Is intellectual capital-based strategy market-based or resource-based?

On sustainable strategy in a knowledge-based economy

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Abstract

Purpose – The purpose of this paper is to construct a strategy model based on Intellectual Capital (IC) theory and to demonstrate that it is not purely resource-based (RBV), but includes many elements that are rooted in the market based view (MBV). The authors' analysis indicates that only strategies which lead to both tangible and intangible revenues are sustainable in a knowledge-based economy.

Design/methodology/approach – The paper takes the form of an extensive review of IC and strategy literature, and in-depth comparative analysis of IC concept and the strategy management frameworks, particularly Porter's framework.

Findings – It is found that the IC-based view (ICBV) is much closer to the MBV than what one would expect and the ICBV is more appropriate for a knowledge-based economy than both the MBV and the RBV in general.

Originality/value – It is widely assumed that IC theory is strongly related to resource-based strategy. The authors question this simple view and maintain that the IC-based view relates to both MBV and RBV.

Keywords Intellectual capital, Management strategy, Value creation

Paper type Conceptual paper

1. Background and aim of the paper

From a strategic management perspective not all knowledge is important for business. It is authors' contention that only knowledge that contributes to the value-adding process of a firm is strategy relevant. Further, due to the "active" nature of knowledge not all intangible assets are in essence knowledge assets, which may often be a result of the knowledge-creating process.

Although the market-based view (MBV) and the resource-based view (RBV) are valuable strategic tools, they were developed in the context of the traditional market economy, primarily relating to physical capital. However, the transition towards the

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knowledge-based economy sets new requirements related to the impact of intellectual capital (IC) on overall performance. Therefore, a new strategy perspective is required.

The aim of this paper is to construct a further strategy model based on IC theory and to demonstrate that it is not purely resource-based (RBV), but includes many elements that are rooted in the MBV. Our analysis indicates that only strategies which lead to both tangible and intangible revenues are sustainable in a knowledge-based economy.

As a first step, in Section 2 we outline the methodological approach followed in this theoretical piece of research. Considering the inconsistency of knowledge management (KM) and IC literature in Section 3, we study and analyse different views on knowledge, intellectual assets, intangible assets and IC, as well as the similarity and difference between these concepts. As a result, building on this background we conceptualise IC as a dynamic interaction between human, structural capital (SC) and relational enabling the value creation process. In Section 4, we investigate whether the IC concept is strategy relevant from the perspectives of the MBV and the RBV. We present a new conceptual framework of the value creating process, which acknowledges that both monetary and non-monetary revenue is created as a result of the constant interaction and transformation between physical, financial and IC. Finally, this process is presented through the closed loop between monetary and non-monetary revenue, and both tangible and intangible resources.

2. Methodology

The paper investigates the understanding of knowledge and IC in the management literature. Further, it analyses different views of the IC concept from a strategy perspective. Building on the IC theory literature, the authors focus attention on some specific characteristics of IC relevant to the value creating process from a strategy perspective. Since our goal is to investigate how the most widely acknowledged and applied strategy theories support the IC concept the study is focused on key literatures, representative of the two major schools of thought: the MBV and the RBV.

Building on the IC and strategy literature analysis, an IC-based view (ICBV) is offered. IC is seen as a dynamic interaction between its three core elements: human capital (HC), relational capital (RC), and SC. We argue that only knowledge that contributes to the value creation process and sustainable competitive advantage of the firm is strategy relevant. Accordingly, we argue that ICBV is related both to MBV and RBV. It is claimed, however, that the ICBV is a novel strategy perspective and not further development of the RBV.

Finally, the requirements of a sustainable strategy in a knowledge-based economy are reconsidered. The impact of both tangible and intangible revenues is analysed.

3. Views on knowledge, intellectual assets, intangible assets and the IC concept

The concept of IC has been theorised by scholars working in the field of KM (Saint-Onge, 1996; Roos and Roos, 1997; Wiig, 1997b; Stewart, 1997; Bontis, 1998, 2001; Ahonen, 2000; MERITUM, 2002; Teece, 2002). Although the debate is continuing, the majority of arguments and statements related to this concept unify around some basic features of this complex phenomenon. In order to gain a fuller understanding of the evolution of this "invisible and dynamic" asset (Zhou and Fink, 2003, p. 38),

it should be compared to other closely related concepts such as knowledge, intangible assets and intellectual assets.

