

# Intellectual Capital and Sustainability: Towards an Integrated Reporting

## Recent Developments and Emerging Issues

Mauro Paoloni, Cristiana Bernardi\*, Paola Demartini  
Faculty of Economics, Department of Management and Law, Roma TRE University, Italy  
E-mail: [cristiana.bernardi@uniroma3.it](mailto:cristiana.bernardi@uniroma3.it)

### Abstract

The on-going transition to a global knowledge-based economy has dramatically emphasized the crucial role Intangible Assets play in the value creation process of organizations. Along with Intellectual Capital Management, another issue is currently at the centre of the international debate: Sustainability.

Over the last decades, the concept of Sustainability has gained considerable recognition among academics and practitioners, and has consequently been subject to various interpretations. As per today, it is widely acknowledged that the implementation of sustainable strategies is a powerful management tool that enables companies to meet both growth and profitability goals, thus gaining an advantage over competitors in the long term.

Therefore, recent studies have attempted to evaluate the potential of an integrated approach which combines Intellectual Capital on the one hand and Sustainability Management on the other. However, the way Intangible resources might trigger the growth of firms within a sustainability framework is still a subject of controversy.

This paper intends to provide a general overview of the most significant contributions from researchers to the field of Intellectual Capital and Sustainability Development. In this context, special attention was devoted to the analysis and evaluation of pilot research projects carried out on Integrated Reporting. Specifically, in order to keep abreast of the emerging issues on this topic, we selected and examined in depth the most noteworthy papers that were presented in the following Academic Networks: ECIC 2012 (4<sup>th</sup> European Conference on Intellectual Capital), IKFAD-KCWS 2012 (7<sup>th</sup> International Forum on Knowledge Asset Dynamics - 5<sup>th</sup> Knowledge Cities World Summit) and EIASM 2012 (European Institute for Advanced Studies in Management, 8<sup>th</sup> Interdisciplinary Workshop on “Intangibles, Intellectual Capital & Extra-Financial Information”).

Further studies will be required to provide empirical evidence of real effectiveness of such an innovative approach; the application of the proposed model to a concrete business case could significantly contribute to the assessment of its viability.

### Introduction

*“The only irreplaceable capital an organization possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who can use it”.*  
(Andrew Carnegie, 1902)

Although the economic importance of Intangible Assets has long been recognised - as Carnegie’s quote shows – the topic has attracted growing interest only in recent years. The last decades of the 20<sup>th</sup> century represented, in fact, a turning point in the global economic development process: the transition toward a knowledge-based society has progressively highlighted the crucial value-creating role played by intangible resources. Starting in the early 1980s, both business leaders and academic researchers realised that Intangibles could

potentially turn into prominent determinants of a corporation's profit. As a consequence, knowledge was soon identified as a critical key factor for the economic growth of organizations and, subsequently, its management started to be perceived as one of the most valuable source of competitiveness.

Along with Intellectual Capital Management, another issue is currently at the centre of the international debate: Sustainable Development. The origin of the concept dates back to the mid '80s, when the World Commission on Environment and Development (the so-called Brundtland Commission) defined it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987).

The purpose of this paper is to analyse the relationship existing between Intellectual Capital and Corporate Sustainability Reporting. Up to date, the extant literature on the topic offers a significant range of contributions (Ghutrie et al., 2000; Cordazzo, 2005; Yongvanich et al., 2006; Ghutrie, et al., 2007; Pedrini, 2007; Polo et al., 2008; Passetti, 2009; Oliveira et al., 2010), although the integrated reporting project is still in its infancy. As argued by Eccles and Krzus (2010), "an integrated report is a single document that presents and explains a company's financial and non-financial - environmental, social, and governance (ESG) - performance".

However, as the academic publishing process is impeded by delays, we decided to focus our attention on some of the most outstanding International Conferences that were held in Europe during 2012, in order to take an overall look at the evolutionary trends of contemporary emerging issues on the topic.

## **Intellectual Capital**

The origin of Intellectual Capital (IC) can be traced back to the 19<sup>th</sup> century: the introduction of the term can be ascribed to the economist Kenneth Galbraith who, in 1969, described it as a process of value creation and as a bundle of assets at the same time. As argued by Stewart (1997) and Sveiby (1997), however, "Intellectual Capital has been considered by many, defined by some, understood by a select few, and formally valued by practically no one".

