[Editorial] Intellectual capital accounting in the age of integrated reporting: a commentary

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Abstract

Purpose: This commentary explores the extent to which the practice of integrated reporting (IR) in organisations can be a vehicle for furthering and sustaining the practice of accounting for intellectual capital (IC). It introduces the eight papers forming this special issue that demonstrates how organisations are developing practices at the nexus of IC and IR.

Methodology: The commentary is a review of the eight papers, and it connects the outcomes from these papers into some future research directions based on an interpretive approach and the special issue editors' expertise on IC and IR.

Findings: The papers published in this special issue provide a useful foundation for extending the research project on integrated reporting-led IC accounting. However, there is a lack of research in this special issue that goes much beyond third stage IC research, which is directed at strengthening IC practices inside organisational boundaries.

Originality: The special issue presents leading-edge research into the nexus between IC and IR to inform future research opportunities.

Research implications: While it is essential to understand how IR works in practice moving beyond organisational boundaries it is even more critical if companies are to survive and thrive in an increasingly turbulent business operating environment. Thus, this commentary offers arguments as to how IC and IR research can extend into fourth and fifth stage research paradigms.

Intellectual capital accounting in the age of integrated reporting: A commentary

1 Introduction

Integrated reporting (IR) is gaining popularity among organisations globally. Within just six years since the release of the first international guideline for IR *Towards Integrated Reporting – Communicating value in the 21st century* in 2011, the number of integrated reporters has surpassed published intellectual capital (IC) reports. The International Integrated Reporting Council (IIRC) claims that more than 1,000 businesses worldwide have prepared a form of integrated report (IIRC, 2016). As of March 2017, the IIRC lists 477 organisations whose reports refer to the IIRC or the International Integrated Reporting Framework (hereafter International IR Framework). The IIRC and its supporters predict that IR represents the future of corporate reporting and will become the "corporate reporting norm" (IIRC, 2013, p.2).

Coinciding with the emergence of IR there has been a demise of IC reporting in the form of IC statements. Skandia AFS published the world's first IC statement in 1995. Since then, organisations in several countries have experimented with IC statements, supported by initiatives of governments in a range of countries, as well as supranational organisations. One of the most influential projects that supported organisations to measure, manage and report IC was the Danish Guideline Project for IC reporting. This project resulted in the publication of guidelines for preparing and analysing IC statements (DATI, 2000; DMSTI, 2003; Mouritsen *et al.*, 2003) and, as a consequence, about 100 organisations prepared IC statements. However, after less than a decade since the termination of the Danish Guideline Project, none of those organisations is publishing IC statements (Nielsen *et al.*, 2017). It is now difficult to find a single listed company anywhere in the world still preparing an external IC statement (Dumay, 2016).

Although IC reporting in the form of IC statements has become virtually non-existent, it has partly reincarnated in the form of the emerging IR movement. An integrated report aims to explain the potential value creation story of a company and, in doing so, grounds itself in a multi-capital system where IC is significant (IIRC, 2013). According to the International IR Framework issued by the IIRC (2013), human, relational and structural capital, which are considered as the main components of IC (Guthrie *et al.*, 2006), represent three out of the six capitals an organisation should provide insight about in its integrated report. These capitals are in the International IR Framework, forming the salient concepts of IR (IIRC, 2013). Thus, in the age of IR, IC accounting is being revived.

One might question the motivation for examining IR from an IC perspective, invoking Darwinism to argue that the extinction of the practice of IC statements is evidence that IC accounting is not fit for purpose. However, it can be counter-argued that the resurrection of IC accounting in the International IR Framework testifies to its ability to adapt to changing circumstances and institutional logics. Hence, the relevant question is not whether IC accounting is essential but, instead, whether its newest embodiment is likely to extend the agenda for IC accounting. Such is the motivation for this commentary and the special issue.