Nonaka and Takeuchi (1995) focused attention on knowledge as a crucial asset for competitive advantage in the contemporary economy. They stress the fact that knowledge is "essentially related to human action"; is "context specific and relational"; and "dynamic" in nature (pp. 58-9). They consider the transformation and interaction between tacit and explicit knowledge as critical to the development of innovations and organizational and economic growth.

Sveiby (1997) and Stewart (1997) develop the concept further and build on the definition of knowledge from a strategy point of view, describing it as the "capacity-to-act". This definition focuses attention on its productive impact in the value creation process. Further, Sveiby (1997) focuses attention on intangible assets and defines them as the interaction among competence, internal structure and external structure. He argues that all these value-creating components and the interrelation processes among them derive from people. Sveiby (1997) regards intellectual assets and KM as twin concepts – defining KM as the art of creating value from an organization's intangible assets.

Edvinsson (1997) suggests a classification of IC based on human and organizational capital. The Skandia model regards IC as constituted of HC and SC, the latter in turn being divided into customer capital and organizational capital. The latter is then split into innovation and process capital. This is echoed in the 1999 OECD report (Petty and Guthrie, 2000, p. 158) in which IC is defined as "the economic value of two categories of intangible assets of a company", that is organizational and HC.

Devanport and Prusak (1998, p. 5) describe knowledge as a "fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information". Although this definition includes all of the above-mentioned views, it fails to communicate the active element.

Ahonen (2000) argues that generative intangibles create commercially exploitable intangibles, such as cost efficiency, intellectual property rights (IPR) and customer trust. Generative intangibles include human resources, internal structures and external structures.

Sudarsanam *et al.* (2006, p. 291) present IC as a collection of intangible assets known also as knowledge assets. They suggest that IC and knowledge assets can be used interchangeably. More recently Claver-Cortes *et al.* (2007, p. 172) has considered the management of knowledge flows will result in the creation of intangible assets that will constitute the so-called IC of the organization.

Most IC and KM theory scholars (Saint-Onge, 1996; Edvinsson, 1997; Roos *et al.*, 2005; Susdarsanam *et al.*, 2006; MERITUM, 2002) have reached consensus that IC comprises three components: HC; organizational (or structural) capital (SC) and RC (Figure 1). There remains debate as to which term, SC or organizational capital is more appropriate. We consider the formulation SC as a more appropriate since it is structure that represents better all those things that remain in the organization when the employees have left the building, but you cannot find in the balance sheet (Edvinsson and Malone, 1997), e.g. all kinds of intellectual property and intellectual assets: organizational structures, processes, systems, information, etc.

Exploring the definitions of IC the literature uncovers significant disagreement among authors, some of whom (Nerdrum and Erikson, 2001; Susdarsanam *et al.*, 2006;

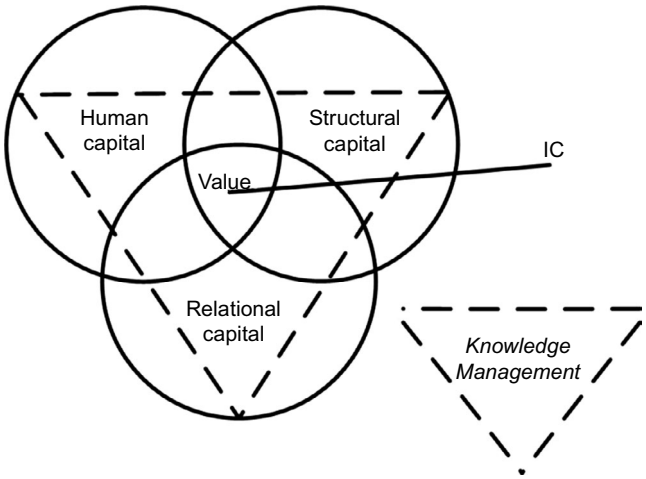

Figure 1.
The IC concept model

Source: Saint-Onge (1996)

Namasivayam and Denizci, 2006; Claver-Cortes *et al.*, 2007), do not acknowledge that only when HC, SC and RC interact, and there is transformation of one form of capital into another, is there IC (Figure 1). This dynamic aspect of IC is central to the value-adding process.

