unemployed people, etc. All of them are issues that are open for debate. Values and ethics play a significant role in such decisions. Hence, there is a need for further decision about who should participate in defining purposes, making decisions and drawing boundaries. And because resources and interests will be at stake, as well as different philosophies, power and politics will have a considerable impact on purposeful systems.

Furthermore, Jackson (2003) argued that the encounter of holism with “Management” and “Organization Theory” has thrown up complications not found when the focus of attention for systems thinking was the natural realm. With its emphasis on holism, emergence, interdependence and relationships, complexity theory is definitely a systems approach.

According to the definition of “Holism Philosophy” it may be an appropriate explanation of intellectual capital in organization. Subsequently, IC scholars attempt to know and disclose its components and roles in today's business world. Based on the discussion above the next subsection of this study will try to explain the relation of intellectual capital and Holism as a philosophy which is based on the IC scholars' opinions.

Components of intellectual capital in holism: Based on similar characteristics of the definition of IC, IC

management can be defined as a “Holistic Approach”. In IC studies, when researchers simultaneously focus on employees, structures and customers’ needs and expectation through the integration of all organizational functions and involvement of all individuals to continuously improve, the researchers pay basically attention to all aspects of capital in an organization through components of intellectual capital perspective. Therefore, IC has been accepted as comprising a set of principles and widely disseminated in the form of employee characteristics as representations of “Human Capital” which include knowledge, skills, experiences. Firm characteristics as representations of “Structural Capital” include process, practices, tools, techniques and systems. Network characteristics as representative of “Relational Capital” include customer, brand and reputation. All three common dimensions of intellectual capital defined as follows:

- **Human capital:** Includes all the talent, competencies and experience an organization employees and managers. This is the intangible capital that “Goes home at night”
- **Structural capital:** Includes all knowledge that stays behind when employees go home at the end of the day. There is significant structural capital in today’s organizations, including recorded knowledge, processes, software and intellectual property. This is the intangible capital that “Remained in organization at the end of a workday”
- **Relationship capital:** Includes all keys external relationships that drive the firm’s business such as customers, suppliers, partners, outsourcing and financing partners, to name a few. This kind of capital also includes organizational brand and reputation

Accordingly, Adams (2012) argued that one of the key implications of “intangible capital theory” is that knowledge should be managed holistically to indicate the holistic role of the intellectual capital components. Based on the author’s conclusion, the theory of intangible capital with roots in the intellectual capital movement in Europe and Japan says that the driving force for organizations today is knowledge. Further, while knowledge is a ubiquitous and dynamic resource, it is possible and helpful to identify the key sources of knowledge in the organization by IC components and their interrelations.

Therefore, the key to leveraging knowledge (whether a firm’s goal is growth, performance, innovation or value) is to manage these sources of knowledge holistically by intellectual components which include Human Capital,

Structural Capital and Relational Capital, in knowledge-based organization or high IC firms. Thus, all components of IC and their inter-relations could be representative of “Holism Philosophy”.

Intellectual capital in holistic value approach: In terms of intellectual capital, Bornemann *et al.* (1999) with special attention to the European Foundation for Quality Management (EFQM) model suggested an holistic oriented and dynamic concept to measure and manage IC as an alternative strategic driver for internal and external reporting of intangible assets. One year later, Pike and Roos (2000) presented “Holistic Value Approach” (HVA) in term of IC as a method for evaluating and measuring intangible assets in distinctions of IC.

Thus Andriessen (2004b) asserted that IC concept represents a holistic view of the firm, where HVA addressed two problems of organizations which include “Internal Management” and “External Reporting”.

Therefore, based on the opinions above, “Holestic approach” can be explanatory of intellectual capital philosophy by illustration of the internal and external aspects of organizations.

Immaterial resources in holism: Johannessen *et al.* (2005) have shown that “Non-material Resources” have become core competencies in many business operations, particularly in knowledge-based companies which include high IC firms such as law firms, consulting firms, financial service’s firms, media companies (Edvinsson and Malone, 1997) and also software companies, banking, insurance companies and hotels (Rosenbusch *et al.*, 2011). In comparison, low IC firms do not invest highly in IC and do not apply knowledge properly. Knowledge, structures and relationships could not be used, in low IC firms as drivers to create value added (Sofian *et al.*, 2006).

