Milestones in the Development of Intellectual Capital Reporting

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Received: November 14, 2013 Accepted: December 2, 2013 Online Published: January 22, 2014

Abstract

This paper reviews the accounting and management literatures relating to intellectual capital. It identifies and discusses the major milestones in the intellectual capital (IC) reporting movement and significant contributions promoting external reporting of IC. It was identified that with a view to enabling organisations provide a clear understanding of firm value creation several national and supranational institutions have produced guidelines and frameworks for externally reporting IC. In many cases regulators, the accounting profession and accounting scholars have driven these initiatives. Although IC reporting has been identified as an important aspect of reporting not only in large corporates but also in small and medium enterprises and in the not-for-profit sector the existing guidelines for reporting of IC have not been embraced by organisations. Possible future directions for IC reporting are proposed.

Keywords: intellectual capital, non-financial reporting, integrated reporting, reporting guidelines

1. Introduction

The importance of intellectual capital (IC) information for security valuation is well-understood (Johanson, Koga, Skoog & Henningsson, 2006). However, little or no action was taken to encourage and guide the inclusion of such information in business reporting until the early 1990's. It had largely been left to the discretion of firms. This paper discusses the major milestones in the IC reporting movement and significant contributions promoting external reporting of IC. It does not however concern the developments that have taken place in the space of IC measurement and management for internal decision making purposes. The discussion to follow is organised by the type of entity that has been the focus of the various IC reporting initiatives.

2. IC Reporting in the Profit Sector

One of the earliest proposals to incorporate non-financial information within the annual report was put forward by the Kondrad Group (Sveiby, 1989)—a group of accounting practitioners from Sweden. They argued that the existing annual report does not provide information required by shareholders of know-how companies (e.g., consultancy firms, advertising agencies, law practices) which derive value from the IC of their personnel. In order to improve the relevance of the annual report to shareholders Kondrad Group proposed a framework for the disclosure of indicators on companies' know-how capital, which is the concept later manifested as IC. The recommendations of the Kondrad Group were published in a report entitled 'Den nyaÅrsredovisningen' (translated as 'The New Annual Report') and a book, edited by Karl-Eric Sveiby entitled 'Den OsynligaBalansräkningen', (translated as 'The Invisible Balance Sheet'). The framework for reporting know-how capital was further developed into a multidimensional framework by Sveiby (1997). This new framework was labeled "Intangible Asset Monitor'. These work inspired several Scandinavian companies to measure and report at least some of their intangibles (Sveiby, 2001). The work carried out by the Kondrad Group and Sveiby has also underpinned the recommendations issued by the Swedish Council of Service Industries in 1993 on reporting human capital, and has been influential in the development of the tripartite categorisation scheme of IC, where IC is categorised into human, structural and relational capital.

The work carried out by practitioners such as Thomas Stewart, who published a series of articles in the Fortune magazine in the early to mid-1990's (e.g., Stewart, 1991; 1994; 1995a; 1995b; Stewart & Brown, 1996; Stewart & Kaufman, 1995) and Leif Edvinsson and colleagues (e.g., Edvinsson, 1997; Edvinsson & Malone, 1997b; Edvinsson and Sullivan, 1996; Roos, Roos, Dragonetti & Edvinsson, 1997) towards the latter part of the 1990's strengthened the case for IC measurement and reporting from a practitioner

standpoint. This work not only highlighted how important IC measurement and reporting is for an economy, which was increasingly being recognised as knowledge intensive, but also further developed and clarified the concept of IC, its various subcategories/elements and interrelationships (see, Edvinsson, 1997; Edvinsson & Malone, 1997b). Especially, Edvinsson was instrumental in promoting the preparation of IC statements to be included as a supplement to financial reports (both annual and interim). The first IC statement was published in 1995 by Skandia AFS, an insurance and financial services company in Sweden, in which Edvinsson was the Director of Intellectual Capital (Edvinsson, 1997). Skandia's efforts in making their IC visible have been widely published (e.g., Bartlett & Mahmood, 1996; Edvinsson, 1997; Grafström & Edvinsson, 2001; Mouritsen, Larsen & Bukh, 2001; Skandia, 1994; Stewart, 1994). Skandia's IC Navigator model and Sveiby's Intangible Assets Monitor, among other things, have been instrumental in the development of new and advanced IC measurement and reporting frameworks, mostly for the purposes of internal management, by others (e.g., IC-Index, IC Rating®).

Another important initiative that provided impetus to the rise of the IC reporting movement is the study commissioned by the American Institute of Certified Public Accountants (AICPA) in 1991. AICPA formed a special committee on financial reporting under the chairmanship of Edmund L. Jenkins (hereafter Jenkins committee) to "determine the information needs of users to identify the types of information most useful in predicting earnings and cash flows for the purpose of valuing equity securities and assessing the prospect of repayment of debt securities or loans" (American Institute of Certified Public Accountants [AICPA], 1994, Chapter 1). Jenkins Committee commissioned research into the information needs of sell-side and buy-side analysts and creditors and made recommendations on types of non-financial information that companies should provide in external reports.