Building on the most widely recognised views on knowledge, intellectual assets, intangible assets and IC in management literature, we argue that while tightly related these concepts are not one and the same thing. From strategy perspective only knowledge related to the value-adding process is relevant. On one hand, it can be actively involved in the value-adding process; on the other hand, it might be an output of this same process represented through commercially exploitable intellectual assets or intangible revenues. Knowledge turned into value generation is IC. However, it should be stressed that IC is only possible as a result of the constant interaction and dynamic transformation between HC, SC and RC.

Drawing upon IC, KM and strategy theories, we now investigate the IC concept further and explore whether it is strategy relevant.

4. Strategy and IC

The review of strategy theory evolution (Lynch, 2009; White, 2004; Faulkner and Campbell, 2006) shows that over the years views of scholars in the field (Porter, 1980, 1985; Barney, 1991; Lynch, 2009; White, 2004; Roos *et al.*, 2005; Mintzberg, 1994) can be grouped around two main schools of thought: the MBV and the RBV.

While MBV takes an external view, considering the business outcome in the context of the environment, RBV is more internally focused. From the MBV perspective strategy is "positioning a business to maximize the value of the capabilities that distinguish it from its competitors" (Porter, 1980, p. 4). This theory deals mainly with the impact of the external environment, and assumes that it predetermines the strategy an organization should follow. It is strongly industry dependent and the accent is on the products or services offered. Accordingly, the RBV addresses the issues related

to a firm's resources and its capability for benefiting from them in the most effective and efficient way as crucial for sustainable competitive advantage. It is more internally focused, resource and capabilities dependent, describing strategy as "the match an organization makes between its internal resources and skills [. . .] and the opportunities and risks created by its external environment" (Hofer and Schendel, 1978, p. 103).

The MBV of strategy

Although different frames of MBV exist (Lynch, 2009), Porter's (1980) 5-forces model is still recognized as one of the most widely applied analytical tools for industry-based benchmarking and the evaluation of a firm's potential to generate economic value. Ireland *et al.* (2009, p. 13) describe it as a "model of above-average returns", summarizing the general idea of strategy that:

> Firms are rent seekers. This is to say that firms strive to achieve a return above and beyond the level required by the market for an investment of similar level of risk (Roos *et al.*, 2005, p. 37).

According to Porter (1980, p. 4) the goal of the competitive strategy for a business unit in an industry is to find a position in the industry where the firm can best compete against these five forces: buyers, suppliers, substitutes, new entrants, and existing competition (Figure 2).

The argument of Roos *et al.* (2005) that the MBV, and in particular Porter's 5-forces model, is static, focused only on the external environment, and strongly industry dependent is only partially valid. The 5-forces model is perceived only as static when it has been taken out of the context of Porter's theory as a whole, failing to consider the generic strategies representing the dynamic part of the model.

An individual firm's profit performance depends on how successfully it implements one or a combination of the generic strategies: cost leadership; product differentiation;