Some scholars (Alcaniz *et al.*, 2011; Andriessen, 2001, 2004a, b; Augier and Teece, 2005; Bontis and Serenko, 2009; Chang and Birkett, 2004; Edvinsson and Malone, 1997; Schiuma *et al.*, 2005; Sharabati *et al.*, 2010; Spender and Marr, 2005; Stewart, 2002; Sullivan, 2005; Tayles *et al.*, 2007; Uwuigbe and Uadiale, 2011; Usoff *et al.*, 2002; Wang, 2011) have asserted that IC is related to the value creation processes of organizations based on each element of the typology which is shown by Johannessen *et al.* (2005) in Fig. 1.

Based on the Fig. 1, from IC point of view, three main or common components of IC including Human, Structural and Relational Capital individually, are not new. However the holistic perspective in a management context is new as well as the construct IC. Customer capital, goodwill, supplier relations, work processes, technology,

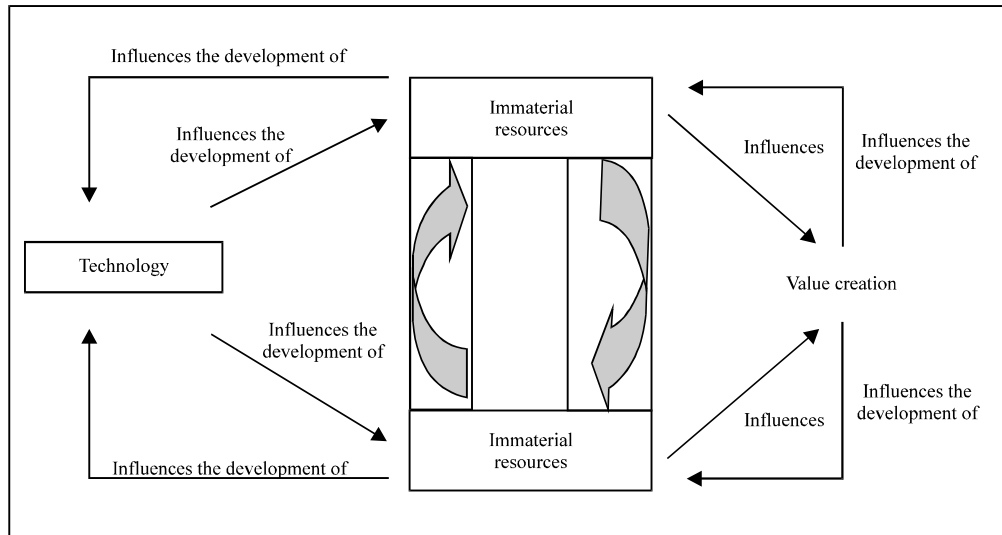


Fig. 1: Immaterial resources as IC and value creation (Johannessen *et al.*, 2005)

competence, motivation and innovation, etc., are concepts which have for a long time been considered as essential for both value creation and competitive position. Therefore, IC is the expression used to denote all immaterial resources furthering value creation and which are instrumental in goal achievement and competitive position.

Commonly, as the model shows, intangible assets as immaterial resources are core competence in many organizations, particularly in knowledge-based companies, in today's economy. One of the main reasons for this situation is the increased complexity and difficulty compared to previous situations. Thus, in this context it is clear that the focus on intellectual capital as a coherent management philosophy comes into play through the whole of the elements, material and immaterial. Therefore, through the sum of tangible and intangible resources an organization has a competitive advantage compared to those which have not used immaterial resources. As seen from this point of view "Holism" could also be a profitable philosophy in support of intellectual capital.