Some scholars argue that IR is doomed to fail (see, for example, Dumay, 2016; Flower, 2015). The debate about success or failure of IR is pertinent to the questions explored in this JIC special issue, but it is not the authors' intention to engage in this debate because the special issue seeks to understand the role IC plays in IR, regardless of its future. To understand the critical debate about IR's potential and likely success or failure, the readers are referred to critical and normative analysis of IR, such as the work cited above and those by Brown and Dillard (2014), Tweedie and Martinov-Bennie (2015), Adams (2015) and Dumay *et al.* (2017), which provide extensive coverage of this debate. Also, it should be noted that the arguments underpinning criticisms of IR are mainly unrelated to IC accounting embedded within IR. The focus of this commentary, rather, is on how IC accounting can be advanced through IR if it is to become the mainstay of corporate reporting. Even if IR does not succeed, the insights provided in this commentary may be relevant to understand and evaluate future iterations of IC accounting, in whichever form it might materialise, akin to the contributions of the plethora of studies examining IC statements, despite their recent extinction.

The remainder of this commentary is as follows. Section 2 provides an overview of IC accounting and its two main strands: external reporting of IC and measuring and visualising IC for management decision making. Section 3 gives an overview of the first strand and introduces the papers published in this special issue that extend the knowledge within this strand. Section 4 does the same for the second strand. Section 5 concludes this commentary by providing direction for further extending the research project on the IC–IR nexus.

2 Intellectual capital accounting

Fincham and Roslender (2003, p.781) define IC accounting as "measuring and reporting the range of human and knowledge-based factors that create sustained economic value". As the IC literature has now reached consensus in its understanding of IC as constituting human, relational and structural capital, it is convenient to define IC accounting as the measuring and reporting of these three capitals. Any technology that enables IC or one or more of its three components to be measured and reported is one that sustains IC accounting.

In this vein, IC accounting existed even before Skandia prepared its first IC statement in 1995. Early examples of IC accounting from practice include, amongst others, The Invisible Balance Sheet (Sveiby, 1989), the Balanced Scorecard (Kaplan and Norton, 1992) and Human Resource Accounting systems, such as that developed at R.G. Barry Corporation in 1968 (Brummet *et al.*, 1968). Many early systems of IC accounting focused on quantifying IC in monetary terms (see Sveiby, 2010). For instance, Brummet *et al.* (1968, p.220) argued in relation to accounting for human resource that the focus is to "move the 'human factor' from a qualitative factor that is typically held constant or ignored to a quantitative one which may be an integral part of decision models". Attributing value to human capital was expected to assist managers in making decisions such as those relating to capital budgeting, reducing staff turnover, investments in human capital and training and development, and enabling stakeholders (mainly investors) to forecast future performance and assessing managerial effectiveness in utilising human capital. Subsequent initiatives in IC accounting moved away from valuing IC to (re)presenting IC. These include non-monetary, narrative and diagrammatic (re)presentations of IC (e.g., the Skandia navigator, IC rating® framework, MERITUM Project).

The focus of IC accounting in practice is twofold: (1) external reporting of IC; and (2) measuring and visualising IC for management decision making. The emphasis of a particular IC accounting technology or the purpose for which IC accounting is adopted within a specific organisation may predominantly align with one or, occasionally, both fields of inquiry (Chaminade and Roberts, 2003). The following subsections discuss how these two fields of IC accounting are manifested in IR and highlights the contributions of the papers that form this special issue of the *Journal of Intellectual Capital.*

3 External reporting of IC

The motivation for externally reporting IC stocks and flows of listed companies lies in the presumption that transparency of organisational value drivers leads to a better valuation of companies by the capital market. Dumay (2016) invokes the proprietary cost theory to counter-argue that information relating to an organisation's IC is proprietary and, thus, its disclosure is not in the best interest of the company and its managers. Verrecchia (1983, p.181) defines proprietary cost as "cost associated with disclosing information which may be proprietary in nature, and therefore potentially damaging". Proprietary costs may be associated with information favourable to a firm that competitors may use to the detriment of the company, or unfavourable to a firm that might result in increased credit risk as perceived by lenders. Dumay (2016, p. 169) argues that the false foundation on which IC reporting was built (i.e., the relevance of IC reporting depends on disclosing proprietary information) led to the demise of IC accounting, and IR, which is built on the same "wealth-creation myth", is unlikely to succeed either.