In 1999, the Financial Accounting Standards Board in the US commissioned a study aimed at enhancing voluntary corporate disclosure (Financial Accounting Standards Board [FASB], 2001) as a follow-on to the work of the Jenkins Committee. The steering committee appointed by the FASB researched the existing voluntary disclosure practices of leading companies in eight industries, investigating their annual and quarterly reports, SEC filings, press releases, fact books, corporate websites and transcripts of presentations to shareholders, analysts and potential investors. Examples extracted from these voluntary disclosure practices in the sample firms were presented as evidence for other companies to improve their corporate reporting. The main focus of this FASB steering committee was to enable companies identify information that would be useful to investors and decide whether disclosure of such information would be appropriate. Soon after this project was concluded work on another study was initiated by FASB under the leadership of Wayne S. Upton, Jr., a FASB Senior Project Manager. The objective of this second FASB project was to examine the recommendations developed by other firms in the USA and other countries with regard to voluntary disclosure of non-financial information (Upton, 2001). Insights from this project were expected to provide a foundation for potential projects to be added to FASB's agenda. Upton's (2001) report concluded by calling attention from standards setters on: recognition of internally generated intangible assets in financial statements and improved measures of those assets; greater and systematic use of non-financial performance metrics; and greater use of forward-looking information.

The Organisation for Economic Corporation and Development (OECD) also took an interest in promoting accounting for IC in the mid 1990's. A number of conferences were held with the auspice of OECD most notable being the International Symposium for Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects held in Amsterdam in 1999. This symposium saw some seminal work in the fields of IC measurement and reporting being presented, and it promoted the development of voluntary guidelines for measuring, reporting and managing intangibles. Johanson et al. (2006) note that OECD even had an agenda to propose global voluntary guidelines for the external reporting of IC.

In 1995 the Danish Trade and Industry Development Council (1997) commenced work on analysing and synthesising IC accounting practices of selected Scandinavian companies which prepared IC accounts. The purpose of this work was to establish why and how companies actually prepared intellectual capital accounts. A memorandum was published presenting the findings of this study with examples of how the selected companies reported and accounted for their IC. With this knowledge in hand in 1998 the Danish Agency for Trade and Industry (DATI) commissioned a project to develop guidelines for preparing IC statements. In 2000, DATI published this work in a report entitled 'A Guideline for Intellectual Capital Statements—A Key to Knowledge Management' providing recommendations on the process of preparing an IC statement and the presentation of it for external publication. These guidelines were based on the experience of 17 companies in preparing IC statements and provided a practical perspective to the preparation of IC statements (Danish Agency for Trade

and Industry [DATI], 2000). They were put to test with about 100 companies and industry organisations in 2001 in the second phase of this project coordinated by the Danish Ministry of Science Technology and Innovation (DMSTI). It was found that although the original guideline concept worked well it could be further improved (Danish Ministry of Science Technology and Innovation [DMSTI], 2003). The revised guidelines were published by DMSTI entitled 'Intellectual Capital Statements—The New Guideline', in 2003. Although publication of an IC report is not mandatory for companies in Denmark, the Danish government had made it a requirement that companies disclose in their management report (published as part of the annual report) information on their IC, if considered relevant (European Commission, 2006). A similar requirement exists in the German Accounting Standard (GAS) 12 issued by the German Accounting standards committee. GAS 12 which is based on International Accounting Standard (IAS) 38 on intangible assets includes a recommendation to prepare a report about IC within the management report. GAS 12 goes as far as listing different types of IC (e.g., human capital, customer capital, supplier capital, investor capital, process capital, location capital and innovation capital) and encouraging disclosure of quantitative measures on them in the management report.

Around the same time as the Danish Agency for Trade and Industry (DATI) commissioned its project on preparing IC reporting guidelines the European Union too embarked on a similar project. It convened the *Measuring Intangibles to Understand and Improve Innovation Management* (MERITUM) project in 1998 with the participation of Denmark, Finland, France, Norway, Spain and Sweden to develop a set of guidelines to measure, manage and disclose information on intangibles (MERITUM, 2002). The guidelines were published in 2001. The MERITUM project contributed immensely to the development and promotion of IC measurement, management and reporting practices within companies not only in Europe but also in other parts of the world. In addition, it influenced regulators in numerous other countries to seriously consider the need to encourage IC measurement and reporting among firms in those countries. Also, IC literature has benefited from the contributions that are direct or indirect offshoots of this project (e.g., Bukh & Johanson, 2003; Canibano, García-Ayuso, Sanchez & Olea, 1999; Catasus & Grojer, 2003; Eronen & Ahonen, 1999; Johanson, Eklöv, Holmgren & Mårtensson, 1999; Johanson, Martensson & Skoog, 1999; Johanson, Mårtensson & Skoog, 2001). Researchers who were involved in the MERITUM project are still active in IC related research.

