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Intellectual Capital For 21st Century Business Contemporary Thoughts And Futuristic Thrust

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Abstract:

Purpose – The purpose of the paper is to roll out a cognitive map spotlighting the quintessence of the valuable information in contemporary IC literature of how IC has been historically and currently vital. It also aims to give the fundamental frameworks against the backdrop of today's strategic concepts used in business and industry.

Design/methodology/approach – The paper reviews the seminal literature of IC to be a theoretical framework.

Findings – The findings show that IC has been a catalyst in the lives of people and business since time immemorial. This is at the core of contemporary business occupying the centre stage in 21st century organizations synergizing business models and practices. Hence, its comprehension and robust application by all concerned in terms of its definitions, elements, frameworks, measurement models are indispensable and imperative.

Research limitations/implications – The review is limited to scholarly peer-reviewed, referred international journals published before August 2013.

Practical implications – IC is an area of interest to numerous parties, including managers, accountants and accounting firms, shareholders, individual and institutional investors, regulators, analysts, technologists, scholars, board of directors, corporate executives, policymakers and other stakeholders. IC can equip them to formulate effective strategies to discover blue oceans and stay ahead of Strategic Inflection Points (SIP), a fact of life in the 21st century going by recessions, political upheavals and the political and economic balance of power among nation states. This paper serves as a useful reference on the evolution of IC and the concepts for application to business and management.

Originality/value – The study examines the why, what and how of IC. Existing strategy literature rarely connects the different IC dimensions and points out their interdependencies with a line of sight with business strategy and execution. This overarching perspective knitting the past-present-future horizon helps to integrate the different dimensions of IC to formulate and execute strategy by organizations.

Key words: Knowledge economy, Intellectual capital, Intangibles, Blue Ocean strategy, Strategic Inflection Point

1.Introduction

Intellectual Capital (IC) in the management and legal literature, intangibles in the accounting literature and knowledge assets used by economists refer essentially to the same thing and are used interchangeably (Lev, 2001, p.5). IC is today recognized as a key strategic asset for performance of organizations and its management is critical to the competitiveness of organizations (Grant, 1997; von Krogh and Grand, 2002; Grant, 1996; Roos and Roos, 1997; Spender, 1996). Petty and Guthrie (2000) observed that “intellectual capital is instrumental in the determination of enterprise value and national economic performance”. Manufacturing and retail economies are globally being replaced with a “knowledge-based, fast-changing and technologically intensive economy” (Canibano et al. 2000, p. 102). IC can be thought of as the knowledge-based equity of a company (International Federation of Accountants, 1998). The significance of IC is so great that Roos et al, (1997) urge: “In the modern business world, the business imperative is to manage intellectual capital or die!”

1.1.Lets Us A Look At A Historical Account To Appreciate The Greatness Of IC

While writing the foreword to the book “INTELLECTUAL CAPITAL: REALIZING YOUR COMPANY'S TRUE VALUE BY FINDING ITS HIDDEN ROOTS” written by Leif Edvinsson and Michael S. Malone (1997), the editor of Forbes ASAP, Rich

Karlgaard said that intellectual capital has always been a decisive factor in the rise of civilizations, organizations and people. Here is his historical illustration to illuminate the inimitability of intellectual capital greatness:

“For at least 60,000 years our ancestors, the Cro-Magnons, lived side by side with the Neanderthals. Then, about 30,000 years ago, the Neanderthals disappeared. Why did one species survive and the other perish? Both used tools and language. But the Cro-Magnons had a lunar calendar. Soon they correlated the passing days with the migratory patterns of bison, elk, and red deer. This insight was dutifully recorded on cave-wall paintings and in sets of 28 notches on reindeer antlers. Hungry for meat, the Cro-Magnon was taught that all he has to do was wait at a river crossing on certain days, spear in hand. In the meantime, the Neanderthals appear to have unwisely scattered their men and their scarce resources in search of random encounters. They allocated their resources poorly. They perished.

Intellectual Capital made the difference. It always has. It ever will. Especially in the modern market space where the market price of an organization is supposed to be an encapsulation of a number of tangible and intangible factors.

Now the million dollar question is what the ‘Leadership in the era of economic uncertainty’ does take on the challenge of managing in a toxic environment (Charan, 2008). In cricketing parlance, the ‘run-rate’ has lagged and the ‘asking rate’ has spiraled. From the perspective of organizations, governments and all other stakeholders, it is time for a few lusty ‘helicopter shots’ (in true M. S. Dhoni style), (K. Venkatachalam, Executive Director – Tax and Regulatory Services, PwC India in The Hindu BUSINESS LINE, February 18, 2013).

Now let us correlate history to our contemporary times to prove the greatness of intellectual capital whose utility is as old as humankind. In August 2012, Apple had become the most valuable company in history with a stock market value of over 600 billion USD, many times more than Nokia, the previous market leader (Edvinsson, 2013). What did Steve Jobs actually do in Apple? He managed its Intellectual Capital. How? For Steve Jobs managing the intellectual capital involved the capability to give proper direction to the knowledge assimilated in the organization in order to generate innovative ideas and develop them (B. Prasad, in International Business, 6 October 2011).

In 2006, Proctor and Gamble paid £ 31 billion for Gillette, of which only £ 4 billion were accounted for by tangible assets. Here is yet another fascinating instance in the business folklore. “The story of Dell”. This represents the story of American enterprise. Started in a college dormitory room, and making products that the technology age devoured with passion, the company wasted no time in catapulting itself to a market capitalization of more than \$100 billion.

2. Historical Context

The Knowledge Economy, or the Next Economy as Drucker (2001a, b) called it, is clearly different from what went before. In the knowledge-driven economy, the knowledge worker is the primary factor of production. (Crawford, 1991a; Drucker 1999). Drucker (1999) said that the biggest contribution of management in the twentieth-century is to increase the productivity of the knowledge worker because knowledge can be used to explain the performance and the growth of an organization (Penrose, 1959a).