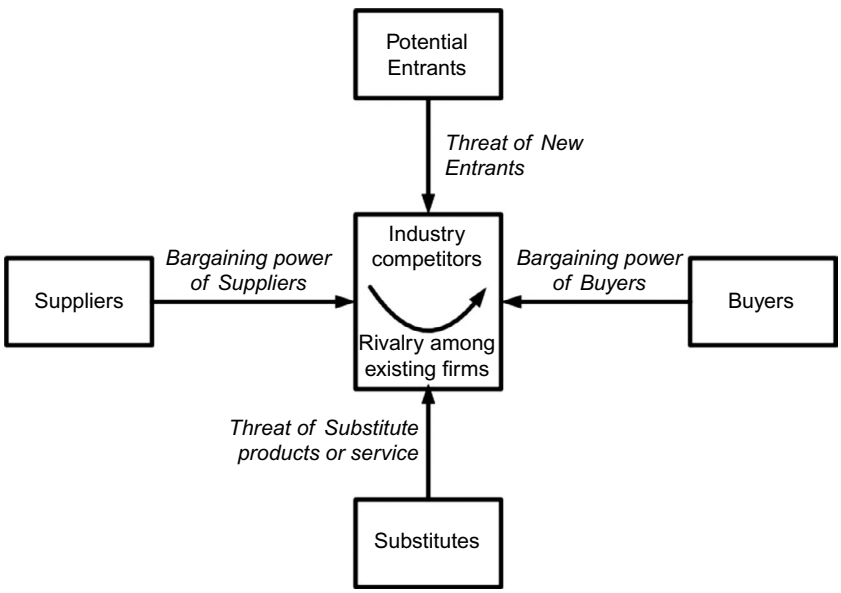

Figure 2.
Porter's 5-forces model

or focus strategy. The lowest cost producer in an industry must earn above average profits if it prices at industry average levels. Above average profits can also be achieved where the firm can successfully differentiate its products thus allowing it to charge premium prices. The firm achieving focus either has a low cost position with its strategic target, high differentiation, or both, which potentially allows it to earn above-average returns for its industry.

The comparative analysis between the IC concept and Porter's 5-forces model is based on following two different approaches: first, we make a general comparison between the key components of the two frameworks; then we take a more detailed view of specific elements of IC and try to evaluate them against each of the forces considered by Porter, treating them as competitive advantage factors.

Following the first approach, when comparing the 5-forces model (Figure 2) and the IC model (Figure 1) it seems that Porter's model relates to just one of the elements of the IC, i.e. RC. Even the generic strategies that could be regarded as the dynamic or the proactive component of the model fail to acknowledge the role and impact of HC and SC. Porter's model is focused on analyzing the impact of the environmental forces mainly from a negative perspective. It considers only the threats coming from the five forces: bargaining power of suppliers and customers; substitute products; rivalry; and potential entrants. Conversely, IC theory, takes a positive view and looks to the opportunities provided by the environment through RC: valuable relationships with customers, suppliers and other relevant stakeholders (loyalty, trust and respect); the firm's reputation and image, brand and partnerships.

This approach is, however, general and one-sided. Following a second approach, IC can be treated as an end in itself, an outcome of the value creation process, which can be evaluated against each one of the five competitive forces. So, for example, a firm can have sustainable competitive advantage over new entrants due to its IPR, i.e. due to its SC; or because of the specific competencies of its employees, i.e. its HC; or as a result of its image or brand, i.e. its RC. This kind of analysis can be made for all IC components against any one of the five competitive forces.

A commonly observed limitation of Porter's model is related to its failure to consider the human resources aspect of a strategy: "[I]t makes little attempt to recognize, let alone resolve, aspects of the microenvironment that might connect people to their own and other organizations" (Lynch, 2009, p. 102). In addition, Porter's model is reactive, i.e. it explains events that are already a fact, and though the generic strategies are meant to provide solutions regarding future tendencies, they are more of an answer to the challenges set by the external environment than proactive efforts to establish new opportunities.

The main limitation of Porter's 5-forces model from an IC theory perspective is that it does not support the transformation processes between HC, SC and RC, which result in actual value creation. However, it should be acknowledged that at a later stage, Porter (1985) introduces the value chain as a key tool for the internal analysis of a company. The model views business as a system of value-adding processes and comprises a sequence of activities considered to be common for a wide range of firms. The value chain model is a useful analytical tool for defining a firm's core competencies in which it can pursue competitive advantage. When the value chain model was developed, the IC concept was not considered as a factor contributing to the value creation process, but it is possible to develop it further and incorporate an IC perspective. However, the main limitation

of Porter's value chain model is related to the specific features of IC to increase value when used and especially to the interactive part, which would be hard to represent through a linear model as the value chain.

According to Faulkner and Campbell (2006), one of the main limitations of the "5-forces" model is the difficulty of determining the boundaries of the market that is relevant to the analysis. Lynch (2009) further criticizes Porter's model for paying insufficient attention to customers. Lynch's criticism is too simplistic and can be accepted only under the conditions of a strongly customer-oriented market, however. Porter (2008) reaffirms, updates, and extends his view stressing the importance of analyzing and evaluating the industry as a whole. He refers to his framework as an industry structure (Porter, 2008), which from the perspective of IC theory could be compared to the Sveiby's (1997) external structure.