In light of the success of MERITUM, a follow-on project was initiated in September 2001 by the European Union named *E*Know-Net* (Bjurström, Catasus & Johanson, 2003). The aim of this project was to exploit, enhance and communicate the results of the MERITUM project and create a European research and communication arena on intangibles. E*Know-Net was specifically concerned with widely disseminating the knowledge that resulted from MERITUM and collaborate to further improve IC measurement and reporting practices (Bukh & Johanson, 2003, p. 580). E*Know-Net acted as a virtual network on intangibles, facilitating individuals and institutions throughout the world to exchange new knowledge emanating from research or practice (García-Ayuso, 2003).

Another European initiative on IC reporting was the 'The Intellectus Model' (in Spanish, Modelo Intellectus) developed by academics and practitioners in Spain based on the Intellect One model introduced by Euroforum (1998). The specialty of this model is that it provides a framework for a detailed break-down of IC into measureable components. The Intellectus Model provides 273 examples of indicators that could be used for measuring IC in organizations (Centro de Investigación sobre la Sociedad del Conocimiento [IADE-CIC], 2003).

By early 2000 the IC reporting movement had spread beyond the West. In 2002, the Japanese government issued a policy document entitled the *Intellectual Property Policy Outline* with the intention of promoting the creation, protection and exploitation of intellectual property to make Japan a 'nation build on intellectual property' (Japan Ministry of Economy, Trade and Industry [JMETI], 2004). This was followed by the enactment of the *Intellectual Property Basic Law* in November 2002 in Japan. However, a particularly important step towards the regulation of IC reporting in Japan is the release of the *Strategic Program for Intellectual Property* in July 2003. In this publication JMETI identified the need to enhance disclosure of information on intellectual property by Japanese companies in order to facilitate a proper evaluation by the capital market. An agenda was set forth for the formulation of guidelines for promoting the disclosure of such information. Acting on this JMETI issued a 'Pilot Model for Disclosure of Patent and Technology Information' in 2003. The Pilot Model was later tested with 13 companies and the feedback was used to establish the Guideline for Intellectual Property Information Disclosure (GIPID) in 2004 (JMETI, 2004). This Guideline attempts to facilitate a fair valuation in the capital market of companies practicing 'intellectual property-backed management' by suggesting items of information that may be disclosed to the public in relation to a company's strategic acquisition, management and exploitation of intellectual property.

In October 2005 JMETI issued another document entitled *Guidelines for Disclosure of Intellectual Assets Based Management*. The aim of this Guideline is to assist companies in preparing *Intellectual Assets Based Management Reports*, and it provides guidance on information disclosure concerning management of intellectual assets. The disclosures suggested by this guideline extend beyond intellectual property, which was the scope of GIPID, and includes all sources of a firms' corporate value that are not represented by financial capital (JMETI, 2005). The approach to the preparation of Intellectual Assets Based Management reports stipulated in this guideline has been influenced by projects undertaken in the West such as the MERITUM (Johanson, Koga, Almqvist & Skoog, 2009). The Japanese government has shown a keen interest in furthering the work on Intellectual Assets Based Management, and had tried to push their agenda forward through the OECD (Yamamoto & Matano, 2007).

The work of the Jenkins Committee also led to the formation of a Special Committee on Enhanced Business Reporting of the AICPA in September 2002, which then launched the Enhanced Business Reporting Consortium (EBRC) in 2003 with the sponsorship of Grant Thornton LLP, Microsoft Corporation and PricewaterhouseCoopers (PwC). At the time one of the main purposes of the Consortium was to develop an international framework for voluntary business reporting with special emphasis on disclosure of KPIs that are leading indicators of financial results and intangible assets absent in companies' balance sheets (Enhanced Business Reporting Consortium [EBRC], 2007). This framework was intended to provide a structure for the presentation of non-financial information so that external reporting is closely aligned with internal reporting (Anderson, Herring and Pawlicki, 2005). Towards this end the EBRC issued the Enhanced Business Reporting Framework in November 2006 which recommended information to be presented on four key areas – business landscape, strategy, resources and processes, and performance. It recommended that information on IC categorised into relational, human and structural capital to be presented alongside monetary and physical capital under the resources and processes category (EBRC, 2006). EBRC also became a founding member of the World Intellectual Capital Initiative (WICI) which is dedicated to improving corporate reporting. EBRC has also worked closely with WICI in developing a voluntary, open-standard global framework for measuring and reporting corporate performance to shareholders and other stakeholders (Witt, 2012).

