How Intellectual Capital and Learning Organization Can Foster Organizational Competitiveness?

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Abstract

Intellectual capital can be regarded as the hidden value of an organization. The intention of these social capitals (human, organizational and customer) is to value the intangible asset and reassess the knowledge gaps to improve the business advantage. Although intangible assets may represent competitive advantage, organizations do not understand their nature and value. Managers do not know the value of their own intellectual capital. They do not know if they have the people, resources, or business processes in place to make a success of a new strategy. They do not understand what know-how, management potential, or creativity they have access to with their employees. Because they are devoid of such information, they are rightsizing, downsizing, and reengineering in a vacuum (Davis, 2009, p.17; Collis 1996).This paper is aims to review the Intellectual Capital, IC concept among organizations and employees generally, this paper looks the IC concept in Management sphere.

Keywords: Intellectual Capital, Intellectual Capital Knowledge, Organization

1. Introduction

Primary uncertainty can never be reduced, but organizations can adapt to it (Williamson 1985). Fundamental changes have been wrought in the global economy, which are changing the basis of firm level competitive advantage and with it the functions of management. The decreased cost of information flow, increases in the number of markets (e.g. for intermediate products, and for various types of risk), the liberalization of product and labor markets in many parts of the world, and the deregulation of international financial flows is stripping away many traditional sources of competitive differentiation and exposing a new fundamental core as the basis for wealth creation. That fundamental core is the development and astute deployment and utilization of intangible assets, of which knowledge, competence, and intellectual property are the most significant. Also included are other intangibles such as brands, reputations, and customer relationships. Thus, while there are many ways to keep busy in business, and to expand revenues, there is only a diminishing subset of strategies for creating attractive profit margins. In the end, wealth creation in a world of heightened competition comes down to developing and owning difficult to replicate (intangible) assets, and orchestrating them astutely. The latter capability is what I have referred to elsewhere as dynamic capabilities (Teece, 2002).

Knowledge creation by business organizations has been virtually neglected in management studies even though Nonaka and Takeuchi (1995) are convinced that this process has been the most important source of international competitiveness for some time.

Traditional accounting methods look backwards into the past and measure physical assets only. But new methods must be established to measure intellectual capital because now we could not put of the important roll of IC in today's competitive markets (Davis, 2009).

More than 60% of US workers are knowledge workers, Knowledge workers are defined as "symbolic analysts", workers who manipulate symbols rather than machines. They include architects and bank workers, fashion designers and pharmaceutical researchers, teachers and policy analysts. In advanced economies such as the US, more than 60 per cent of workers are knowledge workers (Ernst & Young, 2006). So in all entire the world all countries try to develop all their workers' and staff's capabilities, especially in knowledge. By increasing these capabilities countries will have much more development in this global economy and will act more efficiently and effectively.

It is estimated that; intellectual capital research has primarily evolved from the desires of practitioners (Bassi and Van Buren 1998; Bontis 1996a; Darling 1996; Edvinsson and Sullivan 1996; Saint- Onge 1996). Consequently, recent developments have come largely in the form of popular press articles in business magazines and national newspapers (Davis, 2009, p.18).

Only Knowledge and knowledge-based organizations can dominate the markets (Drucker, 1995). It has long been recognized that 'economic prosperity rests upon knowledge and its useful application' (Teece 1981).

In ancient time, the ruler of kingdom searches for the group of intellectual people, who can advise them for better a management. For developing the IC, they have been established so, many schools of thought & universities around the world. Today's ruler must do the same for worldwide holistic Intellectual human resource development, whole can make prosperous world. Organizations which have more intelligent staff will do better (Nirmal et al, 2004).

Indeed, 'the increase in the stock of useful knowledge and the extension of its application are the essence of modern economic growth' (Kuznets 1966). Enlightened economic historians have long emphasized the role of technology and organization in economic development.

Formalization, the sharing of personal knowledge, and the development of structural approaches as a mechanism to transfer learning throughout the firm may on the other hand sap creativity and impede learning. Ideally, one would like to develop approaches or models which have a common essential logic, but which enable customization of particular features. This is but one of the many challenges to service firms in the new economy where knowledge sharing itself can often is the basis of competitive advantage (Teece, 2002).