Intellectual capital perspectives in holism: As seen from another point of view discussed in previous sections of this study, Bernard Marr a prominent author and IC expert in his book "Perspectives on Intellectual Capital", found that the topic of IC has emerged from a different range of perspectives. He categorized them into two kinds of IC perspectives, "Disciplinary" and "Inter-disciplinary" (Marr, 2005b). Based on Table 1, former IC scholars have provided various intellectual capital perspectives such as "Economic Perspective", "Strategic Perspective",

"Accounting Perspective", "Financial Perspective", "Reporting Perspective", "Marketing Perspective", "Human Resource Perspective", "Information System Perspective", "Legal Perspective Intellectual" and "Property Perspective" which all the perspectives are categorized as disciplinary term of IC. Based on Table 2, the author has categorized "Public Policy Perspective", "Knowledge-based Perspective" and "Epistemology Perspective" together as interdisciplinary terms of intellectual capital.

From human-resource approach, intellectual capital relates to expertise, knowledge and employee attitude. Accountants tend to focus on intangible properties which are non-financial fixed assets and are not physically substantiated. However, they can be identified and managed by the entity through the legal rights and custody. On the other hand, from a marketing point of view, intangibles like customer satisfaction, brand recognition, etc. are located at the heart of business success. However, from an information systems approach, IC is described as software applications and also as network capabilities (Marr, 2005b).

Based on the discussion above, Table 1 and 2 show the statements of the disciplinary and inter-disciplinary terms on intellectual capital which are identified by IC scholars in various dimensions management terminology. Based on the descriptions, all dimensions of IC are representatives of both terms which mean that the collection of all perspectives explain "Holism" as the philosophy of IC.

Consequently, Alcaniz *et al.* (2011) argued in support of all of above perspectives, where the term

Table 1: Different perspectives from disciplinary views of intellectual capital

References	Perspective	Discriptive
Augier and Teece (2005)	Economic perspective	They provide a historical overview of the growing significance of knowledge and IC as a driver for innovation and R and D and describe the features of such assets in terms of replicability, limitability and appropriability. Authors highlight how the nature of IC offers big challenges for their measurement and management
Marr and Roos (2005)	Strategic perspective	Authors discuss the strategic importance of IC resources and differentiate between the static and dynamic nature of these assets. Then, the authors outline the tools for the strategic management of IC
Lev <i>et al.</i> (2005)	Accounting perspective	Chapter clarifies the definition of IC from an accountant's view and discusses some of the difficulties and inconsistencies in the way IC is treated in accounting, posing many challenges for accounting professionals. Authors then outline the current practice and latest changes in accounting rules and regulations for intangibles, before they take a look into the future of accounting for intangibles
Marr (2005b)	Financial perspective	They outline the importance of IC for future cash flow and growth opportunities. It then discusses a selection of valuation approaches, which are split into static and dynamic models. Authors focus on real option models for the valuation of IC, by highlighting both the benefits and the limitations of such an approach
Marr (2005b)	Reporting perspective	Discuss how organizations could voluntarily report on IC, both internally and externally. This perspective is related to management accounting but does not take a disciplinary perspective as such. The scholars discuss the voluntary reporting experience in Europe, where several initiatives have developed guidelines on how to report and disclose information on the knowledge-based value drivers. Authors discuss the need for reporting on IC, then discusses what organizations should include in such reports and outlines European guidelines for IC reports. The chapter includes a case study example of how a firm produced IC reports for external disclosure
Marr (2005b)	Marketing perspective	Discusses the importance of brands, customer satisfaction and customer relationships. The scholar outlines the development of modern marketing, with a strong emphasis on IC. It then discusses the different IC components relevant from a marketing perspective. Author also outlines how an IC perspective might shed light on the valuation and measurement of assets such as brand and relationships
Johanson (2005)	Human resource perspective	Discusses the role of IC in a human resource management environment. The author defines IC in this context and then discusses various tools developed to manage IC from this perspective. These include the human resources scorecard, human resource accounting and human resource costing. The scholar outlines the measurement trap many of these tools fall into and the conflicting interest concerning human resource measures. Author states how firms have managed their IC from a human resources perspective, before the author takes a look into the future
Marr (2005b)	Information system perspective	Discusses the role of IC from an information systems perspective. The chapter puts IC into the context of information systems and technology. It distinguishes between data, information and knowledge as organizational assets and the role of information systems and technology in the management of these assets. Author discusses how to value information system assets and how information systems management can help transform human capital into structural capital
Marr (2005b)	Legal perspective	Scholars outline the various legal mechanisms and instruments companies have at their disposal to protect their IC. Authors discuss the application of instruments such as trade secrets, patents, copyrights, contracts and licenses
Sullivan (1999)	Intellectual property perspective	Outlines how organizations can strategically manage their intellectual property. Related to the legal perspective, this perspective outlines the practical business application of IC in an intellectual property paradigm. Based on the experience of various firms, the author outlines some best practices for managing intellectual property for business value