The performance capacity of an organization is based on the knowledge of its people (Savage, 1990) and also on the collective and organizational knowledge (von Krogh et al., 1994). As IC is being recognized as the foundation of organizational success in the twentieth century (Wiig, 1997), this phenomenon has emerged from the transition (Figure 1) from a traditional industrial economy to a knowledge economy (Guthrie et al., 1999). As knowledge and IC are viewed as the most important source for achieving sustainable competitive advantages (e.g. Drucker, 1993; Bontis, 1999; Seleim et al., 2004; Seleim and Khalil, 2007; Cortini and Benevene, 2010), the historical phases of the transformation to a knowledge economy is shown in Figure 1. Peter Drucker described how our society is being transformed into one whose primary resource will be knowledge. He claimed that the true investment in the future of our society is not in machines and tools but in the knowledge of the knowledge worker. Drucker (1994) further drives home the point that the most important resource of a company’s economic growth is its knowledge, collected from its employees, customers, and suppliers. To drive home the point (a) the resource-based theory of the firm (e.g. Penrose, 1959b; Wernerfelt, 1984; Itami, 1987; Aker, 1989; Dierickx and Cool, 1989; Amit and Schoemaker, 1993; Prahalad and Hamel, 1990; Barney, 1991; Hall, 1992; Teece et al., 1997), (b) the dynamic capability of the firm (e.g. Teece et al., 1997; Zahra and Nielsen, 2002), and (c) the knowledge-based theory of the firm (e.g. Demsetz, 1991; Kogut and Zander, 1992, 1996; Nonaka, 1994; Nonaka and Takeuchi, 1995; Grant, 1996; Bierly and Chakrabarti, 1996) are particularly prominent.

The transition from one type of economy to the next is characterized by mastering the productivity of a given sector. For instance, as the productivity of agriculture improved, it took less workers to produce food. As a result, freed workers were able to migrate to the suburbs and participate in the industrialization process (Crawford, 1991b). Likewise, as manufacturing technology advanced and coupled with the science of management of Taylor in the 20th century (Russell and Taylor 2000), the productivity of the industrial worker reached a point where enough capacity of labour was able to move to a market laced with knowledge economy with its base in services. Crawford (1991c) says that services’ primary factor of production is knowledge and therefore the term “knowledge intensive services”.

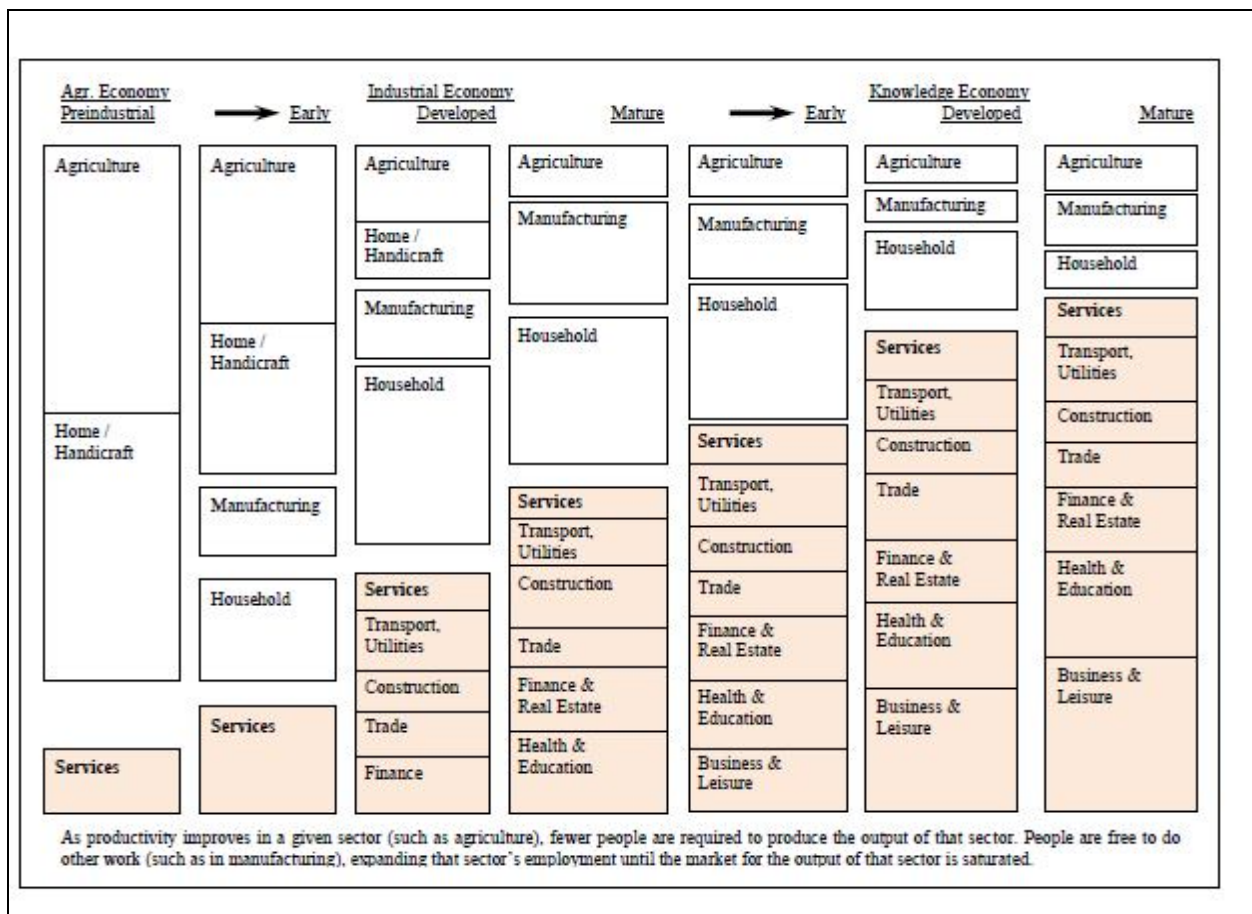


Figure 1: Transformation To A Knowledge Economy
(Source: Crawford, 1991, Fig. 1.1)

The value of manufacturing industry has shifted from the value of manufactured goods to that of services. However, due to the complexity of the measurement of the gross value of firm, identification of such shifting trajectory has still remained in a black box (Barth and Clinch, 1998). Here, the dominant role of intangibles (also known as knowledge assets or intellectual capital) could be seen by the fact that there is an increased gap between market value and book value over the last three decades. In 1978, the book value accounted for 95% of market value. The ratio fell to 27% in twenty years (Stewart, 2001). Little wonder, in the beginning of the twenty-first century, IC was officially recognized as a scientific discipline within the management domain (Serenko and Bontis, 2013). A Google search conducted on the IC and Knowledge Management (KM) terms yielded thousands of websites (Knowledge Management = 3,400,000, intellectual capital = 368,000) which attests to the large on-line appeal of these concepts. This proves the initial interest in the domains (Serenko and Bontis, 2004).