A similar initiative to EBRC was the Value Measurement Reporting Collaborative (VMRC) which was founded by 5 accounting bodies: AICPA, Canadian Institute of Chartered Accountants, CPA Australia, Institute der Wirtschaftprüfere.V. and South African Institute of Chartered Accountants (Value Measurement Reporting Collaborative [VMRC], 2005). VMRC was formed to coordinate value measurement efforts on a global basis and educate and inform various stakeholder groups about value measurement and reporting and the benefits it creates. One of the key components of value measurement reporting identified VMRC is IC measurement and reporting.

The Society for Knowledge Economics (SKE) established in June 2005 following a mandate from the Australian Government Consultative Committee on Knowledge Capital and the Australian Government Information Management Office has had a special focus on intellectual capital reporting. As one of its first tasks SKE introduced what is called an Extended Performance Account (EPA) for companies to report on knowledge-intensive resources and activities that are often overlooked in traditional financial accounts. The EPA was proposed to be the fourth performance account complementing the balance sheet, income statement and cash flow statement. The *Australian Guiding Principles on Extended Performance Management* published by SKE in 2005 provides guidance on measuring, managing and reporting on IC (Society for Knowledge Economics [SKE], 2005).

Another important contribution toward enhancing corporate IC disclosure practice is the *Principles for Effective Communication of Intellectual Capital* issued by the European Federation of Financial Analysts Societies (EFFAS)-Commission on Intellectual Capital in 2008. EFFAS established the Commission on Intellectual Capital in 2006 in order to encourage the disclosure of IC information by companies and the use of IC information by financial analysts in company valuation. The EFFAS's Commission on Intellectual Capital (2008) aims to: (a) promote the measurement and disclosure of IC by companies, highlighting financial professionals' needs and expectations regarding the reported information; (b) promote standardisation of the disclosure format to keep additional costs to a minimum and facilitate inter-company benchmarking; and (c) foster the valuation of information on intangibles by financial analysts, boosting the required expansion of their valuation competences. While most of the prior initiatives in this regard had been driven by the accounting profession or the industry this is the first IC disclosure guideline to be developed by users of corporate reports – financial analysts. Thus, the primary objective of these principles is to enhance the usability of IC information provided by companies for company valuation.

Integrated reporting is the latest development in business reporting with links to intellectual capital reporting

among other things. The Accounting for Sustainability Project under the patronage of the HRH Prince of Wales and the Global Reporting Initiative (GRI) launched the International Integrated Reporting Committee (now Council) in August 2010. IIRC is a global coalition of regulators, investors, companies, standard setters, the accounting profession and non-governmental organisations that have come together "to create a globally accepted international integrated reporting framework that elicits from organizations material information about their strategy, governance, performance and prospects in a clear, concise and comparable format" (International Integrated Reporting Council [IIRC], 2013a, p. 1).

The IIRC issued the Prototype Framework in November 2012, followed by a Consultation Draft in April 2013. The final International Integrated Reporting Framework was issued in December 2013 after a period of consultation. The Integrated Reporting Framework establishes guiding principles for the preparation of an integrated report and recommends content elements that should form part of an integrated report. The framework describes that firm value creation should be understood within a broader context formed by the organisational overview and external environment, governance, opportunities and risks, strategy and resource allocation, business model, performance, and future outlook. IC, including human and relational capital, is considered fundamental drivers of value in this framework. IC is framed as comprising inputs to the business model, and it is used, transformed and enhanced by the business activities of the organisation (IIRC, 2012).

As of October 2013 more than 100 companies from various parts of the world were taking part in the IIRC's Pilot Programme Business Network and preparing integrated reports according to International Integrated Reporting Framework (IIRC, 2013b). In addition, many more companies that have not formally subscribed to the Pilot Programme Business Network are publishing or in the process of publishing self-declared integrated reports. In 2010 fourteen per cent of the reports filed with the GRI were self-declared integrated reports, and this proportion is said to have grown year-on-year (Global Reporting Initiative [GRI], 2013). While integrated reporting remains largely voluntary worldwide, South African regulators took the unprecedented step of mandating the issuance of an integrated report for companies listed on the Johannesburg Stock Exchange.

IIRC is working towards aligning its framework with the International Accounting Standard Board (IASB) framework for corporate reporting. Recently, a Memorandum of Understanding was signed by the IASB Chairman and IIRC Chief Executive Officer that will enable the two organisations in improving cooperation on the IIRC's work to develop an integrated corporate reporting framework (International Financial Reporting Standards Foundation, 2013).