The topic has indeed attracted the attention of both managers and researchers over the years: after several attempts to find a generally accepted definition, agreement on its classification and categorization has finally been achieved. The theorization of the term Intellectual Capital passed through various stages, which varied in relation to the aim they pursued. Although Edvinsson & Malone (1997), along with Sveiby (1997), are generally considered early pioneers in the field of IC research, the subject has received numerous refined contributions since additional definitions were suggested.

Until now, the designations proposed have been conceptually very similar: they all refer to the intangible hidden value that exists within each organization and to the role it plays in promoting innovation. According to the prevailing literature, Intellectual Capital is most frequently categorized into three sub-components, namely Human Capital, Structural Capital and Relational Capital (Edvinsson, 1997; Sveiby, 1997; Roos et al., 1997; Boedker et al. 2005; Marr et al., 2005, among others).

Increasing global competition, together with the dramatic change experienced by worldwide market dynamics, has progressively highlighted the importance of these knowledge-driven resources, which have been labelled as strategic weapons to focus on in order to gain and maintain a sustainable advantage over time. Consequently, organizations have become steadily aware that a systematic Intellectual Capital disclosure could shed light on firms' growth potential, thus improving the intelligibility of the information provided within traditional financial statements.

However, the international accountability framework soon proved inadequate to the emerging business scenario and the new related value drivers: traditional accounting methods, in fact, being mainly based on the historical cost principle, fail to capture the essential value of intangible assets. Nowadays, several reporting models for the measurement and assessment of IC are available for those enterprises interested in its voluntary disclosure. As argued by *Holland et al.* (2003) in fact, IC disclosure can significantly improve the informative relevance of traditional financial reports.

### **Corporate Sustainability**

Agreement among academics in the field of Sustainable Development has not yet been reached: as far as the term is still subject to different interpretations, a wide range of definitions is available. However, despite the complexity and ambiguity of the topic, there is no doubt that such a corporate management philosophy has gained universal acceptance: the second half of the '90s, in fact, was characterized by an increasingly collective interest in the sphere of sustainability, as the globalization process did not only involve the economic, but also the political and social dimensions. Against this background, in the early 90's John Elkington coined the term Triple Bottom Line (TBL); this concept was later revised in order to introduce an innovative accounting framework which incorporated the three dimensions of performance: economic growth, social equality and environmental sustainability (*Elkington, 1997*).

Despite being a relatively young practice, Sustainability Reporting has enjoyed considerable advancement over the past few years. From the beginning, much concern has been shown in the accounting literature for sustainability issues (*Gray, 1992; Rubenstein, 1994; Milne, 1996*, among others) and the topic is still experiencing substantial evolutionary tensions. The general awareness of corporate social and ecological malpractices has indeed prompted a growing number of enterprises to take into account both ethical and environmental standards when managing their business, paying greater attention to the development of those capabilities necessary for operating in accordance with the TBL philosophy.

Measuring and consequently reporting the social responsibility of a company is a challenging assignment. To this end, the guidelines for setting up a Sustainability Report have been systematically reviewed and refined over recent years; it is in fact argued that accounting for sustainability is a crucial strategy which firms would be advised to prioritize, as it has positive repercussions on the overall performance and image of the organization.

Nowadays there is an increasing demand among both shareholders and stakeholders for a more detailed and accurate corporate disclosure, which contains financial and non-financial information. As noticed by *Schäfer* (2005), a growing number of stakeholder groups does in fact request additional evidence on business sustainability. In order to meet these demands, a significant number of organizations has started providing supplementary non-financial statements, such as Intellectual Capital or Corporate Social Responsibility Reports, along with traditional accounting ones. As argued by *Adams et al.* (2011), "the call for disclosure of non-financial information has grown in response to the awareness that financial statements omit salient information about the company". Never has the spotlight been so firmly fixed on transparency: the term has gradually gained a revolutionary meaning, as it implies not only the availability of trustworthy information but, more importantly, total accessibility for both internal and external reporting purposes.

As the context within which companies operate becomes more and more challenging, the belief that those strategies enhancing the management of knowledge within a sustainability framework is progressively gaining ground: the ability to administrate human resources in a sustainable perspective is perceived as a critical enabler of an enduring growth.

In this context, managerial flexibility is not the only feature required in order to survive in such a dynamic environment; greater prominence has been attributed to the firm's ability to be innovative, an indispensable prerequisite for long-lasting survival.