Andreou et al. (2007, p. 53) say that the business enterprise in this knowledge era has a need to become “intelligent” about its environment to gain knowledge from its environment and subsequently value its intangible resources. They are of the view that in order for an enterprise to become “intelligent”, it is necessary for it to scrutinize its business processes/functions, codify them to facilitate the modeling of business activities, and provide definitions, attributes and constraints of business intelligence that align with the performance of the enterprise.

3. Significance Of IC In The 21st Century

To maintain long-term business value, decision makers should realize the correct direction and coming challenges for the enterprise (Kelso and Adler, 1958). In consonance with the Resource Based View (RBV), IC represents as valuable, intangible and inimitable resources for facilitating productive activities and value creation of a firm (e.g., Roos et al., 2005; Nahapiet and Ghoshal, 1998; Roos and Roos, 1997b). Anchored in an RBV logic, IC-based view (ICV) represents a general aspect RBV that intangible resources have been theoretically linked to a firm’s competitive advantage (Reed et al., 2006). ICV focuses on the stocks and flows of intangible resources embedded in an organization, and is posited to have direct associations with financial performance (Youndt et al., 2004). The synergistic effects of the interaction of IC and its value creation propensity are explained in Figure 2 and 3. The efficiency of IC utilization to have a direct influence on the performance of firms is such that it constitutes a matter of practical interest to managers and shareholders (Tan et al. 2008) and an important area for research.

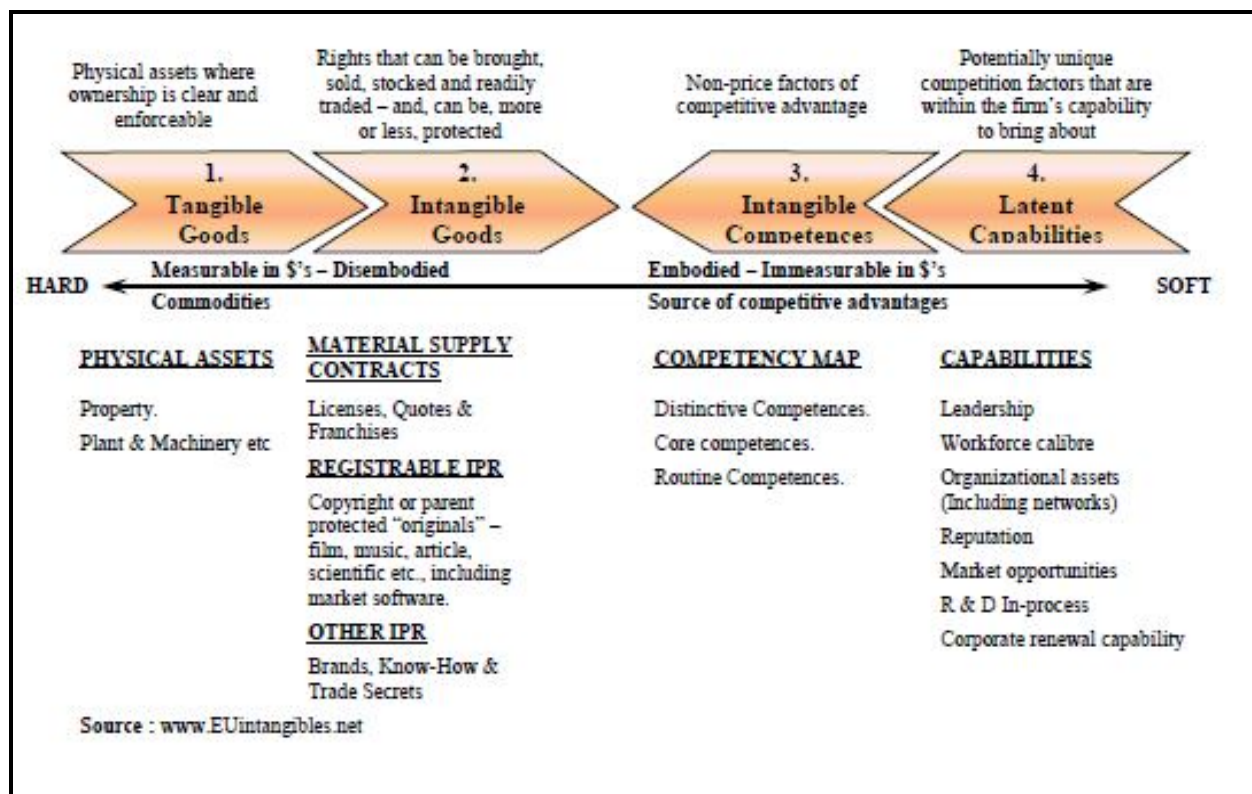


Figure 2: The Intangibles In The 21st Century
(Adapted From Eustace & Youngman (2003) And Krambia-Kapardis And Thomas (2006))

The four blocks are based on taxonomy from an earlier European Union (EU) project. They are intended to represent the strategic assets of an enterprise or a nation. They are laid out horizontally to represent the fact that such assets or capital can be accessed from both within and without the traditional legal boundaries of the enterprise. The value adding genetic space is on the border line where the internal IC meets the external IC. To the left of the "value creation space" lie the tangible and intangibles assets over which ownership rights can - more or less - be elaborated. Tangible goods would include physical assets such as land and buildings, plants, machinery and equipment. Intangible goods would include packaged and codified assets such as software, brands, trademarks, licenses, and legal intellectual property rights (IPR) over scientific discoveries. To the right of the "value creation space" lie the intangible competences and latent idle capabilities. or, in other words, capital in waiting. Intangible competences embrace the organisational capital such as culture, networks and the human capital, which is effectively leased for productive use from the individual knowledge workers. Latent capabilities are what investors, in particular venture capitalists, are interested in. The discovery and exploitation of this value shaping space is where top leadership truly differentiates itself.