According to Verrecchia (1983), when proprietary costs exist the capital market is unable to interpret information that managers have withheld as unambiguously 'bad news'. It creates a doubt as to whether the withheld information is 'good news' that the managers are reluctant to disclose due to the risk of that information being harmful to a firm's prospects. Thus, proprietary costs enable companies to withhold information without experiencing an adverse market reaction that they would have otherwise experienced in the absence of proprietary cost. According to this logic, companies would only disclose IC information to the extent that the marginal proprietary cost is less than the marginal benefit of disclosure.

It is unlikely that IC accounting would have seen the light of day if it meant that organisations would incur a proprietary cost as a result of providing information on organisational IC that is detrimental to their competitive advantage. Moreover, it is inconceivable that companies saw IC reporting as a medium for disclosing price-sensitive IC related information for the simple reason that companies cannot withhold price-sensitive information until the release of an annual or IC report. One plausible explanation is that IC accounting was adopted by companies to make their value creation potential and stories more intelligible to their financial shareholders and to enable them to understand the business better. Such an objective does not necessarily lead to IC reporters incurring proprietary costs or being reprimanded for withholding price-sensitive information. One of the primary objectives of IR itself is making organisational value creation stories via businesses models more intelligible to the capital market so that financial capital providers can make better-informed decisions. Thus, it can be argued that IR and IC reporting share a similar purpose insofar as serving the capital market is concerned. IR has been designed to overcome the weaknesses inherited by IC accounting in focusing on just three capitals, and the International IR Framework, with its six capitals and the relationships therein, is more comprehensive.

Five papers published in this JIC special issue examine disclosure of IC through integrated reports and attributes of such disclosure. Camodeca *et al.* (2019) directly address the debate about the capital market benefits of integrated reports as a vehicle for signalling IC. They examine whether the adoption of the International IR Framework increases the value-relevance of IC information reported through integrated reports. The study assumes that integrated reports, when compliant with the International IR Framework, provide credible, precise and truthful information related to IC. The study, which focuses on the pharmaceutical industry, finds only companies with sufficient IC adopt integrated reporting, indicating that managers adopt the International IR Framework to signal companies' IC to the capital market.

The study by Terblanche and De Villiers (2019) complements Camodeca *et al.* (2019) by examining whether integrated reports are associated with more IC disclosure and whether companies with greater exposure to capital markets as a result of being cross-listed in an overseas stock exchange disclose more IC through integrated reports. Using a sample of companies listed on the Johannesburg Stock Exchange, where companies are required to prepare an integrated report or explain reasons for not doing so, the study finds that companies preparing an integrated report disclose more IC information, specifically information on human capital, but companies with cross-listings do not disclose more IC. This paper highlights a crossover between integrated reporting and IC disclosures, especially in relation to human capital disclosures, and raises questions as to why IR has not impacted the extent of relational and structural capital disclosures.

Demartini *et al.* (2019) examine attributes of IC disclosure in the integrated reports published by European listed firms from 2011 to 2016 available via the IR Emerging Practice Examples Database. The authors find that IC disclosures in integrated reports are mainly discursive, positively toned and backwards-looking, and, consistent with the findings of Terblanche and De Villiers (2019), focus on human capital. Demartini *et al.* (2019) also investigate whether there is an association between the non-financial performance of integrated reporters and the tone of IC disclosure in the integrated reports. Drawing on impression management and incremental information approaches they show a positive association between optimistic tone in companies' IC disclosures in integrated reports and non-financial performance, measured in terms of environmental, social and governance aspects.

Casonato *et al.* (2019) also explore the use of integrated reports for impression management purposes using a case study of an Australian bank rocked by a major scandal in 2004. They examine whether the information in the bank's integrated reports is consistent with other information available to investors and find a gap between company-provided disclosures and publicly available information in other media. The authors conclude that the IR paradigm is being co-opted by impression management strategies to improve legitimacy through trust, reputation and social capital. The paper links IR with its use in building relational capital. The authors argue that disclosure studies, including those on IC, should go beyond the organisational boundaries and understand if these disclosures add value to society.