## Discussion

In response to an increased demand for non-financial information, the International Accounting Standards Board (IASB) in 2010 issued the "IFRS Practice Statement - Management Commentary"; the aim of this document was to encourage firms to disclose their business model and intangible resources. However, since the Practice Statement is not an IFRS, unless required by their own jurisdiction, organizations are not compelled to comply with it. Furthermore, implementing such a disclosure is far from being without expense; as a result, most firms are discouraged from providing it. At present, the observed level of IC disclosure is very low and mainly used for internal managerial purposes (*Guthrie et al.*, 2000).

By contrast, as international financial markets are increasingly urging listed companies to provide sustainability reports which take into account both the environmental and social dimensions of their activity, a growing number of enterprises are today committed to Corporate Sustainability Reporting. The motives underlying the adoption of corporate business sustainable strategies have been broadly investigated by several Authors; for example, the "enhanced ability to track progress against specific targets", "greater awareness of broad environmental issues" and "improved all-round credibility from greater transparency"- as noticed by *Kolk* (2010) - may boost the adoption of these reporting practices.

To date, companies are responding to a growing demand for clearer disclosure: the investment community, which has an interest in monitoring not only past performance but also a company's ability to create and sustain value in the long term, requires a financial reporting system that is able to shed light on the performance achieved and, more importantly, on the actions that led the organization to the results. The present-day financial and economic crisis has, in fact, brought to the public eye the inadequacy of the information provided by traditional annual reports: rather disjointed, backward looking and, furthermore, short-term oriented. As a consequence, the improvement of financial disclosures became of primary importance.

In response to this requirement, the Global Reporting Initiative (GRI) has introduced a set of Guidelines adopted worldwide for measuring and reporting on a firm's financial, environmental and social performance. The first official edition of the GRI Guidelines was released in June 2000, while the second and third generations of the Guidelines, were released – respectively - in August 2002 and October 2006. The latest version available at present, the so-called "G3.1 Sustainability Reporting Guidelines", sets out principles and indicators that provide universal guidance within the sustainability reporting framework. A fourth generation of Guidelines - G4 – is in the pipeline and is expected to be launched in May 2013.

In the light of what has been said above, it is evident how the idea of an integrated approach to Intellectual Capital and Sustainability Reporting is gathering momentum, since it is perceived as an essential determinant to the future of business success (*Parisi*, 2012; *Orth et al.*, 2012). The implementation of an integrated report is highly recommended: this tool seems in fact to be extremely powerful, as it allows corporations to report on their intangible resources within a sustainability accounting framework. Such an initiative would provide those having a stake in the business with a clearer and more extensive information, while keeping the additional related costs down. An exhaustive Integrated Report should explain in detail the performance achieved and the operational strategy adopted in the market within

which the company operates; both the social and environmental components, in fact, are fundamental determinants, as external variables strongly influence corporate business activity.

Within this context, the International Integrated Reporting Council (IIRC), set up in August 2010, brings together “leaders from the corporate, investment, accounting, securities, regulatory, academic, civil society and standard-setting sectors” (IIRC, 2010), seeking the development and worldwide adoption of an integrated reporting system. For this purpose, in September 2011 a document (known as The Draft) was issued with the aim of gaining international participation - through the use of discussion papers and questionnaires - in defining the framework guidelines; the Council would therefore be provided with a structured feedback on the key elements necessary for the implementation of an integrated report.

According to the IIRC, “Integrated Reporting brings together material information about an organization’s strategy, governance, performance and prospects in a way that reflects the commercial, social and environmental context within which it operates”. Incidentally, although traditional corporate reports are likely to experience a considerable growing sophistication in the years to come, managers seem to have difficulty in grasping the desired integration process. In fact, according to a Bloomberg research, “only 21% of listed companies report any sustainability information” despite the fact that 96% of CEOs from the world’s largest firms strongly believe that sustainability issues should be fully integrated into the strategy and operations of an organization (“*The Sustainability Edge, Sustainability Report 2010*”, Bloomberg, 2010).

### **Research Methodology**

The theoretical paradigm underlying our research is a qualitative one. Since we decided to investigate the state of play of Integrated Reporting practices within the European Union, we selected and afterwards attended some of the most notable Conferences that were held throughout Europe during the year 2012. The decision to focus our attention exclusively on European Networks was dictated essentially by the lack of available financial resources.