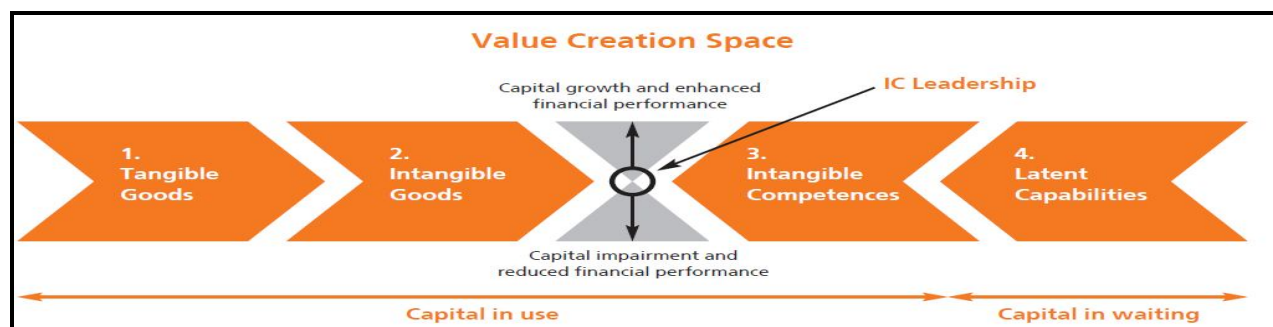


Figure 3: Value Creation Space
(Source: Edvinsson, 2002)

At the core of this lies the "value creation space" where IC leadership faces the challenge of leveraging these longitudinal resources and create economic value adding. This is the dialectic space or kinetics for knowledge entrepreneurship. It might lead to growth of capital on the balance sheet as well as impairment of the balance sheet. In such a situation value destruction will occur. A critical

question will emerge: What is the knowledge leadership of today doing to avoid erosion and leverage the idle intellectual capital in waiting and how do we know about this from the reporting? (Edvinsson, 2002)

In IC literature, it is very common that the terms: “intellectual capital” and “intellectual assets” (IAs) are used interchangeably, which is both confusing and incorrect (Andriessen, 2004). IAs, as any other company’s assets, have to generate cash flows today or in the future. On the other hand, IC is the human potential that could be converted into IAs. As such, the value of assets reflects (mirrors) the value of capital (see Figure 4).

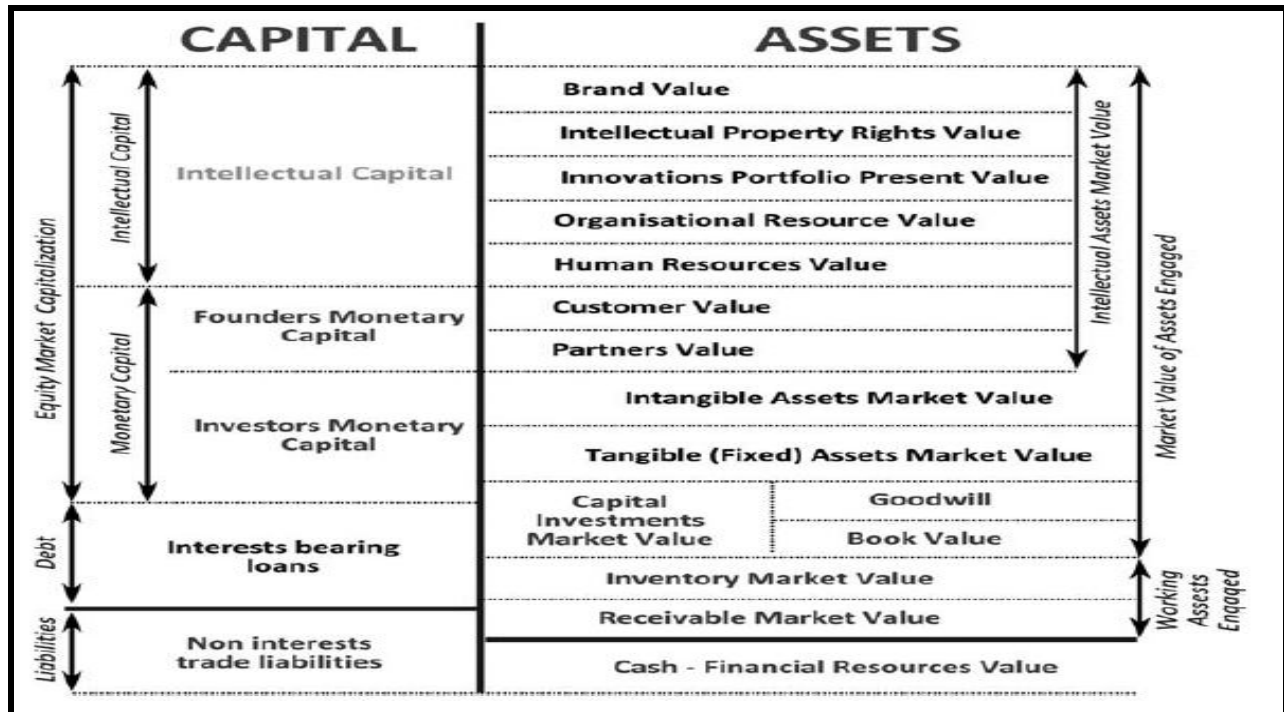


Figure 4: The Value Of Intellectual Capital Equals Intellectual Assets' Intrinsic Value
(Adapted From Grajkowska, 2011)

Therefore, the value of company’s IC is equal to the value of all its IAs. That explains why investors are willing to invest into promising knowledge-based companies and pay the price per share that exceeds its current book value, thus acknowledging the potential value of the company’s intellectual capital (Damodaran, 1996). The value of the company’s entire IC is mirrored by the economic profit created on all assets, especially IAs.

The economic profit generated by each particular asset should be calculated separately as its estimated (intrinsic) or realized (market) value less cumulative value of cash invested into given asset from beginning to present day, capitalized with risk adjusted cost of capital rate (RaCoC). The level of RaCoC is determined by specific risks relevant for each asset, including IAs. The purpose of the valuation process is to define a fair market value of a company, which is not a trivial task in the case of innovative knowledge-based companies (KBC) (Daum, 2002). Fair market value is the price at which the asset (company) would change owner when neither the seller nor the buyer is under pressure to sell/buy, and both parties have equal knowledge about the asset (company) (Slee, 2004)

4. Investment In Intangibles Meets That Of Tangibles

The most important factors of production in developed economies are invisible. These intangible assets –staff skills, strategic and process quality, software, patents, brands, supplier and customer relationships etc.– are delivering a fast-growing contribution to corporate competitiveness. And massive investment is being made in these assets: Leonard Nakamura from the Federal Reserve Bank of Philadelphia puts the total for the USA in 2004 at USD one trillion, equivalent to about 9% of US GDP and fast approaching capital expenditure on tangibles (Figure 5).