3. IC Reporting in Small and Medium Enterprises (SMEs)

It has been highlighted that SMEs often fail to explain their value creating IC when making requests for funding, and as a result find it difficult to raise equity or borrow from banks (European Commission, 2006; Organization for Small & Medium Enterprises and Regional Innovation, 2007). The report entitled 'Capital and Growth' issued by the Danish Trade and Industry Development Council highlighted that innovative projects and intangibles of knowledge intensive and innovative SMEs receive only little attention from investors partly due to difficulties in understanding their significance (Danish Trade and Industry Development Council, 1997). IC reporting thus becomes particularly important for SMEs to secure funding.

One of the first guidelines on IC reporting to be published specifically focusing on SMEs is the *Intellectual Capital Statement—Made in Germany* issued by the German Federal Ministry of Economics and Labour in 2004. These guidelines were developed based on the experience gained by the Intellectual Capital Statement Project Group (AK-WB), which was especially established to develop prototype IC statements in 14 German SMEs. These guidelines propose an IC statement to be a tool for systematic development of strategy and for external communication with a view to secure funds for future investment (Alwert, Bornemann and Kivikas, 2004).

Issues surrounding the reporting of IC in SMEs have also been addressed by the European Commission (EC). In December 2004 the Directorate General for Research and Technological Development of the EC set up a High-Level Expert Group, as part of the overall implementation of the *European Commission's Research Investment Action Plan*, to make recommendations on stimulating the reporting of IC in research intensive SMEs. The group had a particular focus on SMEs that either perform Research and Development (R&D), or use the results of R&D to innovateⁱ. To reflect the purpose of this expert group the project was entitled *Reporting of Intellectual Capital to Augment Research, Development & Innovation in SMEs* (RICARDIS). It was intended that an IC report could promote management of IC within SMEs and enable SMEs to better communicate with stakeholders to attract financial and human resources and develop relationships (Community Research and Development Information Service, 2006). One of the recommendations made by RICARDIS is that the existing guidelines for IC reporting available in Europe are sufficient and should be promoted among research-intensive

SMEs for perpetration of IC reports. It also made recommendations: (a) to guide research intensive SMEs to make a business case for R&D investments through IC reports; (b) to help investors and other stakeholders interpret IC statements; and (c) for policy makers to stimulate companies to report on their IC.

Japan is another country that focused on capacity building in the SME sector by encouraging an IC perspective. Organisation for Small & Medium Enterprises and Regional Innovation in Japan developed an amended version of the guideline for *Intellectual Assets Based Management Reports* for SMEs. This was published as a manual in 2006

4. IC Reporting in the Not-For-Profit Sector

In the not-for profit sector, research training organisations (RTOs), have been early adopters of IC management and reporting. RTOs include Contract Research Organisations, Public Research Institutes, Joint Research Centres, Competence Centres and Large-Scale Facility Centres (Leitner, 2005). The first RTO to publish an IC report is the Austrian Research Centres Seibersdorf Research GmbH, which published its first IC report in 1999. This IC report was based on the IC model developed by Günter Koch and U. Schneider at Austrian Research Centres Seibersdorf Research (known as the Koch-Schneider model). Subsequently, RTO's in a number of European countries started publishing IC reports. Among them are Joanneum Research (Austria), German Aerospace Centre DLR (Germany), RisØ National Laboratory (Denmark) and Centre for Molecular Medicine (Sweden) (European Commission, 2006). Although RTOs do not compete on the capital market or rely on lenders for funding, the motivation to reduce information asymmetry via IC reports for them emanates from the need to facilitate technology transfers and communicate their competencies and research results to secure external grants and build relationships. Also IC reporting enables these organisations to be transparent about the use of public funds in the conduct of their activities.

Austria is the first country in the world to mandate the publication of an IC statement. In 2002, the Austrian Federal Minister of Education, Science and Culture (AFMEC) enacted the University Organisation and Studies Act 2002 in order to reorganise Austrian universities based on the principles of New Public Management which is premised on increased autonomy, output orientation and performance-based funding (Leitner, 2004). In order to achieve these principles the Act requires, *inter alia*, that all state owned universities in Austria to prepare an IC statement annually for external reporting and submit to the AFMEC from 2006. The IC statement is expected to serve as a basis for budgetary reimbursement and performance oriented budget allocation from the government (Schaffhauser-Linzatti, 2004). In addition, it is expected to serve as an external communication tool of universities' performance to the public as Austrian universities are financed by public funds. Austrian government took advantage of the experience they had gained from Austrian Research Centres who had been publishing IC reports for several years when stipulating the preparation of an IC report.

Another area of IC reporting that has received particular regulatory attention is IC reporting in regional clusters and network initiatives. The European Communities' Sixth Framework Programme initiated a project aimed at providing guidance on IC reporting for regional, knowledge-intensive clusters and network initiatives. This project entitled Regional Intellectual Capital Reporting–Application and Development of a Methodology for European Regions (RICARDA) developed a manual with a methodology to support cluster managers and policy makers prepare an IC report. The pilot application of this methodology was carried out within four clusters/networks in Germany, Austria, Sweden and Hungary.