The first phase of our research consisted of selecting the most significant papers that were presented in the Academic Networks we attended, namely – in chronological order - ECIC 2012 (4<sup>th</sup> European Conference on Intellectual Capital), IKFAD-KCWS 2012 (7<sup>th</sup> International Forum on Knowledge Asset Dynamics - 5<sup>th</sup> Knowledge Cities World Summit) and EIASM 2012 (European Institute for Advanced Studies in Management, 8<sup>th</sup> Interdisciplinary Workshop on “Intangibles, Intellectual Capital & Extra-Financial Information”). The criteria adopted in the selection process was mainly based on the identification of the keywords of our interest, such as Integrated Reporting (IR), Intellectual Capital and Sustainability Management (SM). The next step of the investigation involved the in-depth analysis of the previously selected papers, in order to evaluate the current state-of-the-art practices of IR. Finally, we drew conclusions and formulated an outlook for the future desirable development of the examined issue.

The 4<sup>th</sup> European Conference on Intellectual Capital (ECIC), the first congress we attended, was hosted by the Arcada University of Applied Sciences in Helsinki. The general aim of the Conference, following in the footsteps of the previous editions, was the promotion of further advancement in the Intellectual Capital field. In order to fulfil this purpose, a great variety of topics was covered: among the sixty-eight papers published in the Conference Proceedings, we selected those three that were pertinent to our research.

The International Forum on Knowledge Asset Dynamics (IFKAD), together with the Knowledge Cities World Summit (KCWS), for the first time brought together their energies and hosted a joint multi-disciplinary edition in Matera. The Conference was intended to encourage discussions on three critical factors driving the 21<sup>st</sup> century development process:

Knowledge, Innovation and Sustainability. The links existing between these aspects, which affect the overall value creation capacity of organizational systems, were examined adopting both a Micro (i.e. organizations) and a Macro perspective (i.e. cities). Also in this case, the four papers out of the one hundred and forty presented were chosen on the basis of their relevance to the investigated topic.

Finally, the 8<sup>th</sup> Interdisciplinary Workshop on “Intangibles, Intellectual Capital & Extra-Financial Information” aimed at extending the boundaries affecting present-day understanding of Intangibles and Intellectual Capital issues. The workshop took place in Grenoble, where it was hosted by the Grenoble École de Management. In this case, about fifty papers were presented, but only three were of relevance to our research.

## Results

The following table (Table 1) provides a general overview of the perspective adopted by the Authors of the selected papers when analysing the possibility of developing an integrated reporting document. An integrated approach can in fact be applied at different levels, namely Micro and Macro: whereas the former focuses on the single corporation, the latter concerns wider organizations, such as Cities, Regions, Nations, etc. Moreover, it is worth noting the informational purpose that integrated reports can be developed for: it is in fact possible to make a distinction between those intended to be used internally - as managerial reporting tools - and, conversely, those used for providing stakeholders with a set amount of additional information. In this latter case, the document is destined to be used mainly for external purposes.

Since the subject of our research is an Integrated Reporting approach that simultaneously combines – at a corporate level - Intellectual Capital disclosure within a sustainability framework, we focused on those papers which were developed in a Micro perspective. As a second step, we identified whether these documents were implemented in response to a managerial demand (i.e. Integrated Management Reporting), to the emerging claims of the stakeholders’ community (i.e. Integrated Financial Reporting) or in the attempt to combine the two aims.

Table 1: An overview of the selected papers

Network	Authors	Paper Title	Micro vs. Macro Perspective	IMR	IFR	IMR + IFR
ECIC	D. Bedford	“Expanding the definition and Measurement of Knowledge Economy - Integrating Triple Bottom Line Factors into Knowledge Economy Index Models and Methodologies”	Macro	N.A.	N.A.	N.A.
IFKAD-KCWS	V. De Marchi R. Grandinetti	“Knowledge Strategies for Environmental Innovations: the Case of Italian Manufacturing Firms”	Micro	N.A.	N.A.	N.A.
ECIC	K. Mertins R. Orth	“Intellectual Capital and the Triple Bottom Line: Overview, Concepts and Requirements for an Integrated Sustainability Management System”	Micro	x		
ECIC	D. Branwijck	“Corporate Social Responsibility + Intellectual Capital = Integrated Reporting”	Micro	x		
IFKAD-KCWS	R. Mazzotta G. Bronzetti G. Sicoli M. Baldini	“Intellectual Capital Reporting from Social and Sustainability Reports”	Micro		x	
IFKAD-KCWS	C. Parisi	“Intellectual Capital and Sustainability Performance Measurement and	Micro		x	