Also doing a successful strategy and transferring a traditional organization to a knowledge-based one, and keeping and accumulating the IC and intangible resources in the organization more efficient, organizations should use from LO and knowledge accumulate strategies and professional team building strategies in their organizations to survive and growth and dynamical capability in today's' competitive era (Hung et al, 2005; Davenport & Beck, 2002; Groves, 2002; Levet & Guenor, 2000).

This paper first discusses the Intellectual Capital and states burgeoning field of intellectual capital as an exciting area for both researchers and practitioners. Second, the importance of IC in recognising changes in the worth of their business and ultimately in balance sheets comes. Then the importance of Intellectual Capital Technology, ICT brings and state that ICTs are the enablers of change and not by themselves create transformations in society. ICTs are best regarded as the facilitators of knowledge creation in innovative societies. Then the problems of IC and the role of IC in the organizations come. Finally the barriers of IC come in details.

2. Intellectual Capital

Knowledge management theorists argue that knowledge is the preeminent resource of the firm (Grant 1996a, b; Spender 1994, 1996; Baden-Fuller and Pitt 1996; Davenport and Prusak 1997). The knowledge-based view of the firm identifies the primary rationale for the firm as the creation and application of knowledge (Demsetz 1991; Kogut and Zander 1992; Nonaka 1994; Spender 1994; Nonaka and Takeuchi 1995; Foss 1996; Grant 1996a, b; Bierly and Chakrabarti 1996; Connor and Prahalad 1996, Choi and Lee 1997).

Johnson and Kaplan state that: A company's economic value is not merely the sum of the values of its tangible assets, whether measurable at historic cost, replacement cost, or current market value prices. It also includes the value of intangible assets: the stock of innovative products, the knowledge of flexible and high-quality production processes, employee talent, and morals, customer loyalty and product awareness, reliable suppliers, efficient distribution networks and the like. Reported earnings cannot show the company's decline in value when it depletes its stock of intangible resources. Recent overemphasis on achieving superior long-term earnings

performance is occurring just at the time when such performance has become a far less valid indicator of changes in the company's long-term competitive position (1987: 202).

The field of intellectual capital initially started appearing in the popular press in the early 1990s (Stewart 1991, 1994). Intellectual capital was described by Stewart as a "brand new tennis ball—fuzzy, but with a lot of bounce." However, this statement acts as a detriment for the survival of this field in academia. Most "bouncy" topics that are researched extensively (e.g., reengineering, quality circles, management by objectives) are frowned upon in academic circles because they are considered nothing more than popular fads. Due to their temporal shortcomings, they are deemed unworthy of serious study. On the other hand, the "fuzzy" aspect of intellectual capital captures the curious interest of practitioners who are always on the prowl for finding solutions to difficult challenges. Hence, the popularity of this topic during its genesis has been sponsored by business practitioners. It is for this audience that the conceptualization of intellectual capital resonates most (Bontis, 2002, 14-15).

Since organizational knowledge is at the crux of sustainable competitive advantage, the burgeoning field of intellectual capital is an exciting area for both researchers and practitioners. Intellectual capital is conceptualized efrom numerous disciplines, making the field a mosaic of perspectives Accountants are interested in how to measure it on the balance sheet, information technologists want to codify it on systems, sociologists want to balance power with it, psychologists want to develop minds because of it, human resource managers want to calculate an ROI on it, and training and development officers want to make sure that they can build it (Bontis, 2002).

Information and knowledge are the thermonuclear competitive weapons of any time. In today's time, acquiring the knowledge is not a big deal but implementation of acquired is a big deal. Only intelligent people can take the decision that where & when the acquired knowledge implementation can produce the best results.

Success goes to those who manage their intellectual capital wisely (Stewart, 1997, p. 68). Many view the accessibility of knowledge as the foundation for establishing a competitive advantage in the new millennium (Edvinsson & Malone, 1997; Stewart, 1997). The theory of intellectual capital has emerged in the past decade in response to these advances within an organization. Although the theory is new and research is in the early formative stages, theoretical foundations have been identified as anchors of intellectual capital.