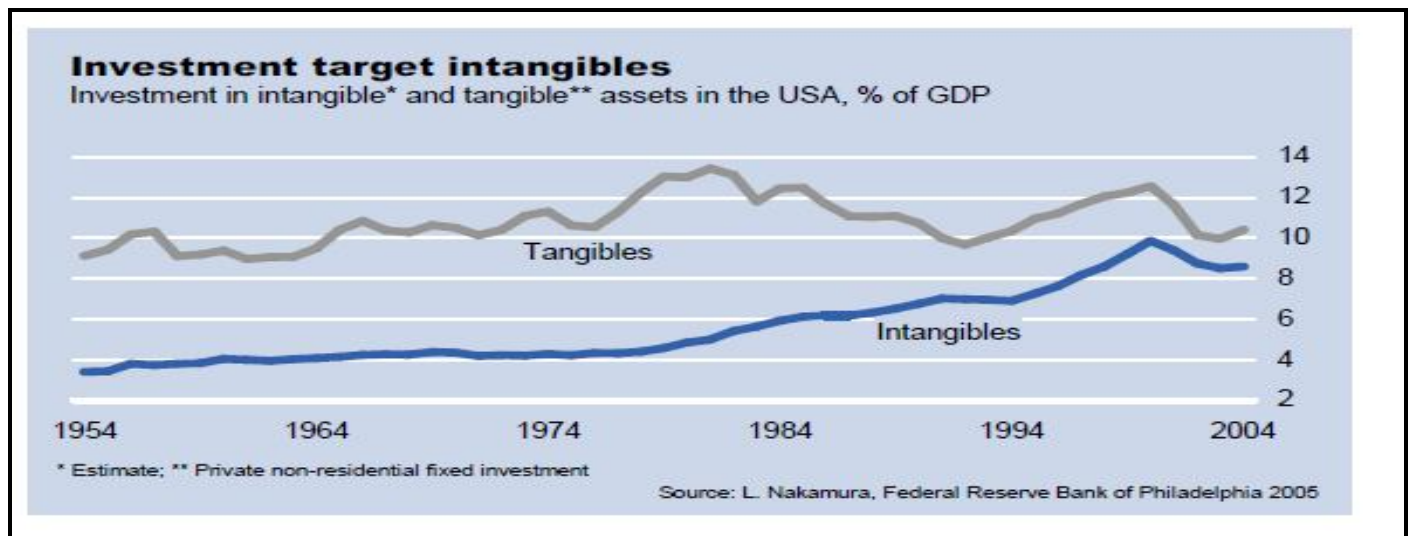


Figure 5: Investment In Intangible And Tangible Assets In The USA, % Of GDP

Takers and providers of capital alike can secure themselves a tangible competitive edge with more systematic measurement of intangible capital. For this they need experience and, most importantly, a close relationship with one another. This can be built up only slowly – often in the course of new business processes. The early bird catches the worm (Hofmann., 2005)

In the light of the above, according to Roos et al, (1997) and Marr et al. (2003), the management of IC involves (a) identifying the key IC which drive the organization's strategic performance (b) visualizing the value creation pathways and transformations of key IC (c) measuring performance and specifically the dynamic transformations (d) cultivating the key IC using KM processes and (e) the internal and external reporting of performance.

5.The Imperatives Of Real-Time Strategy Concepts & IC

The authors are of the view that good to great companies (Collins, 2001) built to last (Collins & Porras, 2002) can confidently compete for the future (Hamel and Prahalad, 1994) only if they discover and sail through blue oceans (Kim and Mauborgne, 2005) by steering clear of strategic inflection points (Burgelman and Grove, 1996). Let us explain the blue ocean strategy and strategic inflection points to put IC in context.

5.1.Blue Ocean Strategy

In their landmark book, Blue Ocean Strategy (2005) and the research articles that preceded it, W. Chan Kim and Renee Mauborgne convincingly argue that corporations can earn greater profit by creating unique offerings for new markets than by competing with rivals in existing ones. Blue Ocean Strategy asks managers to change their perspective from that of field generals battling competitors head-to-head for market share or repeatedly seeking to grow by endless market segmentation. Instead they should see themselves as explorers, looking to discover new customer demand. Companies that have successfully discovered Blue Oceans enjoy a number of first-mover advantages, including gaining economies of scale, building reputation and user loyalty, and the ability to fund the search for the next Blue Ocean.

The blue-ocean-strategy framework consists of a strategy canvas and four practical actions to systematically innovate value. The strategy canvas is an analysis tool that reveals the current state of participants in a well-known market. It also shows what customers gain from rival products in that market. The so-called ERRC practical actions reconstruct customer value perception by answering four questions from which the acronym derives: (a) Which of the factors that the industry takes for granted should be eliminated? (b) Which factors should be reduced well below the industry's standard? (c) Which factors should be raised well above the industry's standard? (d) Which factors should be created that the industry has never offered? The blue-ocean-strategy framework also includes six principles. The first four formulate the strategy and last two execute it: (1) Reconstruct market boundaries. (2) Focus on the big picture, not on the numbers (3) reach beyond existing demand (4) Get the strategic sequence right. (5) Overcome key organizational hurdles and (6) Build execution into strategy. (Kim and Mauborgne(2004, 2005))

Blue Ocean strategies are most appropriate for companies whose products are in the mature or decline phase of the product-life cycle. These companies, which exist in what Kim and Mauborgne label, highly competitive "Red Oceans," usually suffer from little or no revenue growth because of the increasing commoditization of their offerings and decreasing customer loyalty. Companies facing these pressures typically attempt to increase profitability by cutting production costs while at the same increasing marketing efforts. These value renovation tactics typically meet with little success because competitors are attempting the same moves, resulting in a zero sum game. Instead of focusing on besting current competitors, Kim and Mauborgne believe that firms in mature markets should aim for value innovation by redefining their offerings to provide unique attributes and experiences to a set of unserved customers. (Sheehan and Vaidyanathan, 2009). Blue ocean strategy (BOS) literature (Kim and Mauborgne, 2004, 2005a, 2005b) presents a largely descriptive approach into assessing how successful companies are capable of creating business model transformations that provide a

foundation for creating completely new value offerings to the marketplace. Such new and even disruptive approaches are presented as key for competitive advantage (Parvinen et al., 2011)

Research finds that elements of human, structural and customer capital are required for successful innovation (Dumay et al., 2013). Innovation is now understood as the driving force behind increases in wealth (Skandia, 1996, p. 3) and it is categorized as a knowledge management practice (Madhavan and Grover, 1998).