Dumay *et al.* (2019) examine the gap between reporting and managers' behaviour to shed light on the theoretical underpinnings of current IC disclosure practice and research. The authors rely on academic literature and illustrations from practice to provide a critique of existing corporate disclosure theories and then propose stewardship theory to frame corporate behaviour and disclosure practices. Dumay *et al.* (2019) argue that there are significant differences between corporate behaviour and what is publicly disclosed, leading to a loss of trust in corporations. They argue that in such a context improved disclosure of information, including IC information, does not help instil trust in the company. They propose that stewardship theory could inform managerial behaviour and disclosure for rebuilding public trust in business. The implications of this proposed model for disclosing IC through integrated reports and reports complying with the new EU Directive are profound.

4 Measuring and visualising IC for management decision making

In investigating the reasons for the demise of IC reporting in firms that implemented IC statements, Schaper (2016) identifies loose coupling of IC within organisations as the main reason. As a solution, he recognises the need for new reporting practices to be embedded in organisations via management decision-making processes. By emphasising the importance of integrated thinking as a precursor to, and an antecedent of IR, the International IR Framework attempts to couple IR with management decision making and corporate culture. Under the International IR Framework, managers are strongly encouraged to engage with integrated thinking as it enables a more comprehensive approach to strategic planning and the development of new ways of reporting value outcomes. The IIRC (2013, p.2) claims that:

> The more that integrated thinking is embedded into an organization's activities, the more naturally will provide the connectivity of information flow into management reporting, analysis and decision making, and subsequently into the integrated report.

Integrated thinking is defined as the "active consideration by an organisation of the relationships between its various operating and functional units and the capitals that the organisation uses or affects" (IIRC, 2013, p.33). Thus, integrated thinking provides a mechanism for an IC-based perspective to be instilled within organisations that, as a by-product, will also enrich organisations' structural capital.

Three papers in this JIC special issue examine IR for its capacity to enable an enhanced understanding of non-financial value drivers and incorporate IC in management decision making. Doni *et al.* (2019) explore an innovative approach developed by the Development Bank of Singapore (DBS), an organisation pioneering IR in Singapore, to account for multiple capitals in their journey towards IR. The authors find that DBS management re-conceptualised, re-categorised and measured multiple capitals as a form of non-financial value using the balance sheet approach and integrated the capitals within a Balanced Scorecard. The new approach enabled the company to visualise the interactions and potential trade-offs among various capitals. The study provides insight into the firm-level implementation of the International IR Framework, explaining how it enables a company to reflect on non-traditional forms of capital, including IC.

Extending the theme explored by Doni *et al.* (2019), Massingham *et al.* (2019) provide a conceptual essay that integrates critical concepts from the Balanced Scorecard with specific measures of integrated thinking and value creation. The purpose is to provide a new learning and growth perspective for the Balanced Scorecard that incorporates specific measures of integrated thinking and value creation. The authors argue that the new learning and growth perspective, which operates in tandem with the International IR Framework and integrated thinking, will enable organisations to better appreciate human and structural capital and their role in value creation.

Finally, Stacchezzini *et al.* (2019) explore the conceptualisation of IC elements in the context of IR and the functions that integrated reporters assign to IC elements. The authors use social ontology theory and apply this to an energy sector company. In-depth interviews were undertaken with corporate staff. The study reveals that the meaning of IC only emerges during the process of preparing the integrated report. The integrated thinking phase facilitates dialogue between departments and actors in constructing IC accounts. Their study is the first to explore IC ontology empirically within an IR context. It opens paths to further research on the relationships between IC and integrated thinking.

5 Further extending intellectual capital through integrated reporting

The papers published in this special issue provide a useful foundation for extending the research project on IR-led IC accounting. However, there is a lack of research in this special issue that goes much beyond third stage IC research, which is directed at strengthening IC practices inside organisational boundaries (Guthrie *et al.*, 2012). Dumay and Garanina (2013) coin the term "fourth stage IC" to conceptualise IC as an extra-organisational phenomenon which "relates directly and powerfully to environmental and social justice" (Dumay and Guthrie, 2017, p.40). Arguably, IR is a potential enabler of this fourth stage IC accounting because IR can promote an understanding of IC extending beyond its creation, utilisation and impacts within economic boundaries of organisations to its role within the broader eco-system.