In the simplest of terms, Ulrich (1998) defines intellectual ,& competence multiplied by commitment (p. 125), meaning that intellectual capital equals the knowledge, skills, and attributes of each individual within an organization multiplied by the person's willingness to work hard. Klein and Prusak (1994) define intellectual capital as the intellectual material that has been formalized, captured and leveraged to produce a higher-valued asset (p. 67).

The literature on intellectual capital has deployed a variety of different classification schemes (i.e., Edvinsson and Malone 1997; Petrash 1996). There are widely accepted, three-category classification, which divides intellectual capital into codified knowledge about an organization's systems and operations (systems capital); knowledge about customers, markets, and distribution (customer capital); and knowledge acquired from people skills and expertise (human capital; Bontis 1996; Bontis and Fitz-enz 2002; Stewart 1997; Sveiby 1997). Figure 1 provides an overview of the three types of intellectual capital used in this study. Whether professional based or customer based, it is common practice for service firms to purchase some of their intellectual capital from external consultants and franchisors (Walsh et al, 2008, p.302).

<Insert figure 1 here>

Over the last ten years, intellectual capital (IC) has been the subject of several interesting developments, which led to its establishment as a recognized field of research and action. Yet, in spite of the already observed effort IC research is still in its infancy, and there is a need to consider to what extent it contributes in a sufficient way, to problematizing managerial and policy issues of the knowledge economy. One of these challenges lies in considering the dynamic aspects of performance, and how IC research can address it in a proper way.

Intellectual capital is knowledge that can be exploited for some money-making or other useful purpose. The term combines the idea of the intellect or brain-power with the economic concept of capital, the saving of entitled benefits so that they can be invested in producing more goods and services (Augier & Teece, 2005). Intellectual capital can include the skills and knowledge that a company has developed about how to make its goods or services; individual employees or groups of employees whose knowledge is deemed critical to a company's continued success; and its aggregation of documents about processes, customers, research results, and other information that might have value for a competitor that is not common knowledge. Business organizations employ knowledge.

They generate and process information, formulate plans and strategies, make decisions, monitor behavior and experiences, and learn, create, and use know-how (Augier & Teece, 2005). Although economists have traditionally modeled firms as employing capital, labor, and other factors of production to increase output— possibly with exogenous technical change as a shift parameter in the production function—it is increasingly realized within the economics profession that knowledge and intellectual capital (IC) are the primary creators of value in the economy (i.e., the creation and use of intangible rather than tangible [physical] assets are the keys to wealth creation), and technological change is not exogenous but, in fact, generated in large measure by firms themselves (Augier & Teece, 2005). Peter Drucker suggested: "The traditional factors of production—land, labor and capital—have not disappeared. But they have become secondary. Knowledge is becoming the only meaningful resource" (1993, p. 42). Also Intellectual property systems have been strengthened since the 19805, both in the USA and abroad. Moreover, intellectual property is not just important in the new industries—such as microelectronics, biotechnology and the internet— it remains important in pharmaceuticals and chemicals and is receiving renewed interest in more mature industries such as petroleum and steel.

3. Benefits of Intellectual Capital in Management and Organization

Knowledge, competence, and related intangibles have emerged as the key drivers of competitive advantage in developed nations. This is not just because of the importance of knowledge itself, but because of the rapid expansion of goods and factor markets, leaving intangible assets as the main basis of competitive differentiation in many sectors. There is implicit recognition of this in both management theory and practice with the growing emphasis being placed on the importance of intangible assets, reputation, customer loyalty, and technological know-how. By using a good structure like learning organization we will have organizational structure that have the ability to support the Intellectual capital in today's market. So today's organizations should try to use this paradigm (learning organizations) to be competitive. Also because our contemporary organizations may differ from the traditional organizations and so we should implement new skills to be learning organization so that our staff can adjust themselves with new technologies. Also can sense the weak signals in the environment and can reply the prosper answer to them. In this situation our managers and executives and CEOs can effectively manage the Intellectual Capital in the organization.