5.2. Strategic Inflection Point

A Strategically Inflection Point (SIP) has a rigorous mathematical meaning to describe the giving way of one type of industry dynamics to another; the change of one winning strategy to another; the replacement of an existing technological regime by a new one. These changes – witness the computer industry – create a “valley of death” for the incumbents because they materially affect their profitable growth trajectories. If an incumbent’s top management is able to come up with new strategic intent that takes advantage of the new industry conditions, it can traverse the valley of death and enter a new era of profitable growth. Otherwise, it continues to survive with severely reduced performance prospects, or dies. Unfortunately, it is pretty difficult for anyone in an extremely dynamic industry, including top management, to clearly perceive the new industry equilibrium, winning strategy, or new technological regime, that looms beyond a SIP.

In extremely dynamic industries alignment between a firm’s strategic intent and strategic action is not likely to last. Strategic actions, inevitably, will begin to lead or lag strategic intent. Such divergences between intent and action cause “strategic dissonance” in the organization. While new strategic intent is necessary to lead the company out of strategic dissonance, new strategic intent must be based on top management’s capacity to take advantage of the conflicting information generated by strategic dissonance (Burgelman and Grove, 1996, pp.8-10)

Managing strategic dissonance requires “strategic recognition”- the capacity of top managers to appreciate the strategic importance of managerial initiatives after they have come about but before unequivocal environmental feedback is available. The strategic recognition of Top management that the set of changing circumstances is a SIP happens in three key stages: (1) recognizing the growing divergence between what the company currently puts forth as its strategy and the actions taken by its managers – what is called strategic dissonance (2) asking the (anxiety provoking) question “is it one-SIP?” and (3) trying to discern the newly emerging strategic picture and providing a framework in which the divergence can be combated and new strategic intent formulated. (Burgelman and Grove, 1996, pp.11-12)

Strategic dissonance, strategic inflection points, and strategic recognition are tools for managing the major transformations that companies must bring about in the face of discontinuous change. As the company moves through the valley of death, the old and new basis of competition, the old and the new distinctive competence, the old and the new strategy, and the old and new strategic action are all in play together. (Burgelman and Grove, 1996, p.17)

The foregoing account reveals that over time, there unavoidably emerge divergences between competence and basis of competition, and between strategy and action. These divergences are natural outcomes of the internal and external dynamic forces that move and shake companies and industries.

Strategic dissonance signals a strategic inflection point in the firm’s development trajectory and alerts the top management about the fact that the familiar picture of the industry is being morphed into a completely new one – involving a fundamental change in the basis of competition, requiring fundamentally different competencies or both. Strategic recognition is top management’s major tool for dealing with strategic dissonance and a SIP. Strategic recognition picks out of the mass of conflicting information the elements that can form the foundation for new, viable strategic goals. Top management’s capacity for strategic recognition is enabled in major ways by the ability of the company’s internal selection environment to distinguish signal from noise. This depends on the comprehensiveness, depth and rigor of intellectual debate among middle and top managers which is the cultural feature most telling of a company’s long-term ability to manage through SIPs (Burgelman and Grove, 1996, pp.24-25)

A favorable organizational reputation is a core intangible resource that creates competitive advantage when competitors are not able to match the prestige and esteem it creates, and enables an organization to attain sustained superior outcomes (Roberts and Dowling, 2002; Shrum and Wuthnow, 1988). ‘Intangible resources are more likely than tangible resources to produce a competitive advantage.’ Hitt et al. (2001: 14), the issue is how, not whether, to match the competitive strategy and the culture of the organization (Itami with Roehl, 1987). 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 Relational Capital: valuable relationships with customers, suppliers and other relevant stakeholders (loyalty, trust and respect); the firm’s reputation and image, brand and partnerships.

Galabova and Ahonen (2011)

6. IC Concepts From Theoretical, And Pragmatic Consideration: Definition, Elements, Frameworks And Measurement

Smith (1994) defines IAs as “all the elements of a business enterprise that exist in addition to working capital and tangible assets. They are the elements, after working capital and tangible assets, that make the business work and are often the primary contributors to the earning power of the enterprise. Their existence is dependent on the presence, or expectation, of earnings”.

According to non-accounting researchers, “intellectual capital” is the “difference between the firm’s market value and its book value of entity” (Edvinsson and Malone, 1997; Stewart, 1997; Sveiby, 1997; Mouritsen et al., 2001). Sveiby (1997) is the first from the

non-accounting perspective to propose the classification of IC into three sub-categories: (1) employee (individual) competence; (2) internal structure; and (3) external structure. (Choong, 2008). But as per accounting researchers (Ohlson, 1995, p. 662; Feltham and Ohlson, 1996, p. 220; Beaver, 1998, p. 78; Holthausen and Watts, 2001, p. 50), the difference between the market value of the entity and the book value of the entity's identifiable assets is defined as "goodwill." Goodwill is also known as "intangible assets". It is to be borne in mind that (a) intangible cannot stand by itself, and hence, it cannot be valued separately from other assets; and (b) IC is the result of the network effect of utilizing various intellectual, human capital and organizational resources. Lev (2001), Daum (2002), Rastogi (2003) and Mouritsen et al. (2004).

Three IC categories: external capital, internal capital and human capital developed by Sveiby (1997) became a common framework used by more recent research studies (Liao et al. 2013). Some of the more popular frameworks are the balance scorecard by Kaplan and Norton (1992), the intangible asset monitor by Sveiby (1997), the Skandia Value Scheme by Edvinsson and Malone (1997). These frameworks have been developed independently and at different times. Many of them are conceptually similar. However, the major distinctions are the basic assumptions and classifications that lead to different levels of aggregation of the IC elements which are sought to be addressed within the Sveiby (1997) framework.