		Reporting Practices”				
EIASM	K. Mertins H. Kohl R. Orth	“Integrated Reporting and Integrated Thinking - A Resource Oriented Perspective”	Micro			x
EIASM	R. Mazzotta F. Rubino G. Bronzetti	“Intellectual Capital Reporting from Social and Sustainability Reports in Financial Services”	Micro			x
EIASM	C. Parisi J. Mouritsen	“Problematizing the Relationship between the Concepts of Intellectual Capital and Sustainable Development”	Micro			x
IFKAD-KCWS	R. Orth H. Kohl	“Intellectual Capital and Sustainability Management: Perspectives for an Integrated Reporting and Benchmarking”	Micro			x

Legend: N.A.: not applicable; IMR: Integrated Management Reporting; IFR: Integrated Financial Reporting.

As is shown in the table above, only one out of the ten papers analysed adopts a Macro-level perspective; in this case, however, no reporting purposes were addressed and therefore it was not possible to associate it with any of the outlined categories. Similarly, the research proposed by *Grandinetti & De Marchi* was not intended to introduce alternative reporting tools: despite the adoption of a Micro approach, the Authors mainly focused on the analysis of management models. Within the adoption of a Micro perspective, the percentage of integrated reports destined for external usage almost triples those implemented in support of the management system. Incidentally, only one out of the ten papers analysed, seeks to combine the managerial and financial reporting aspects.

In our opinion, the most valuable and analytical contribution came from the research paper entitled “Intellectual Capital and the Triple Bottom Line: Overview, Concepts and Requirements for an Integrated Sustainability Management System” by K. Mertins and R. Orth, whose objective was the evaluation of the integration potential of IC and SM. In order to address their research goal, the Authors reviewed and compared the concepts existing up to date: the EFQM Excellence Model and Sustainable Excellence Approach (*EFQM, 2009*), the Sustainability Balanced Scorecard (*Figge et al., 2002; Bieker, 2003; Schaltegger, 2011*), the SIGMA approach - Sustainability Integrated Guidelines for Management – (*BSI, 2003*), the VDI-Guideline “Sustainable Management in Small and Medium-Sized Enterprises” (*VDI, 2006*) and, finally, the InCaS Approach: Intellectual Capital Statements – Made in Europe (*InCaS Projects*). The analysis highlighted that an adequate management approach which points out the effective contribution of intangible resources to a sustainable development is still not provided; as a consequence, a preliminary draft model for an integrated perspective was suggested. An updated version of the previous model, which combines both managerial and financial aspects, was proposed at the International Forum on Knowledge Asset Dynamics by *Orth & Kohl*. The Authors, in fact, outlined six steps for the implementation of a Sustainability Management System, emphasizing the importance of a benchmark analysis and recommending the development of a more robust set of indicators in order to facilitate external communication.

### Conclusions

Over the past few years, an increasing interest in Corporate Sustainability has emerged, in academia as well as in the business world. The adoption of sustainable strategies is nowadays regarded as an invaluable catalyst of corporate competitiveness and consequently an increasing number of organizations is devoting its attention to sustainability development. The international debate on the aforementioned issue has indeed brought to the public’s

attention the disclosure gaps existing within traditional reporting practices; as a consequence, the concept of sustainability reporting has inevitably evolved into integrated reporting.

In order to meet the increasing demands for more transparent information concerning the companies' activities, several governmental and non-governmental initiatives have been specifically set up for the promotion of an integrated statement. Today, the most significant contribution within the realm of corporate reporting comes from the International Integrated Reporting Committee (IIRC), whose primary aim is to encourage the adoption of responsible practices. Simultaneously reporting on a company's financial and non-financial performance is intended to fulfil the investors' claims and, at the same time, attract potential business partners. Moreover, such a practice would enable comparison among organizations, thus allowing benchmarking and evaluation activities that, to date, are still not available.

