

## Preface

The determinants of growth and profitability of firms and organizations, as well as of national economies as a whole, is reliant upon their effectiveness and efficiency in gathering and utilising knowledge assets to solve current problems and exploit future opportunities (OECD, 1999). The strategic building material of the modern organization is the creation and use of knowledge-based resources. However, these intangible resources are invisible to many companies, making measurement and management difficult for most managers. If we understand the key elements of intellectual capital that do, in fact, drive value, we will be able to achieve a competitive advantage for the organization. Undoubtedly, these new strategic decisions will reflect new forms of working, new models of business, and new approaches to management thinking (Lytras & Ordóñez, 2007, 2009).

The concept of intellectual capital is still unknown to many because it is difficult to measure in explicit terms (Bontis, 1998; Lytras & Ordóñez, 2008; Seetharaman *et al.*, 2002). In this sense, Chaharbaghi and Cripps (2006, p. 30) state that “it is impossible and undesirable to reduce intellectual capital to a calculable number that establishes whether an organization’s intellectual capital has increased or diminished.” Furthermore, Marr (2005) believes that different people talk about intellectual capital from different perspectives, using the same language to describe different constructs (Ordóñez de Pablos, Edvinsson, & Lytras, 2008; Roos & Roos, 1997).

We can understand intellectual capital as the sum of all knowledge-based factors (i.e., resources, capabilities, and competences) that are critical to the creation of organizational value and a long-term, sustained, competitive advantage. This incremental value is a resultant of a set of activities described within the knowledge management literature (Bontis, 2002). The purpose of knowledge management is to build the intellectual capital of a firm. As such, the academic field benefits from a wide variety of perspectives such as accounting (Bontis, 1996; Bontis & Choo, 2001), library science (Lytras *et al.*, 2005), information systems (Lytras & Pouloudi, 2006), project management (Lytras & Pouloudi, 2003), and strategic management (Choo & Bontis, 2002; Lytras & Ordóñez, 2007).

Knowledge-based resources, like human capital, relational capital, or structural capital, seldom have a direct impact on performance. Indirectly they work impact through complementary and nonlinear relationships of cause and effect (Kaplan & Norton, 2004; Ordóñez de Pablos, 2001). Research on the economics of knowledge-based resources shows that investments in knowledge-based resources do not always stimulate productivity and growth without a number of complementary developments. Recent studies have been placing more emphasis on the analysis of interactions and interdependencies of various intellectual capital components (Bontis, 2004; Ordóñez de Pablos, 2001; Tsan & Chang, 2005).

However, much more detailed and empirically grounded research involving the interrelationships between the different components of intellectual capital is needed to understand how these enable (or impinge upon) value creation. The purpose of this book is to exploit the interrelationships among different intellectual capital elements and their value creation consequences through well-justified support from emerging technologies services on the top of business processes and strategic decisions.

## Literature Review

Intellectual capital literature covers diverse typologies of intellectual capital that have been developed until now. Most authors agree with the idea that intellectual capital is formed by three subconstructs: human capital, relational capital, and structural capital (Bontis, Crossan, & Hulland, 2002; Lytras & Ordóñez, 2007; Ordóñez et al., 2008; Roos & Roos, 1997.).

Human capital reflects the set of knowledge, abilities, skills, and experience of the employees of the company or the people of a region or country. It represents the accumulated value of investments in people training, competence, and the future. It also includes an even more intangible element: people motivation. Relational capital reflects the value of organizational relationships (customers, suppliers, shareholders, and the administrations) or the relations that a region or country has with other regions and/or countries. Finally, structural capital represents knowledge that has moved from individuals or from the relationships between individuals to be embedded in organizational structures (such as organizational culture, routines, policies, or procedures) or regional or national structures. Generally, this subconstruct is divided into technological capital and organizational capital (Bontis, Chong, & Richardson, 2000; Ordóñez de Pablos, 2007). Technological capital represents industrial and technical knowledge, such as results from R&D and process engineering. Organizational capital includes all aspects that are related with the organization of the company and its decision-making process, for example, organizational culture, organizational structure design, coordination mechanisms, organizational routines, planning, and control systems, among others, as well as the knowledge embedded in regional and national policies.

Summarizing, human capital, relational capital, and structural capital respectively represent strategic knowledge stocks that can contribute to the creation of a long-term competitive advantage.

## Intellectual Capital and Value Creation in Organizations

Intellectual capital is seen as the main trigger of value creation and sustainable competitive advantage (Prahalad & Hamel, 1990). This suggests evidence of an empirical relationship between intellectual capital and organizational value creation. This link is embedded in a firm's ability to continually build its intellectual capital base by generating new knowledge. Knowledge generation is a process of creating value by recombining previous knowledge through Schumpeterian innovation for an overview. When this recombination builds on already existing intellectual capital, a transformative positive effect on performance is expected.

Researchers from a variety of disciplines have highlighted the close tie between a firm's orientation toward organizational learning and knowledge management and its stock of knowledge-based resources. In this book, we focus on one type of these resources: human capital. Human capital is the primary foundation for organizational learning (Bontis et al., 2002). Human resource management departments can contribute to the creation or acquisition of knowledge.

Thus, an internal human resource management system, or make system, contributes to the internal creation of human capital. On the other hand, an external human resource management system, or buy system, focuses on the acquisition of human capital with specific features. Each system has its own advantages and disadvantages. However, we must never forget that the organizational stock of knowledge-based resources is also formed by relational, organizational, and technological capital.

The architecture of human, relational, technological, and organizational capital plays unique roles in the process of acquiring and integrating new knowledge. As Crossan et al. (1999) state, organizational learning is a dynamic process of strategy renewal occurring across three levels of the organization: individual, group, and organizational.

These authors propose the “4I Framework of Organizational Learning” focused on the relationships between the three levels of learning and two learning flows. At an individual level, the intuiting process takes place. At a group level, the interpreting and integrating processes are developed. Finally, the institutionalizing process is the last stage in the organizational learning process. These modes of learning are linked both by social and psychological processes. This framework is operationalized as the strategic learning assessment map (SLAM), and analyzes, simultaneously, knowledge stocks and flows in the organization. In sum, the organizational learning proceeds through a continuous cycle of identifying and interpreting new knowledge at the individual level, integrating and institutionalizing individual knowledge at the collective level, and finally, enforcing existing organizational knowledge back on individuals and groups.

Taking all this into account, this book aims to contribute to our vision, and also fits excellently with the vision of IGI-Global to develop books that are valued by their targeted audiences for their practical implication and the communication of sound propositions. The scholarly value of this book is anchored in the following key pillars: 1) Exploiting state of the art and emerging trends in intellectual capital, knowledge management and organizational learning; 2) Providing students and academics, as well as to other target markets, an excellent match of theory and practice; 3) Giving an excellent opportunity for discussing some of the hot topics in intellectual capital management and providing fresh ideas on how real-world business challenges set new frontiers for IT and management

We also include further readings of a complimentary nature to the contents of the rest of our publication. As an added value to our readers, the further readings are to provide additional related data in support of the book’s comprehensive concepts, principles, and results, as well as studies that build upon the appeal of this publication as a one-stop reference source

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