

## Chapter 13

# Sustainable Intellectual Capital: A Comprehensive Construct for Understanding the Economic, Social, and Environmental Intangibles

**Javier Martínez Falcó**

 <https://orcid.org/0000-0001-9004-5816>

*University of Alicante, Spain*

**Bartolomé Marco Lajara**

 <https://orcid.org/0000-0001-8811-9118>

*University of Alicante, Spain*

**Patrocinio Zaragoza-Sáez**

*University of Alicante, Spain*

### ABSTRACT

*In recent years, interest in intangible assets has grown, and their identification, measurement, and management has become a topical issue. It is considered important to the recognized value of these invisible assets, called intellectual capital (IC), because they add information to traditional financial indicators that are used both to improve decision making and to demonstrate their potential to potential external users. In this context, IC that incorporates environmental and sustainable aspects (i.e., green intellectual capital [GIC] and sustainable intellectual capital [SIC]) were recently introduced in the academic literature to emphasize the importance of sustainable performance. In order to contribute new knowledge to the subject under study, the research aims to answer the following six research questions through a literature review: (1) What are the origins of IC? (2) How is IC defined? (3) What are the origins of GIC? (4) How is GIC defined? (5) What are the origins of SIC? (6) How is SIC defined?*

DOI: 10.4018/978-1-6684-6815-9.ch013

## **INTRODUCTION**

In recent years there has been a growing interest in intangible assets, at least in the private sector, and their identification, measurement and management is a topical issue. It is considered important to recognize value these invisible assets because they add information to traditional financial indicators that are used both to improve decision making and to demonstrate their potential to potential external users (Salvi et al., 2020).

Changes in the economy in recent years have made knowledge and information the most important sources of competitive advantage and success for a company or a nation. The challenge is to understand the different dynamics to which these two factors are subjected and especially the different economic laws that govern them (Xu & Liu, 2020). While on the one hand, the traditional factors of production, land, capital and labor, follow the law of diminishing marginal returns, i.e., as more of a factor is used while all other factors remain constant, the amount of output obtained per unit of additional factor tends to decrease. This means that the more a given resource is used, the lower its yield will be; on the other hand, knowledge and information enjoy increasing returns, and the more they are used, the higher their yield will be (Ali et al., 2021).

The concept of Intellectual Capital (IC) is a very new and unfamiliar topic; the term was coined in 1969 by economist John Kenneth Galbraith, who suggested that IC means intellectual action, rather than mere knowledge or pure intellect. Thus, IC can be considered both a form of value creation and an asset in its traditional sense (Galbraith, 1969). From this moment on, the definition of IC has been approached by different theorists and has been evolving over time; different elements have been included as components: Human brain potential, product and brand names, technology leadership, employee training, speed of response to customer service requests, among others. This form of capital is responsible for the fact that many companies can be sold for several times their book value.

A traditional understanding of IC is found in the approach of Benavides (2003), who argues that, generally speaking, in the literature on IC there is broad agreement in identifying three elements of IC: Human Capital (HC), Structural Capital (SC) and Relational Capital (RC).

It considers human capital as the most important factor of IC as it is the source of innovation and strategic renewal of the company. It refers not so much to people as to aspects that people possess, such as knowledge, experience, motivation, reasoning and decision-making skills, loyalty, among others. HC is aimed at improving the capabilities of the individual and the innovative capacity of work groups (Sima et al., 2018). This asset is considered to be the basis for the generation of the other elements of IC and the intangible resource par excellence, as it is inseparable from its bearer. Contacts, personal relationships, the degree of satisfaction of people in the workplace, different cognitive traits, aspects such as polyvalence and flexibility, personal skills and competencies, are factors that, when identified, allow for greater achievements in achieving an increase in the value of the organization. This makes it necessary to highlight the importance of human management in the processes of IC management (Otoo et al., 2022).

SC is the element that enables the creation of wealth through the transformation of the work of human capital. It represents the knowledge that the organization manages to make explicit, systematize and internalize and which, in principle, may be latent in the company's people and teams (Lekic et al., 2020). It includes all that structured knowledge on which the efficiency and internal effectiveness of the company depends: the structure of the organization, processes and procedures, such as those developed for the definition of products and services, strategic thinking processes, information technologies, intellectual property, available technology; in short, it represents all those mechanisms and structures of

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/sustainable-intellectual-capital/316074](http://www.igi-global.com/chapter/sustainable-intellectual-capital/316074)

## Related Content

---

### On Sustainable Entrepreneurship: Can Resource Efficiency Be an Economic Opportunity for Small and Medium Enterprises?

Joana Moniz Monteiro, Nicole Agostinha dos Muchangosand Nina Szczygiel (2023). *Corporate Sustainability as a Tool for Improving Economic, Social, and Environmental Performance* (pp. 138-153).

[www.irma-international.org/chapter/on-sustainable-entrepreneurship/319699](http://www.irma-international.org/chapter/on-sustainable-entrepreneurship/319699)

### Socially Responsible Attitudes and Behaviours: How to Fulfil the Sustainable Development Goals

Dolores Gallardo Vazquez, Shafat Maqbooland Juan de la Cruz Sánchez-Domínguez (2022). *Future Advancements for CSR and the Sustainable Development Goals in a Post-COVID-19 World* (pp. 116-138).

[www.irma-international.org/chapter/socially-responsible-attitudes-and-behaviours/287847](http://www.irma-international.org/chapter/socially-responsible-attitudes-and-behaviours/287847)

### Sustainable Business Transformation Through Ambidextrous Practices

Dipak Kumar Bhattacharyya (2019). *Corporate Social Responsibility: Concepts, Methodologies, Tools, and Applications* (pp. 274-291).

[www.irma-international.org/chapter/sustainable-business-transformation-through-ambidextrous-practices/206961](http://www.irma-international.org/chapter/sustainable-business-transformation-through-ambidextrous-practices/206961)

### Role of Corporate Social Responsibility Towards Green HRM in Selected Companies

Reshma Shrivastava, Imran Nadeem Siddiquiand Suresh Kumar Pattanayak (2023). *Intellectual Capital as a Precursor to Sustainable Corporate Social Responsibility* (pp. 200-213).

[www.irma-international.org/chapter/role-of-corporate-social-responsibility-towards-green-hrm-in-selected-companies/316073](http://www.irma-international.org/chapter/role-of-corporate-social-responsibility-towards-green-hrm-in-selected-companies/316073)

### Corporate Social Responsibility (CSR) and the 2030 Agenda in the Framework of New Trends in Tourism and Hotel Companies' Performance

Raquel García Revilaand Olga Martínez Moure (2022). *Research Anthology on Developing Socially Responsible Businesses* (pp. 573-591).

[www.irma-international.org/chapter/corporate-social-responsibility-csr-and-the-2030-agenda-in-the-framework-of-new-trends-in-tourism-and-hotel-companies-performance/302286](http://www.irma-international.org/chapter/corporate-social-responsibility-csr-and-the-2030-agenda-in-the-framework-of-new-trends-in-tourism-and-hotel-companies-performance/302286)