Much of the extant research literature dealing with Intellectual Capital and Corporate Sustainability Reporting tries to find the overlaps existing between the two practices. However, it is interesting to note how, within the development of an Integrated Reporting framework, the contribution of Intellectual Capital seems to have partially lost its original relevance, whereas an increasing emphasis has been placed on Sustainability issues. A management model that simultaneously combines IC and Sustainability has not yet been designed: its development would definitely support and enhance the corporate decision-making process, while meeting the stakeholders' demand for a clearer corporate disclosure.

Overall, our research provided a unique contribution to the understanding of the state of play regarding Integrated Reporting models. However, it could be argued that two major limitations affected our investigation. Firstly, we attended only some of the most relevant European Conferences; the investigation could have been broadened by joining further international forums. Additionally, the Networks we focused our attention on are mainly concerned with Intellectual Capital issues.

Further research should aim at deepening the analysis by introducing a model which, in the attempt to integrate the aspects of management and reporting, identifies a comprehensive set of sustainability indicators - along with the existing financial ones. The applicability of such a model, however, should be verified through the study of a concrete business case.

### **Managerial Implications**

At present, the Integrated Reporting issue is still being debated in literature. Despite the fact that a considerable number of initiatives is underway to enhance a generally accepted framework, those companies wishing to embrace Integrated Reporting may encounter certain difficulties in addressing their purpose. Undoubtedly, among those groups whose aim is the definition of the guidelines for the consolidation of an harmonious reporting scenario, the IIRC holds a role of primary relevance. Nonetheless, an approach that finalizes management in order to achieve a sustainable performance, as required by stakeholders, seems not to be adequately addressed as yet: the adoption of an internationally accepted framework, in fact, seems far from being achieved in the short term, since the variables (political, social, economic, etc.) that may affect the process are numerous.

### **References**

- Adams, S., Fries, J., Simnett, R., (2011), "The Journey Toward Integrated Reporting", *Accountant's Digest*, Vol. May 2011, No.558, pp: 1-45.
- Bieker, T., (2003), "Sustainability Management with the Balanced Scorecard", *International Summer Academy on Technology Studies - Corporate Sustainability*, pp:1-17.

- Bloomberg (2010), "The Sustainability Edge, Sustainability Report 2010".
- Boedker, C., Guthrie, J., Cuganesan, S., (2005), "An Integrated Framework for Visualising Intellectual Capital", *Journal of Intellectual Capital*, Vol. 6, Issue 4, pp: 510–527.
- British Standards Institution (BSI), (2003), SIGMA – Sustainability Integrated Guidelines for Management.
- Carnegie, A., (1902), "The Empire of Business", New York: Doubleday, Page & Co.
- Cordazzo, M., (2005), "IC Statement vs Environmental and Social Reports: an Empirical Analysis of their Convergences in the Italian Context", *Journal of Intellectual Capital*, Vol. 6 Issue 3, pp: 441 – 464.
- Eccles, R., G., Krzus, M., (2010), "One Report: Integrated Reporting for a Sustainable Strategy", New York: John Wiley and Sons, Inc.
- EFQM - European Foundation for Quality Management, (2009), "EFQM Transition Guide: How to Upgrade to the EFQM Excellence Model 2010", Brussels.
- Edvinsson, L., (1997), "Developing Intellectual Capital at Skandia", *Long Range Planning*, Vol. 30, No. 3, pp: 366–373.
- Edvinsson, L., Malone, M., (1997), "Intellectual Capital: Realizing your Company's True Value by Finding its Hidden Brainpower", Harper Business, New York.
- Elkington, J., (1997), "Cannibals with Forks: The triple bottom line of 21st Century Business", Capstone Publishing, Oxford.
- Figge, F., Hahn, T., Schaltegger, S., Wagner, M., (2002), "The Sustainability Balanced Scorecard - Linking Sustainability Management to Business Strategy", *Business Strategy and the Environment*, Vol. 11, No. 5, pp: 269-284.
- Galbraith, J., K., (1969), "The Consequences of Technology", *Journal of Accountancy*, Vol. 127, pp: 44–56.
- Gray, R., (1992), "Accounting and Environmentalism: an Exploration of the Challenge of Gently Accounting for Accountability, Transparency and Sustainability", *Accounting, Organizations and Society*, Vol. 17, Issue 5, pp: 399-425.
- Global Reporting Initiative (GRI), (2011), G3.1 Sustainability Reporting Guidelines, <http://www.globalreporting.org/ReportingFramework/ReportingFrameworkOverview>
- Guthrie, J., Petty, R., (2000), "Intellectual Capital: Australian Annual Reporting Practices", *Journal of Intellectual Capital*, Vol. 1, Issue, 3, pp: 241-251.
- Guthrie, J., Cuganesan, S., Ward L., (2007), "Extended Performance Reporting: Evaluating Corporate Social Responsibility and Intellectual Capital Management", *Issues in Social and Environmental Accounting*, Vol. 1, No.1, pp:1-25.
- Holland, J., Johanson, U., (2003), "Value-relevant Information on Corporate Intangibles - Creation, Use and Barriers in Capital Markets – 'Between a Rock and a Hard Place' ", *Journal of Intellectual Capital*, Vol. 4, No. 4, pp: 465-486.
- InCas Projects, <http://www.incas-europe.org/index-en.htm>
- International Integrated Reporting Council (IIRC), (2011), "Towards Integrated Reporting - Communicating Value in the 21<sup>st</sup> Century", [www.theiirc.org](http://www.theiirc.org)
- Kolk, A., (2010), "Trajectories of Sustainability Reporting by MNCs", *Journal of World Business*, Vol. 45, No. 4, pp: 367-374.
- Marr, B., Roos, G., (2005), "A Strategy Perspective on Intellectual Capital", in B. Marr (Ed.), *Perspectives on Intellectual Capital: Multidisciplinary Insights into Management, Measurement and Reporting*, Boston: Elsevier.