Successful managers and businesses have been managing intellectual capital one way or another all along, whether consciously or intuitively. This however, does not mean that they have an ICM program or strategy. Managing IC as a matter of common business sense is not sufficient for the development of ICM as an organizational competency. It is only when a management style moves from being intuitively applied to a planned and systemized process that it can be perfected. Only then can it be substantially transformed from being an art to becoming a science. Once it transitions into a science, it becomes testable, measurable, more predictable, and, most importantly, repeatable. Though organizations that apply ICM advance this goal, there is still a long road of experimentation and applied research ahead for the emerging field of ICM to become more of a "science." (ICM, 2009)

One of the established precepts of ICM to date, however, is dividing IC into human, customer, and structural capital-what.

4. IC as Dynamical Capability

The dynamic approach to intellectual capital has been developed by IC strategist scholars. Its roots can be found in the resource-base view of the firm (RBV) as well as in the dynamic capability approach. RBV considered the firm as a bundle of resources – mainly intangibles (Barney, 1991; Grant, 1996; Peteraf, 1993; Wenerfelt, 1984). From this framework resources that are of high relevance for competitive advantage are specifically those which are valuable, rare, inimitable and non-substitutable (the so-called VRIN attributes). This framework has been the subject of many critiques, related notably the difficulty of defining and identifying VRIN resources.

The dynamic capabilities approach aimed at addressing some of the RBV weaknesses, especially by providing a more operational analytical framework. Teece *et al.* (1997) defined dynamic capability as "the firm's ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments". A concept similar to the "combinative capabilities" was defined by Kogut and Zander earlier (Kogut and Zander, 1992). This definition has been criticised by Zollo and Winter, as they consider it "as troublesome near-tautology in defining a capability as ability" (Zollo and Winter, 1999, p. 4), and from their perspective the conditions of formation of capabilities are not explicitly defined by Teece *et al.* They connect capability with routine, especially in the context of what they called "knowledge evolution cycle". Therefore, the authors defined a dynamic capability as "a learned pattern of collective activity through which the organization systematically generates and modifies its operational routines in pursuit of improved effectiveness" (Zollo and Winter, 1999, p. 10). In a later

paper Winter (2002) addressed in more details the issue of dynamic capabilities. He made a distinction between ordinary "zero level" capabilities, (i.e. those capabilities that "permit to the firm to make living in the short term") from dynamic capabilities that contribute to the extension, modification ror creation of ordinary capabilities. These have been named elsewhere "high-order capabilities" (Collis, 1994) (Ståhle& Bounfour, 2008,).

5. Learning Organizations

The literature on LO has been suspected of colluding with the 'ruling courts' which govern organizations (Coopey, 1995) and of employing ideologically a discourse of democracy and liberation (Snell and Chak, 1998). Easterby-Smith (1997: 1086) defines the literature on LO as having 'an action orientation', and being 'geared toward creating an ideal type, an organization in which learning is maximized' (Gheradi, 2006).

The ''learning organization'' is the generic term given to strategies and initiatives for improving organizational effectiveness through emphases on developing the capabilities, capacities and qualities of the staff, and on approaches based on behavioral and attitudinal, as well as skills, enhancement (Pettinger, 2002).

Organizations that differentiate themselves through concentrating on employee development also gain reputations for being good employers. Staff is attracted because of the training, development and enhancement on offer, and the opportunities for variety and interest that this is understood to bring (Pettinger, 2002).

<Insert table 1 here>

6. Benefits of Learning Organizations

Twenty first century is the century of knowledge (Rose, 2004).

There are many benefits to improving learning capacity and knowledge sharing within an organization. The main benefits are;

- Maintaining levels of innovation and remaining competitive (Mchugh et al, 1998)
- Being better placed to respond to external pressures(Mchugh et al, 1998)
- Having the knowledge to better link resources to customer needs (Pedler, M., Borgoyne, 1997)
- Improving quality of outputs at all levels(Pedler, M., Borgoyne, 1997)
- Improving corporate image by becoming more people orientated(Pedler, M., Borgoyne, 1997)
- Increasing the pace of change within the organization(Pedler, M., Borgoyne, 1997)

7. The Importance of Intellectual Capital Technology, ICT and Organizational Innovation

ICT releases people's creative potential and knowledge (Frankland, 2008, p.483).