5. Conclusion

Despite the efforts expended on enhancing value reporting in general and IC reporting in specific empirical evidence suggests that a significant number of companies worldwide, including most of the largest companies in the world, do not report IC sufficiently and adopt a proper reporting framework (Campbell & Rahman, 2009; Striukova, Unerman & Guthrie, 2008). In comparison other types of voluntary reporting, such as environmental and sustainability reporting, continue to be undertaken by an increasing number of companies with most adopting the guidelines published by the GRI. None of the IC reporting models and guidelines has either been able to command the level of recognition that GRI has achieved or inspire corporate reporters the way GRI had done for sustainability reporting. This presents an interesting case study for future research.

At present, the numerous initiatives on IC reporting provide many interesting and challenging ideas, but arguably have little prospect of widespread adoption. Perhaps, the lack of agreement among academics and practitioners on most aspects of IC reporting including what to report (or what is IC) and how to report, as observed in this study, can be blamed for the current moribund status of IC reporting. Guthrie and Petty (2000) argue that the lack of a generally accepted framework is an impediment to IC reporting. More than 12 years after their study, we now see numerous guidelines and frameworks for reporting IC but still there is no common

acceptance of any one of them.

At the same time, being a recent development in business reporting, integrated reporting is gathering momentum. It has attracted a strong interest from business, professional accounting firms, accounting regulators and the investor community. Integrated reporting has benefitted much from the work that was carried out in the domain of IC reporting (sustainability reporting and governance being the others). However, now it seems to be foreshadowing the progress of IC reporting. Integrated reporting has occupied the domain of IC reporting, i.e. explaining the value creation story, but it is broader and comprehensive than IC reporting. Value creation extends beyond IC to natural, financial, manufactured and social capital, all of which have been captured in integrated reporting. In addition, the distinguishing feature of an integrated report is the connectivity it demonstrates among financial and non-financial information – connectivity that provides a holistic view of firm value creation. Hence, has IC reporting found its rightful place? If IC reporting is subsumed within integrated reporting, all the work that has been undertaken so far in developing the field of IC will not have gone waste. IC reporting will get a get a new life. The challenge would then be how to integrate IC with everything else!

References

- Alwert, K., Bornemann, M., & Kivikas, M. (2004). *Intellectual capital statement-made in Germany: guideline* 1.0 on the preparation of an intellectual capital statement. Berlin: Federal Ministry of Economics and Labour.
- American Institute of Certified Public Accountants [AICPA]. (1994). *Improving business reporting-a customer focus: meeting the information needs of investors and creditors*. New York: AICPA.
- Anderson, A., Herring, P., & Pawlicki, A. (2005). EBR: the next stop, *Journal of Accountancy*, 199(6), 71–74.
- Bartlett, C. A., & Mahmood, T. (1996). Skandia AFS: Developing Intellectual Capital Globally. Boston: Harvard Business School.
- Bjurström, E., Catasus, B., & Johanson, U. (2003). *E*KNOW-NET Work Package 2-Intellectual capital statements in firms*. A European Research Arena on Intagibles (E*KNOW-NET)
- Bukh, P. N., & Johanson, U. (2003). Research and knowledge interaction: guidelines for intellectual capital reporting. *Journal of Intellectual Capital*, 4(4), 576–587.http://dx.doi.org/10.1108/14691930310504572
- Campbell, D., & Rahman, M. R. A. (2009). A longitudinal examination of intellectual capital reporting in Marks & Spencer annual reports, 1978–2008. *The British Accounting Review, 42*(1), 56–70. http://dx.doi.org/10.1016/j.bar.2009.11.001
- Canibano, L., García-Ayuso, M., Sanchez, M. P., & Olea, M. (1999). Measuring intangibles to understand and improve innovation management: preliminary results. *International Symposium for Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects*, 9–11. OECD: Amsterdam.
- Catasus, B., & Grojer, J. E. (2003). Intangibles and credit decisions: results from an experiment. *European Accounting Review, 12*(2), 327–355. http://dx.doi.org/10.1080/0963818032000089418
- CORDIS. (2006). *Report highlights benefits of intellectual capital reporting for SMEs*. Retrieved October 15, 2012, from http://cordis.europa.eu/fetch?CALLER=EN_NEWS&ACTION=D&SESSION=&RCN=26284
- Danish Agency for Trade and Industry. (2000). A guideline for intellectual capital statements-a key to knowledge management. Copenhagen: Ministry of Trade and Industry.
- Danish Ministry of Science Technology and Innovation. (2003). *Intellectual capital statements—the new guideline*. Copenhagen: Ministry of Science Technology & Innovation.
- Danish Trade and Industry Development Council. (1997). *Intellectual capital accounts-Reporting and managing intellectual capital*. Copenhagen: The Danish Trade and Industry Development Council.
- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long Range Planning*, 30(3), 366–373. http://dx.doi.org/10.1016/s0024-6301(97)90248-x
- Edvinsson, L., & Malone, M. (1997a). Intellectual Capital. London: Piatkus.
- Edvinsson, L., & Malone, M. (1997b). *Intellectual Capital: Realizing Your Company's True Value by Finding its Hidden Brainpower*. New York: Harper Collins.
- Edvinsson, L., & Sullivan, P. (1996). Developing a model for managing intellectual capital. *European Management Journal*, 14(4), 356–364. http://dx.doi.org/10.1016/0263-2373(96)00022-9