- Milne, M., J., (1996), "On Sustainability, the Environment and Management Accounting", *Management Accounting Research*, Vol. 7, Issue 1, pp: 135-161.
- Oliveira, L., Rodrigues, L., Craig, R., (2010), "Intellectual Capital Reporting in Sustainability Reports", *Journal of Intellectual Capital*, Vol.11, Issue 4, pp: 575-594.
- Orth, R., Kohl, H., (2012), "Intellectual Capital and Sustainability Management: Perspectives for an Integrated Reporting and Benchmarking", Proceedings of the International Forum on Knowledge Assets Dynamics – Knowledge Cities World Summit.
- Parisi, C., (2012), "Intellectual Capital and Sustainability Performance Measurement and Reporting Practices", Proceedings of the International Forum on Knowledge Assets Dynamics – Knowledge Cities World Summit.
- Passeti, E., Tenucci, A., Cinquini, L., Frey, M., (2009), "Intellectual Capital Communication: Evidence from Social and Sustainability Reporting", MPRA Paper 16589, online at <http://mpra.ub.uni-muenchen.de/16589/>.
- Pedrini, M., (2007), "Human Capital Convergences in Intellectual Capital and Sustainability Reports", *Journal of Intellectual Capital*, Vol. 8, Issue 2, pp: 346-366.
- Polo, F., C., Vázquez, D., G., (2008) "Social Information within the Intellectual Capital Report", *Journal of International Management*, Vol. 14, Issue 4, pp: 353-363.
- Roos, J., Roos, G., Dragonetti, N., Edvinsson, L., (1997), "Intellectual Capital: Navigating in the New Business Landscape", Macmillan, London.
- Rubenstein, D., (1994), "Environmental Accounting for the Sustainable Corporation", Quorum Books, London.
- Schaltegger, S., (2011), "Sustainability as a Driver for Corporate Economic Success. Consequences for the Development of Sustainability Management Control", *Society and Economy*, Vol. 33, No. 1, pp:15–28.
- Stewart, T., (1997), "Intellectual Capital: the New Wealth of Organizations", Doubleday/Currency, New York.
- Schäfer, H., (2005), "International Corporate Social Responsibility Rating Systems: Conceptual Outline and Empirical Results", *The Journal of Corporate Citizenship*, No. 20, pp: 107-120.
- Sveiby, K.,E., (1997), "The New Organizational Wealth: Managing and Measuring Knowledge-Based Assets", Berrett- Koehler: San Francisco, CA.
- VDI, (2006), "Sustainable Management in Small and Medium-Sized Enterprises - Guidance Notes for Sustainable Management", Verein Deutscher Ingenieure, VDI Guidance 4070, Beuth, Berlin.
- Yongvanich, K., Guthrie, J., (2006), "An Extended Performance Reporting Framework for Social and Environmental Accounting", *Business Strategy and the Environment*, Vol. 15, Issue 5, pp. 309-321.
- World Commission on Environment and Development (WCED), (1987), "Our Common Future", Oxford University Press, Oxford.