Arguably, IC accounting within IR has a role to play in promoting good corporate citizenship and interactions with the broader community. A careful examination of the International IR Framework reveals that social capital is seen more as an input into a business model whereby the main outputs are manufactured and financial capitals. As Casonato *et al.* (2019) highlight in this special issue, it is entirely possible for a company to leverage its capitals to create financial capital for shareholders and managers at the expense of customers, many of whom are the most vulnerable members of society. While creating wealth is an anticipated and desirable outcome for a company, one must ask what cost this has to society? It is important to understand the moral and ethical impacts of leveraging the capitals according to the International IR Framework, considering its focus is primarily benefiting the providers of financial capital, who readily reward managers for creating wealth that has been extracted from those who often have less. Further research is needed to understand how companies, shareholders and managers should use the principles of IC and IR to create more social capital instead of creating financial capital at any cost.

Several scholars criticise IR for ignoring social and ecological sustainability (Flower, 2015; Milne and Gray, 2013), despite the GRI and The Prince's Accounting for Sustainability being two of the founding members of the original International Integrated Reporting Committee (later the Council) (Gleeson-White, 2014). However, some scholars claim that IR is arguably more capable of connecting with environmental sustainability with its inclusion of natural capital that broadens performance measurement beyond financial sustainability (de Villiers and Maroun, 2018). For example, in this special issue, Stacchezzini *et al.* (2019) highlight that IR enables IC to be conceptualised beyond a narrow economic sense to one that is conditional on sustainability-oriented financial value creation. Again, environmental sustainability is not a new line of inquiry for IC researchers, with several papers having been published connecting

IC and ecological sustainability (e.g., Demartini and Paoloni, 2013; Wasiluk, 2013). However, like IC, some IR researchers are making the connection even though the link is not explicit.

As with social capital, it can be argued that it is entirely possible to have natural capital as an input, but if it is depleted in the business process that creates financial capital, the moral and ethical implications of IR in describing how this takes place are questionable. However, considering the fact that most IC reports and IC within integrated reports convey predominantly good news (Demartini *et al.*, 2019), what is the likelihood of any company describing how they are not sustainable and damage natural capital in the pursuit of financial capital? More research should shed light on how IC is connected to ecological sustainability in the IR process.

Another issue tackled by scholars, practitioners and society is the United Nations Sustainable Development Goals (UNSDGs) that seek to eliminate poverty by 2030 (United Nations Development Programme (UNDP), 2015). As Bebbington and Unerman (2018, p.2) advocate these goals are the "salient point of departure for understanding and achieving environmental and human development ambitions up to (and no doubt beyond) the year 2030". Already, the IIRC has issued a position paper entitled '*The Sustainable Development Goals, Integrated Thinking and The Integrated Report'* (Adams, 2018), which, if implemented, will be a significant point of departure for IR and IC accounting. Consistent with the argument that the International IR Framework is currently "too deeply rooted in the business case for sustainability rather than the sustainability case for business" (Thomson, 2015, p. 21) the position paper attempts to align the UNSDGs to the IR business model rather than the IR business model to the UNSDGs (Adams, 2018, p. 33). To enable IR to be rooted in the *sustainability case for business* there is a need for research that investigates cases in which UNSDGs have been relied upon as a force for economic, social and environmental sustainability, rather than as "a force for financial stability and sustainability" as advocated in the current International IR Framework (IIRC, 2013, p. 2). Research on topics such are green IC (e.g., Chang and Chen, 2012; Chen, 2008), which has had some coverage in the IC literature in the past, can be reinvigorated and extended in light of the potential to align UNSDGs with IR. In this regard, it is timely to expect a shift in the focus of IC accounting from IC that is good for the company to IC that can be deployed to overcome environmental and social problems, helping to make the world a better place for future generations. According to this paradigm, IC accounting within IR should not be about making more companies more financially sustainable in the long-term while ignoring the risks that issues such as climate change will have on their business model (Task Force on Climate-related Financial Disclosures

(TCFD), 2016). Currently, the International IR Framework does not openly address ecological sustainability and social justice, and future research should identify whether it should, if so how and what implications it has for IC accounting.

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