ICTs are the enablers of change. They do not by themselves create transformations in society. ICTs are best regarded as the facilitators of knowledge creation in innovative societies (OECD, 1996). The new economics looks at ICT not as drivers of change but as tools for releasing the creative potential and knowledge embodied in people.

However, the ICT sector has a powerful multiplier effect in the overall economy compared with manufacturing. A 1995 study of the effect of software producer Microsoft on the local economy revealed that each job at Microsoft created 6.7 new jobs in Washington State, whereas a job at Boeing created 3.8 jobs (Mandel, 1997). Wealth-generation is becoming more closely tied to the capacity to add value using ICT products and services. The value of accumulated knowledge within New Zealand is an important indicator of its future growth potential (Ernst & Young, 2006).

8. The Problem of IC's Assessment

The real problem with intellectual capital lies in its measurement. Unfortunately, an invisible conceptualization—regardless of its underlying simplicity—becomes an abyss for the academic researcher. To make matters worse, intellectual capital is conceptualized from numerous disciplines, making the field a mosaic of perspectives (Davis, 2009).

How do we measure a firm's intellectual capital? How can a firm tell whether its knowledge assets have increased or diminished over a certain period of time? According to Strassman (1998), intellectual capital is what is left over after suppliers, employees, creditors or shareholders and the government have been paid, and obsolete assets replaced. There are other approaches, including those of Sveiby (1997) and of Stewart (1997). One tool that is now widely used by US companies is Kaplan and Norton's Balanced Scorecard, which combines financial with non-financial measures, such as internal business processes, learning and growth, and various

customer-related measures (Kaplan and Norton, 1996). Competency models seek to define and classify the behaviours of successful employees and calculate their market worth, while a business worth approach seeks to consider the value of information and the costs of missed or under-utilised business opportunities (Ernst & Young, 2006).

9. Discussions and Conclusions

Intellectual capital is a firm's source of competitive advantage, to become knowledge driven, companies must learn how to recognize changes in intellectual capital in the worth of their business and ultimately in their balance sheets. A firm's intellectual capital - employees' knowledge, brainpower, know-how, and processes, as well as their ability to continuously improve those processes - is a source of competitive advantage. But there is now considerable evidence that the intangible component of the value of high technology and service firms far outweighs the tangible values of its physical assets, such as buildings or equipment. The physical assets of a firm such as Microsoft, for example, are a tiny proportion of its market capitalization. The difference is its intellectual capital.

Successful organizations hire intelligent staff and this is the usual form of developing IC in the organization (Sveiby, 1997; Rose et al 1997; Stewart, 1997; Edvinsson, L., and Sullivan, 1996; Edvinsson, L. and M. S. Malone, 1997).

Most organizations have adapted or transformed their management styles and business models to manage intellectual capital (IC) and respond to the IC-enabled dynamics of the knowledge economy. Many of these organizations have done it without even realizing that they are adopting an intellectual capital management (ICM) approach. A top executive of a leading consumer products company, whose name is withheld, commented that his company is not interested in ICM. "Show me the money," he said. "All I see are the circles and pyramids that ICM people draw in conferences." What this executive did not realize is that he was already managing IC in one way or another on a daily basis to make money. If it weren't for this executive's daily reliance on his gut feeling and tacit knowledge to manage his employees' innovation, the company he works for wouldn't be a market leader. If the company's employees did not care about the management of customer and structural capital, it wouldn't invest millions of dollars in its interactive Web site to solicit consumers' feedback 24 hours a day, seven days a week (ICM, 2009).

Our managers and CEO's should provide themselves with the latest knowledge so that they could overcome to the forthcoming events. This important as stated earlier is possible with competent employees and managing them effectively. Also managers should note that; that organizations are operating in a vacuum is not surprising, as they do not have any methods or tools to use that would enable them to analyze their intellectual capital stocks and organizational learning flows. To that end, a methodology and valuation system is required that will enable managers to identify, document, and value their knowledge management. This will enable them to make information rich decisions when they are planning to invest in the protection of their various intellectual properties (Davis, 2009, p.17). So they should an IC management system in their organization to identify intellectual employees. After identifying those staff, the organization can utilize them in appropriate way in organizational shared vision.