A further limitation of Porter's model from an IC theory perspective derives from the fact that it has been developed and designed initially for traditional industries, and therefore it does not consider some specific features of knowledge assets. As for the criticism regarding its industry dependency, in fact, that is what this model is meant to be in the first place. Porter's (2008) intention never was that it should be something else: "The five competitive forces provide a framework for identifying the most important industry developments and for anticipating their impact on industry attractiveness".

Despite the above critique, Porter's 5-forces model has its merits as a starting point when developing a strategy. What can be done is acknowledge the importance of the IC and develop it further considering the specific features of the last.

An often stressed limitation of Porter's model (Zack, 1999; Ireland *et al.*, 2009) that it does not enable companies to identify and leverage their unique advantages: that is, to evaluate their strengths and weaknesses. The RBV provides a solution to this through its more internally focused perspective.

The RBV of strategy

The RBV gained much popularity as a counter view to the market advantage theory. It can be traced back to Penrose (1959) and Selznick (1957). The RBV (Wernerfelt, 1984; Barney, 1986a, b, 1991) argues that above average profits stem from resources controlled by the firm that not only combine to deliver valued products, but are difficult for other firms to imitate or acquire. While Porter's model defines a company's strategy in terms of its product-market positioning, the RBV prescribes that firms should position themselves strategically based on their resources and capabilities rather than on the products and services derived from those capabilities (Zack, 1999).

Although the MBV has tended to emphasize issues of strategic positioning in terms of the choice between cost and differentiation advantage, and between a broad and narrow market scope, fundamental to these choices is the resource-based position of the company (Grant, 1991).

The RBV views the economic activity of enterprises as a process through which value is created depending on their ability to define and control input variables (resources), process them efficiently and produce effective outcome. It views the resources in respect of the specific environment. Therefore, it is true that RBV builds on, but does not replace (Collis and Montgomery, 2005, p. 28) the external environment of the industry and the competitive environment approaches to strategy by combining the internal and external perspectives:

> Resources cannot be evaluated in isolation, because their value is determined in the interplay with market forces.

According to Grant (1991, p. 117), strategy should be viewed less as a quest for monopoly rents (the returns to market power) and more as a quest for Ricardian rents (the returns to the resources which confer competitive advantage over and above the real costs of these resources). Once these resources depreciate, become obsolescent, or are replicated by other firms, so the rents they generate tend to disappear.

In order to benefit from the resources available firms need certain capabilities, i.e. the ability that enables them to provide a particular benefit to a customer (Hamel and Prahalad, 1994) in order to gain above average rents. The main differences between resources and capabilities are that resources are independent, simple and static, as opposed to capabilities that are collective, complex and dynamic. Rent generation comes mainly from capabilities (Martin-de-Castro *et al.*, 2006).

Creating capabilities is not simply a matter of assembling a team of resources: capabilities involve complex patterns of coordination between people, and between people and other resources (Grant, 1991, p. 119). Capabilities that are valuable, rare, costly to imitate, and nonsubstitutable are core competencies (Ireland *et al.*, 2009, p. 81) and he continues:

> Capabilities failing to satisfy the four criteria of sustainable competitive advantage are not core competences, meaning that although every core competence is a capability, not every capability is a core competence.

5. Towards the strategic management of IC

Some scholars have recently referred to the RBV as capability-based theory (Schroeder *et al.*, 2002; Bates and Flynn, 1995), thus stressing the importance of the dynamic element. Taking a more detailed look, it can be seen that RBV is both about resources and capabilities (Grant, 1991; Kay, 1993), and even more – it is about core competence (Hamel and Prahalad, 1994). Therefore, capability-based theory should be regarded as a further development of resource-based theory rather than as a completely new theory. Core competencies are capabilities that serve as a source of competitive advantage for a company over its rivals. Strategic competitiveness is achieved when a firm successfully formulates and implements a value-creating strategy.

Strategic management needs to acknowledge one specific feature of knowledge, related to its value-creation character, which could impact strongly on the strategy approach followed:

> In contrast to tangible resources which tend to depreciate when they are used, knowledge grows when used and depreciates when not used (Sveiby; 1997, p. 23).