- Enhanced Business Reporting Consortium. (2006). *The enhanced business reporting framework version 2.1.* Retrieved June 10, 2008, from http://www.ebr360.org/ContentPage.aspx?ContentPageId=107
- Enhanced Business Reporting Consortium. (2007). Response to the discussion paper for consideration by the SEC advisory committee on improvements to financial reporting. Retrieved June 10, 2008, from http://www.ebr360.org.
- Eronen, A., & Ahonen, G. (1999). Accounting for intellectual capital. *International Symposium for Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects*, 9–10. Amsterdam: OECD.
- European Commission. (2006). Reporting intellectual capital to augment research, development and Innovation in SMEs (RICARDIS): Encourage corporate measuring and reporting on research and other forms of intellectual capital. Brussels: Directorate-General for Research, European Commission.
- European Federation of Financial Analyst Societies Commission on Intellectual Capital. (2008). *Principles for effective communication of intellectual capital*. Frankfurt: European Federation of Financial Analysts Societies.
- Financial Accounting Standards Board. (2001). *Improving business reporting: Insights into enhancing voluntary disclosures*. Norwalk: FASB.
- García-Ayuso, M. (2003). Intangibles: Lessons from the past and a look into the future. *Journal of Intellectual Capital*, 4(4), 597–604. http://dx.doi.org/10.1108/14691930310504590
- Global Reporting Initiative. (2013). *The sustainability content of integrated reports—a survey of pioneers*. Amsterdam: Global Reporting Initiative.
- Grafström, G., & Edvinsson, L. (2001). Accounting for Minds. Stockholm: Skandia.
- Guthrie, J., & Petty, R. (2000). Intellectual capital: Australian annual reporting practices. *Journal of Intellectual Capital*, *I*(3), 241–251. http://dx.doi.org/10.1108/14691930010350800
- IADE-CIC. (2003). *Model for the measurement and management of intellectual capital: "Intellectus Model"*. Centro de Investigación sobre la Sociedad del Conocimiento. Madrid: Universidad Autónoma de Madrid.
- IFRS Foundation. (2013). *IASB and IIRC formalise cooperation on work to develop integrated corporate reporting framework*. Retrieved from http://www.ifrs.org/Alerts/PressRelease/Pages/IASB-and-IIRC-sign-MoU.aspx
- International Integrated Reporting Council. (2012). *Integrated Reporting-Prototype of the International <IR> framework.*Retrieved from http://www.theiirc.org/wp-content/uploads/2012/11/23.11.12-Prototype-Final.pdf
- International Integrated Reporting Council. (2013a). *The IIRC*. Retrieved 27 June, 2013 from http://www.theiirc.org/the-iirc/
- International Integrated Reporting Council. (2013b). *Pilot Programme Business Network*. Retrieved 11 April, 2013 from http://www.theiirc.org/companies-and-investors/pilot-programme-business-network/
- Japan Ministry of Economy, Trade and Industry. (2004). Reference guideline for intellectual property information disclosure: In the pursuit of mutual understanding between companies and capital markets through voluntary disclosures of information on patent and technology. Tokyo: JMETI.
- Japan Ministry of Economy, Trade and Industry. (2005). *Interim report by subcommittee on Management and intellectul assets*. Tokyo: JMETI.
- Johanson, U., Eklöv, G., Holmgren, M., & Mårtensson, M. (1999). *Human resource costing and accounting versus the balance scorecard: A literature survey of experience with the concept.* Stockholm: University of Stockholm.
- Johanson, U., Koga, C., Skoog, M., & Henningsson, J. (2006). The Japanese Government's intellectual capital reporting guideline. *Journal of Intellectual Capital, 7*(4), 474–491. http://dx.doi.org/10.1108/14691930610709121
- Johanson, U., Koga, C., Almqvist, R., & Skoog, M. (2009). "Breaking taboos": Implementing intellectual assets-based management guidelines. *Journal of Intellectual Capital*, 10(4), 520–538. http://dx.doi.org/10.1108/14691930910996625