As mentioned earlier, intellectual capital research has primarily evolved from the desires of practitioners (Bassi and Van Buren 1998; Bontis 1996a; Darling 1996; Edvinsson and Sullivan 1996; Saint- Onge 1996). Finally, consequently, recent developments have come largely in the form of popular press articles in business magazines and national newspapers (Davis, 2009, p.18).

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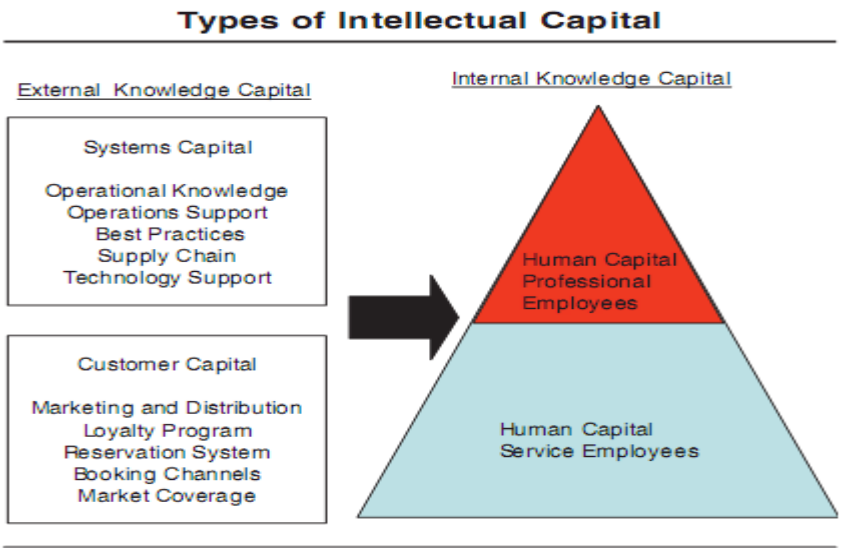
Table 1. Characteristics of IC- knowledge based organizations *

Characteristic	Definition	Associated Best Practices	Positive Byproducts
Self mastery- individual	The ability to honestly and openly see reality as it exists; to clarify one's personal vision	1.Positive reinforcement from role models/managers 2.Sharing experiences 3.More interaction time between supervisory levels 4.Emphasis on feedback 5.Balance work/non-work life	Greater commitment to the organization and to work; less rationalization of negative events; ability to face limitations and areas for improvement; ability to deal with change
Mental models - individual	The ability to compare reality or personal vision with perceptions; reconciling both into a coherent understanding	1.Time for learning 2.Reflective openness 3.Habit of inquiry 4.Forgiveness of oneself 5.Flexibility/adaptability	Less use of defensive routines in work; less reflexivity that leads to dysfunctional patterns of behavior; less avoidance of difficult situations
Shared vision - group	The ability of a group of individuals to hold a shared picture of a mutually desirable future	1.Participative openness 2.Trust 3.Empathy towards others 4.Habit of dissemination 5.Emphasis on cooperation 6.A common language	Commitment over compliance, faster change, greater within group trust; less time spent on aligning interests; more effective communication flows
Team learning - group	The ability of a group of individuals to suspend personal assumptions about each other and engage in "dialogue" rather than "discussion"	1.Participative openness 2.Consensus building 3.Top-down and bottom-up communication flows; 4.Support over blame; 5.Creative thinking	Group self-awareness; heightened collective learning; learning "up and down" the hierarchy; greater cohesiveness; enhanced creativity
Systems thinking - group	The ability to see interrelationships rather than linear cause-effect; the ability to think in context and appreciate the consequences of actions on other parts of the system	1.Practicing self mastery 2.Possessing consistent mental models 3.Possessing a shared vision 4.Emphasis on team learning	Long-term improvement or change; decreased organizational conflict; continuous learning among group members; Revolutionary over evolutionary change

Adapted from the work of Senge (1990), Argyris and Schon (1996), Argyris (1991), and Schon (1983)



Source: (Walsh et al, 2008, p.302).

Figure 1. Types of Intellectual Capital