It has been widely acknowledged that not all resources of a firm have the same strategic value. The general agreement amongst most of strategy and IC theory scholars (Barney, 1991; Grant, 1991, 1996; Sveiby, 1997; Zack, 1999; Ahonen, 2000; Roos *et al.*, 2005) is that IC is more valuable than physical capital. This is due to its ability to increase value when applied without decreasing itself.

Contrary to the general understanding of competence in the strategy literature (Hamel and Prahalad, 1994), Sveiby (1997) suggests competence should be considered in the context of individuals, used both as synonym of knowing and knowledge

and drawing upon RBV develops the knowledge-based theory of the firm for strategy formulation (Sveiby, 2001), which we consider to be more IC theory relevant.

Searching for a solution to the challenges of the new economic setting, the knowledge-based strategic management perspective has gained recognition among scholars (Bontis, 1998; Bontis *et al.*, 1999; Nonaka and Takeuchi, 1995; Sveiby, 1997, 2001, 2010; Roos *et al.*, 2001, 2005; Mouritsen, 1998, 2004; Mouritsen *et al.*, 2003, 2005). It is through the ability to generate knowledge that firms have the potential to achieve sustainable competitive advantage: "[M]anagers should try to regard their organizations as if they consisted of knowledge structures rather than of capital" (Sveiby, 1997, p. 18). Furthermore, this framework takes into account the changing context both outside and within the firm. However, the main contribution of KBV is the totally new perspective on the strategic management of business in a knowledge-based environment.

Sveiby argues that strategy formulation should start with the competence of people. People are seen as the only true agents in business; all tangible physical products, assets as well as intangible relations, are the results of human action and depend ultimately on people for their continued existence (Sveiby, 2001). A further strategy issue related to the value creation resulting from the constant interaction between HC, SC and RC, is on which one of them the firm should focus on. Should the competitive advantage be built on the competencies, knowledge and skills of the individuals working in the company and their networking abilities to build RC, or will the firm rely on well-developed SC?

> IC management is the deployment and management of intellectual capital resources and their transformations (into other intellectual capital resources or into traditional economic resources) to maximize the present value of the organization's value creation in the eyes of its stakeholders (Roos *et al.*, 2005, p. 42).

Both IC theory and strategy scholars are working to develop a suitable theoretical model of the IC concept from a KBV perspective. One of the limitations derives from the complex interrelation and interactions among the numerous factors which should be considered when developing such a model. However, the main difference among traditional strategy models and knowledge-based strategy models is based on the idea of value creation through knowledge transfer:

> In contrast to the value chain the intangible value in a value network grows each time a transfer takes place, because the knowledge does not leave the creator (Sveiby, 2001, p. 347).

Lynch (2009) argues that there are three main areas that every organization has to manage in order to succeed:

(1) the firm's internal resources;

(2) the external environment within which the firm operates; and

(3) the firm's ability to add value to what it does.

IC theory fits well within this general framework of strategy. Comparing the IC definition (Figure 1) it becomes obvious that its key components are covered in full by the three strategy management areas. The firm's internal resources, which in practice include HC and SC; environment is represented by RC; and last, but not least, the ability to generate an economic value through the interaction of HC, SC and RC.

Further review of IC theory supports similar conclusions. If we take, for example, Sveiby's (1997) definition of intangible assets, we can straightforwardly notice the overlapping similarities of both frameworks, e.g. internal structure (e.g. patents, concepts, models, computer and administrative systems, etc.) and individual competence, which deals with the knowledge-based part of firm's internal resources; external structure (embracing customer and supplier relationships and the organization's image), representing the interrelation with the environment. Accordingly, value-adding results from the interaction between competence (HC), internal structure (SC) and external structure (RC).

Summarizing the findings of the above review, it is authors' contention that IC is strategy relevant. However, it should be noted that IC is not purely related to the RBV, but includes many elements that are rooted in the MBV. Further, the analysis indicates that building on MBV and RBV, considering the requirements of the knowledge-based economy a new ICBV would be more appropriate framework for establishing a sustainable strategy.