- Johanson, U., Martensson, M., & Skoog, M. (1999). Measuring and managing intangibles: eleven Swedish qualitative exploratory case studies. *International Symposium for Measuring and Reporting Intellectual Capital: Experience, Issues, and Prospects*, 9–10. Amsterdam: OECD.
- Johanson, U., Mårtensson, M., & Skoog, M. (2001). Measuring to understand intangible performance drivers. *European Accounting Review, 10*(3), 407–437. http://dx.doi.org/10.1080/09638180126791
- Leitner, K. H. (2004). Intellectual capital reporting for universities: conceptual background and application for Austrian universities. *Research Evaluation*, 13(2), 129–140. http://dx.doi.org/10.3152/147154404781776464
- Leitner, K. H. (2005). Managing and reporting intangible asets in research technology organisations. *R&D Management*, 35(2), 125–136. http://dx.doi.org/10.1111/j.1467–9310.2005.00378.x
- MERITUM. (2002). *Measuring intangibles to understand and improve innovation management*. Brussels: European Commission.
- Mouritsen, J., Larsen, H. T., & Bukh, P. N. (2001). Valuing the future: Intellectual capital supplements at Skandia. *Accounting, Auditing and Accountability Journal, 14*(4), 399–422. http://dx.doi.org/10.1108/09513570110403434
- Organization for Small & Medium Enterprises and Regional Innovation. (2007). *Intellectual Asset-Based Management Manual for Small and Medium Enterprises*. Tokyo: Organization for Small & Medium Enterprises and Regional Innovation.
- Roos, J., Roos, G., Dragonetti, N. C., & Edvinsson, L. (1997). *Intellectual Capital, Navigating the New Business Landscape*. London: Macmillan Business.
- Schaffhauser-Linzatti, M. (2004). Intellectual capital reporting for austrian universities-a thrilling work in progress. *European Institute for Advanced Studies in Management Workshop on the Process of Reform of the University Across Europe*, May, 24–26. Siena: Certosa di Pontignano.
- Skandia. (1994). Visualising intellectual capital in Skandia. Stockholm: Skandia Group.
- Society for Knowledge Economics. (2005). Australian guiding principles on extended performance management: a guide to better managing, measuring and reporting knowledge intensive organisational resources. Crows Nest: SKE.
- Stewart, T. A. (1991). Brainpower: intellectual capital is becoming corporate America's most valuable asset and can be its sharpest competitive weapon; the challenge is to find what you have-and use it. *Fortune*, *123*(11), 44–51.
- Stewart, T. A. (1994). Your company's most valuable asset: Intellectual capital. Fortune, 130(7), 68–74.
- Stewart, T. A. (1995a). Mapping corporate brainpower. Fortune, 132(9), 209–212.
- Stewart, T. A. (1995b). Trying to grasp the intangible. Fortune, 132(7), 157–161.
- Stewart, T. A., & Brown, V. (1996). The invisible key to success. Fortune, 134(3), 173–176.
- Stewart, T. A., & Kaufman, D. C. (1995). Getting real about brainpower. Fortune, 132(11), 201-203.
- Striukova, L., Unerman, J., & Guthrie, J. (2008). Corporate reporting of intellectual capital: evidence from UK companies. *The British Accounting Review*, 40(4), 297–313. http://dx.doi.org/10.1016/j.bar.2008.06.001
- Sveiby, K. E. (1989). *Invisible Balance Sheet: Key Indicators for Accounting, Control and Valuation of Know-how Companies.* Stockholm: The Konrad Group.
- Sveiby, K. E. (1997). *The New Organisational Wealth: Managing and Measuring Knowledge Based Assets.* San Francisco: Berrett-Koehler.
- Sveiby, K. E. (2001). *The Swedish Community of Practice*. Retrieved from http://www.sveiby.com/articles/SwedishCoP.htm
- Upton, W. S. (2001). Special report: business and financial reporting challenges from the new economy. Norwalk: Finnacial Accounting Standards Board.
- Value Measurement Reporting Collaborative. (2005). What is VMR. Retrieved from http://www.valuemeasurement.net/

- Witt, K. W. (2012). *Integrated Reporting-A New Model for Corporate Reporting*. Retrieved from http://www.aicpa.org/InterestAreas/BusinessIndustryAndGovernment/Resources/Sustainability/Pages/Integ ratedReporting-ANewModelforCorporateReporting.aspx
- Yamamoto, E., & Matano, T. (2007). Why intellectual asset management is crucial. Retrieved from http://www.managingip.com/Article/1408980/Why-intellectual-asset-management-is-crucial.html?Home=t rue&Keywords=Eiichi+Yamamoto+and+Toshimichi+Matano&Brand=Site&tabSelected=True

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