Methods for IC measurement can be classified in four basic categories (Malhotra, 2003): (1) market capitalisation; (2) return on asset; (3) direct intellectual capital; and (4) scorecard. The first three models focus on the financial side of measurement and the monetary value of intangible assets (Andriessen and Tiessen, 2000; Stewart, 1997; Sullivan, 2000), whereas scorecard approaches consider indicators linked with the strategic objectives of the organization and cover major perspectives such as financial, customer, internal processes, and learning. Scorecard models are widely used in practice and among them three methods are particularly diffused: (1) Skandia Navigator (Edvinsson and Malone, 1997). (2) Intangible asset monitor (Sveiby, 1997). (3) Balanced scorecard (Kaplan and Norton, 1992). The authors would give a bird's eye-view of the first two models (Figure 6) widely used in the world of IC research.

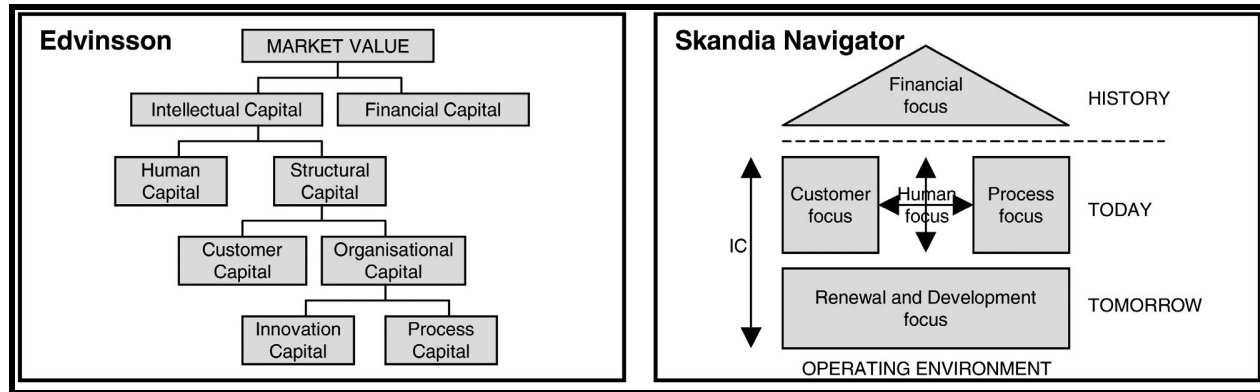


Figure 6: The IC Model And Skandia Navigator (Edvinsson And Malone 1997, P.52 And P.68)

The Skandia navigator "provides a more balanced, overall picture of operations – a balance between the past (financial focus), the present (customer focus, process focus and human focus) and the future (renewal development)" (Skandia, 1988, p. 5). The Skandia Navigator model was the basis for the first official publication of a corporate IC annual report in the world in 1994 (Edvinsson, 2013). It is a sketch which provides a new business-planning mode where the long run is integrated with the concerns of yesterday and today (Mouritsen et al., 2001). The measurement, management and reporting of IC became prominent, especially in Europe and more specifically in the Scandinavian countries, in the two decades leading up to the new millennium (Petty and Guthrie, 2000). At this time, frameworks such as Sveiby's (1997) "Intangible assets monitor" (Table I) became popular (Dumay, 2011).

Intangible Assets		
External Structure Indicators	Internal Structure Indicators	Competence Indicators
Indicators of Growth: Organic Growth.	Indicators of Growth: Investment in IT Investments in Internal Structure	Indicators of Growth: Competence Index Number of Years in the Profession. Level of Education. Competence Turnover.
Indicators of Renewal/ Innovation: Image Enhancing Customers Sales to new customers	Indicators of Renewal/ Innovation: Organization Enhancing Customers. Proportion of new products/ services New processes implemented	Indicators of Renewal/ Innovation: Competence-Enhancing Customers. Training and Education Costs. Diversity
Indicators of Efficiency/ Utilization: Profitability per Customer. Sales per Customer. Win/Loss Index.	Indicators of Efficiency/ Utilization: Proportion of Support Staff	Indicators of Efficiency/ Utilization: Proportion of Professionals. Leverage Effect. Value Added per Employee. Value Added per Professional. Profit per Employee. Profit per Professional.
Indicators of Risk/Stability: Satisfied Customers Index. Proportion of Big Customers. Age Structure. Devoted Customers Ratio. Frequency of Repeat Orders.	Indicators of Risk/Stability: Values/Attitudes Index Age of the organization. Support Staff Turnover. Rookie Ratio. Seniority.	Indicators of Risk/Stability: Professionals Turnover. Relative Pay. Seniority.
<i>Source: www.sveiby.com/articles</i>		

*Table 1: Intangible Assets Monitor
(Source: Sveiby, 1997)*

The emerging frameworks were in part influenced by the development of the “balanced scorecard” (Kaplan and Norton, 1992) that emerged from the USA at the same time. In the mid 1990s, the Scandinavian insurance company, Skandia, combined the principles of the “intangible assets monitor” and the “balanced scorecard” to develop the “Skandia Navigator”. Skandia used the Navigator framework to externally disseminate information about its IC by way of an IC report that was a supplement to their annual financial report (Skandia, 1998)

7. Futuristic Thrust Of IC Through New Paradigms And New Directions

IC study is to think clearly about what IC is and how it can be better managed to create value in the ‘new economy’ (Dumay, 2012). Also, numerous tools and theoretical frameworks have been developed that attempt to conceptualize the notion of IC, making its operationalization easier (Canˆıbao et al., 2000; Edvinsson and Malone, 1997; Lev, 2001; Stewart, 1997; Sveiby, 1997). Future studies should attempt an integrated and holistic approach to aid organizations to visualize, manage, measure and report IC so that they can successfully compete continuously as learning organizations by constantly expanding their knowledge capital and create wealth. (Dierickx and Cool, 1989; Sveiby, 1997; Stewart, 1997). It is indispensable and imperative that we integrate the macro-economic models of intellectual capital, its visualization, identification, management, measurement, accounting and reporting into a synergistic, sustainable and substantive framework for business success. In consonance with the above propositions, Mouritsen (2006) proposes a research agenda that asks three essential questions: (1) what does IC do? (Rather than what is IC?) (2) Where is IC located? (Rather than who owns it?) And (3) how is IC related to value? (Rather than is IC valuable?). These questions help researchers to become knowledgeable about things they did not know beforehand (Kreiner and Mouritsen (2005). In IC terms, this means not simply applying concepts of IC; rather it is about inquiring into the very concept of IC.