Table 2: Inter-disciplinary perspectives of intellectual capital

References	Perspective	Discriptive
Marr (2005b)	Public policy perspective	Discuss implications of the increasing importance of IC for public policy. The authors outline the importance of IC in the performance of regions and entire countries. Scholars contrast European, American and Japanese investment in IC and outlines the various policy initiatives implemented in different countries. In their look into the future, the authors outline possible approaches of IC management for nations and regions
Marr (2005b)	Knowledge-based perspective	Discuss the importance of knowledge as IC and implications for its management. The authors outline the increasing importance of knowledge-based assets, the different views of what knowledge is and how it evolved in the business context. Authors draw some conclusions for the management of knowledge assets based on the diverse views of knowledge
Roos and Roos (1997)	Epistemology perspective	Discusses the notion of corporate epistemology. Introducing three different epistemological concepts (connectionist, cognitivist and autopoietic), the author outlines their implications for the management of IC. The way people believe knowledge is created has an impact on the way knowledge is managed and a mismatch between the way knowledge is managed and corporate epistemology might cause problems. Reporting on various case studies, the author highlights the different epistemologies and their suitability with different value creation logics

“Intangibles asset” is often used as a synonym for IC. “Holism Approach” which can be seen as Disciplinary and Inter-disciplinary terms of IC is the sum of various existent IC perspectives, attempts to show all the possible overviews of intangible assets by the unique term known as intellectual capital. In IC terminology, the word “Intellectual” refers to intangibles in general, both human and non-human resources and the word “Capital” refers to financial wealth. Therefore, IC is not only about people like “Human Resource” but is also about “Organizational Processes”, “Structures” and “Relationships” as organizational phenomena (Andriessen, 2004b).

CONCLUSION

Intellectual Capital is defined as all knowledge within an organization which has the potential to create value when applied in line with the mission, vision and goals of the organization which are intangible assets. In other words, IC is the holistic understanding in a management context of organizations which includes: knowledge, experience and skills, as Human Capital; processes, intellectual property and rules as Structural Capital; customers, networks and brand as Relational Capital. The sum of all, these components are known as Intellectual Capital. These concepts are intangible assets or immaterial resources which for a long time have been considered as essential for both value creation and the competitive advantage of today’s business organizations. Thus, from holistic view, intellectual capital is the expression used to denote all immaterial resources furthering value creation which together are instrumental in organizational goal achievement and competitive position.

Therefore, to better understand intellectual capital concept and its function, attention must be paid to the sum of organizational resources which are involved in the creation of products/services to generate profit. This perspective can be referred to as “Holism Philosophy” or “Holistic Approach”. These concepts apply to whole organizations, to functional teams, to virtual teams as well as to individuals. The value of knowledge is determined by its context, how it fits into a system that includes all three IC elements (Human, Structural and Relational Capitals). Accordingly, Johnson and Christensen (2010) identified a research philosophy as a perspective of IC research that is based on a set of shared assumptions, values, concepts and practices. In fact, based on the statements of scholars, “Holism” could be an appropriate philosophy of IC which reflects the stance of natural and social scientists.

Consequently, IC researchers should first explore IC philosophy in their studies to better understand IC functions, roles and relations of components. They must

have an inventory of their key intellectual capital as intangible assets and an understanding of how the elements work together in an integrated system. Key decisions on investment and deployment of intangibles look at how decisions affect all three components of IC, not just one. Thus, the whole of IC is involved to create products/services to increase the profit of organizations which means “Holistic”. Therefore, current study has considered the above-mentioned philosophy of IC components described by “Holism Approach”.

Finally, the authors of this study hope that this contribution may offer ideas for thought, not only in relation to understanding the concept of “Holism” as a philosophy of intellectual capital but also in relation to emphasizing the importance of research philosophy.

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