Irrespective of the strategy chosen, both scholars and practitioners unify around the idea of earning the maximum possible revenue as an end, though they may refer to it using different terms: "profit" (Grant, 1991), "rents" (Roos *et al.*, 2005), or "above-average returns" (Ireland *et al.*, 2009). Overall, achieving and maintaining above-average returns, for as long as possible, proved itself a core condition for sustainable competitive advantage, traditionally measured by the financial results achieved. But are all factors which impact on the achievement of this ultimate goal understood and acknowledged? Are they fully incorporated by management strategy theory at present? And, last but not least, are all the outcomes of the business always tangible and is revenue only monetary?

In an attempt to overcome some of the limitations of existing strategy models and trying to take a comprehensive view of the specific features of the impact of IC on the value creation process within the firm, we offer a general framework (Figure 3). The model is aimed at taking into account most of the ideas discussed so far. From a traditional strategy point of view (MBV and RBV) only commercial value is relevant. From an IC point of view, it is crucial that also intangible results are produced. These are generated both by tangible and intangible resources in a continuous process of interaction and transformation between HC, SC and RC. Revenue is produced, which closes the loop providing both tangible and intangible resources.

Furthermore, it should be noted that due to the intangible nature of IC, though it is acknowledged that it is involved in the value creation process and is an important prerequisite for the competitive advantage of the firm, still it is not widely recognised that in practice value is created as a result of the constant interaction and transformation of physical, financial and IC. To some extent this is because there are still not adequate standardised measures for evaluating intangibles. However, this should not be a reason to underestimate their strategic importance for the management. Another equally

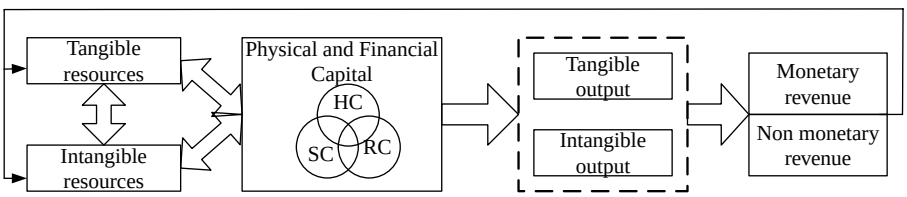

Figure 3.
The IC-based value creation model

important issue deserving further attention and more in-depth research by strategy management scholars is the complex nature of value produced as a result of the firm performance. So far, probably because quantification of intangibles is so hard, the attention has been focused mainly on tangible outcomes, thus neglecting an important and sometimes substantial part of the revenue, i.e. the non-monetary revenue.

6. Conclusion

The transition to a knowledge-based economy imposes new requirements for strategic management, leading to the development of new views for value creation and sustainable competitive advantage. The relationships between value, strategy and IC are investigated in the context of the knowledge-based economy. Driven by the continuous pursuit of a better understanding of the value creation process, strategy theory evolves from a market-based and a resource-based to a knowledge-based view. Is the knowledge-based view an extension of the RBV, or a novel theory? We argue that IC-based strategy is rooted in both market- and resource-based considerations. Therefore, it is wrong to classify it simply as a branch of RBV.

The steady trend of the world economy towards gaining competitive advantage through IC and KM has led to the conviction that a paradigm shift in strategic management is needed. However, the main limitations of the MBV and RBV frameworks derive from the fact that they cover only specific aspects relevant to strategic management and fail to provide an holistic picture considering both the internal and external structure of the firm. Furthermore, in most cases they imply making strategy assumptions for the future based on information about the past or the present, but do not consider the potential for value generation inherent to IC.

Driven by the desire to address some of the limitations of existing strategy models and taking a wide view of the specific features of IC, we now offer an IC-based value-creation model. At the heart of this model is the understanding that knowledge is both a means and an end to sustaining a business in a knowledge-based economy. It is the authors' conviction that from a strategy perspective it is crucial to acknowledge explicitly the importance of both tangible and intangible resources and outputs, as well as reconsider the generally accepted understanding of economic value by relating it simply to monetary revenues. Sometimes, especially from a strategy perspective, the impact of non-monetary revenues outperforms that of monetary revenues.

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