8. Conclusion

A company’s business model (BM) cannot be copied by competitors as easily as mere physical facilities (Edvinsson, 1997). The impact of IC on the value creation process within the firm is offered as a general framework (Figure 7). Many researchers have discussed IC as a source of sustainable corporate competitiveness (Kaplan and Norton, 2004). IC with human, social and structural capitals is considered a new mediator variable that explains the relationship between a High-performance Work System (HPWS) and organizational performance (Becker et al, 1997). IC and Balanced Scorecard (BSC) are both considered as company’s building blocks. IC shares two things in common with BSC: (1) they both expand the public perception of value creation and organizational

performance indicators and (2) both offer extra information about a company’s latest development and non-financial performance measurements besides financial performance measurements (Allee 1999).

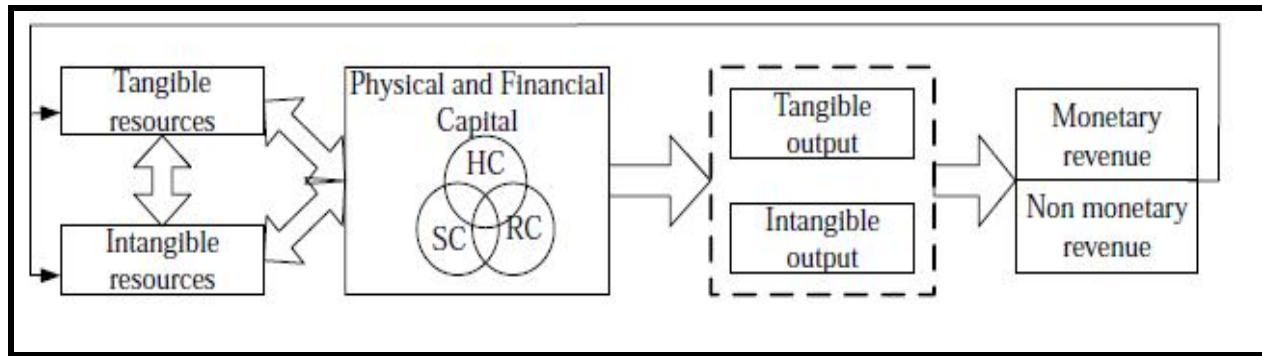


Figure 7: The IC-Based Value Creation Model
(Source: Galabova And Ahonen)

From a traditional strategy point of view (Market Based View and Resource Based View) only commercial value is relevant. From an IC perspective, 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 Human Capital (HC), Structural Capital (SC) and Relational Capital (RC). Revenue is produced, which closes the loop providing both tangible and intangible resources.

Dumay (2012) postulates that the most influential interpretation of IC still stems from the field of financial accounting and some, such as Marr et al. (2003) and Andriessen (2004) are of the considered view that more empirical testing of how IC elements are linked to company financial value is needed improve the legitimacy of IC as an academic discipline. Guthrie et al. (2012) argue that IC researchers need to continue to critically examine and critique IC theory. Gray (2006a, p. 793) agrees with this position, arguing that any research not currently “cognisant or directed towards sustainability or sustainable development does not make sense in the context of current data about the planet”.

Strategic Inflection Point (SIP) is a time in the life of a business when its fundamentals are about to change meaning an opportunity to rise to new heights or to signal the beginning of the end. There is a wind and there is a typhoon, there are waves and then there is a tsunami. There are competitive forces and there are super competitive forces. A large change in one of the forces – competition, technology, customers, suppliers, complementors, regulation – changes by a “10X” factor. SIP offers promises as well as threats. It is at such time of fundamental change that the cliché “adapt or die” takes on the true meaning (Grove, 1996, pp.55-76). Most strategic inflection points, instead of coming in with a bang, approach on little cat feet (Grove, 1996, p.107). But when “10X” forces are upon us, the choice is taking on these changes or accepting an inevitable decline, which is no choice at all (Grove, 1996, p.164). “I know what I need to do. I just don’t know how to do it”, said Andy Grove, the then CEO and Chairman of Intel to its consultant Clayton Christensen of the Harvard Business School while launching their Celeron microprocessor (McChesney et al., 2012, p. xx). What is required is an integrative mechanism between high-level, abstract vision and the organization’s resources providing the starting-point for the “strategy process” as an iterative and continuous process (Figure 8)

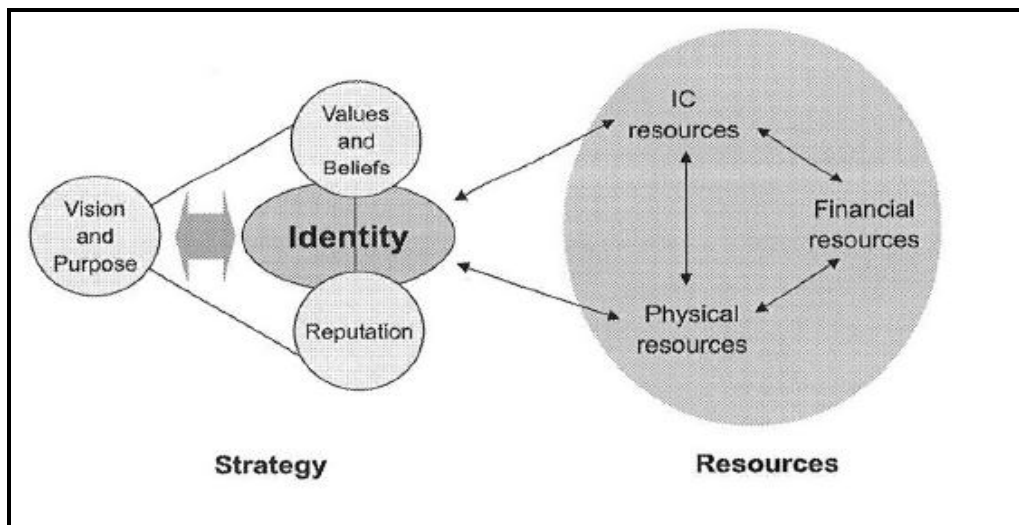


Figure 8: Linking Strategy With Resources From The IC Perspective
(Rylander And Peppard, 2003)

The panacea to surmount the looming business anathema is this: Top managers ought to focus their attention on developing a “Strategic Capability” – the ability of an organization to think and act strategically – in a changing competitive environment rather than expend the energies of the organization in pursuing current fads (Prahalad, 1986).

9. References

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