

#### **Aalborg Universitet**

#### Moving from irrelevant intellectual capital (IC) reporting to value-relevant IC disclosures

Key learning points from the Danish experience

Schaper, Stefan; Nielsen, Christian; Roslender, Robin

Published in: Journal of Intellectual Capital

DOI (link to publication from Publisher): 10.1108/JIC-07-2016-0071

Publication date: 2017

Document Version Accepted author manuscript, peer reviewed version

Link to publication from Aalborg University

Citation for published version (APA):

Schaper, S., Nielsen, C., & Roslender, R. (2017). Moving from irrelevant intellectual capital (IC) reporting to value-relevant IC disclosures: Key learning points from the Danish experience. *Journal of Intellectual Capital*, 18(1), 81-101. https://doi.org/10.1108/JIC-07-2016-0071

#### **General rights**

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
   You may not further distribute the material or use it for any profit-making activity or commercial gain
   You may freely distribute the URL identifying the publication in the public portal -

If you believe that this document breaches copyright please contact us at vbn@aub.aau.dk providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from vbn.aau.dk on: December 05, 2025

#### **Journal of Intellectual Capital**



# Moving from irrelevant IC reporting to value-relevant IC disclosures: Key learning points from the Danish experience

| Journal:         | Journal of Intellectual Capital  |
|------------------|--|
| Manuscript ID    | JIC-07-2016-0071.R2  |
| Manuscript Type: | Research Paper   |
| Keywords:        | Intellectual capital, Reporting, Disclosure, disclosure channels, Integrated Reporting, Regulation |
|                  |  |

SCHOLARONE™ Manuscripts Moving from irrelevant IC reporting to value-relevant IC disclosures: key learning points from the Danish experience

#### Abstract:

**Purpose** – Informed by the findings of a follow-up research study of companies originally involved in the Danish Guideline Project for Intellectual Capital Statements, this paper provides valuable insights for a potential shift from IC reporting, largely informed by an accounting perspective, towards IC-related disclosures.

**Design/methodology/approach** – The paper draws on data obtained from 21 semi-structured interviews with respondents in 16 companies. The respondents were contacted following a genealogical exercise carried out on the 102 companies involved in the Danish Guideline Project between 1999 and 2003.

**Findings** – The interviews suggested a rather critical perspective towards IC reporting using the intellectual capital statement framework. Despite the attempt of the Danish Guideline Project to establish a reporting standard, a range of experiments resulted in changes to the framework's original structure. Overall, a trend towards more integrated forms of reporting was discernible, in some part being motivated by the need to reduce the levels of reporting overload. Examples of integration designed to legitimise intellectual capital or corporate social responsibility reports, involving issuing them in tandem with a recognised reporting vehicle such as the annual report, were also encountered.

Research limitations/implications – The implications of this study are that timely, value-relevant IC disclosures and compliant reporting, primarily for accountability purposes, have the potential to coexist. In addition to the usual limitations of a semi-structured interview research design, respondents' difficulties in clearly recalling events during the project after some 10-12 years is a further potential limitation. Additionally, the use of Internet-based communication channels for disclosure purposes was in its infancy at the time of the Danish Guideline Project.

**Originality/value** – The paper provides important insights into the mechanisms of intellectual capital disclosure and intellectual capital reporting as seen from a practitioner perspective. Implications relevant to the continued development of integrated reporting are also identified.

**Keywords:** intellectual capital, reporting, disclosure, disclosure channels, integrated reporting, regulation

#### 1. Introduction

There has been much discussion in recent years about whether or not current accounting standards and corporate financial reporting practices are sufficiently informative with respect to the different users of such information. The accounting scandals of a decade or so ago, of which Enron is the most infamous, and the emergence of the so-called 'new economy' in which intellectual capital (IC) has become a central component of the business models of both public and private sectors, are two of the notable influences affecting the expectations of the users of accounting information. As a consequence, traditional financial reporting practices have come under pressure. Increased information requirements from professional users have proved particularly challenging. Despite this, accounting and reporting practices have largely failed to keep pace with the changing environment (see, e.g., Cañibano *et al.*, 2000).

IC reporting has been identified as one potential solution for improving transparency by reducing information asymmetries between the providers of corporate information and those to whom it is normally directed (Eccles and Mavrinac, 1995; Johanson, 2003). The reporting of IC information has also been claimed to reduce companies' cost of capital (Bismuth and Tojo, 2008; Nielsen *et al.*, 2015), and Dumay and Tull (2007) found that, in particular, IC disclosures relating to internal capital were price sensitive. In addition, Gelb (2002) argued that providing supplementary disclosures is especially important for firms with significant levels of intangible assets, hence reinforcing the case for IC reporting. Despite the relevance of IC reporting being rarely queried (e.g., Bukh, 2003), its reliability remains of considerable concern to many within the accounting and reporting community, something clearly evident in the debate surrounding the IAS 38 accounting standard (Brennan and Connell, 2000; Van der Meer-Kooistra and Zijlstra, 2001; Cañibano *et al.*, 2000; Wyatt, 2008). Zéghal and Maaloul (2011) likewise found that IC was not recognised in accounting terms but suggest that the voluntary disclosure of IC information forms part of a solution to enhance corporate transparency. The distinction invoked here between reporting and disclosure is worthy of note.

Following the emergence of the early IC reporting practices in Scandinavia in the mid-1990s, there has been a proliferation of IC reporting approaches (Petty and Guthrie, 2000; Alcaniz *et al.*, 2011; Guthrie *et al.*, 2012). However, the lasting impact of these practices has recently been critically scrutinised by Dumay and Garanina (2012) and Nielsen *et al.* (2016a, b). Despite the optimistic rhetoric and proliferation in the initial phases, Dumay (2016) found that IC reporting has completely disappeared from stock exchange-listed companies' annual reports and/or websites, suggesting that IC reporting, at least that which is mainly informed by an accounting perspective, is uninteresting for the financial markets and hence not value relevant.

Integrated reporting (IR) is currently viewed as a reporting vehicle capable of providing value-relevant information to reporting users, some of which relates to IC. Dumay (2016) predicted that IR is at risk of suffering much the same fate as the intellectual capital statement (ICS), as reported by Nielsen *et al.* (2016a, b), in that 1) it will not be able to persuade practitioners involved in corporate reporting to explore the promise it holds for reporting, 2) to convince regulators to identify it as a mandatory requirement or 3) be captured by accounting as did the ICS. To help prevent IR, together with other forms of extra-financial reporting, from failing in much the same manner, we believe it is crucial to learn from past initiatives, *inter alia* the Danish ICS framework

experience, to identify the underlying mechanisms that result in a lack of perceived value relevance. In so doing, we concur with Edvinsson's observation that "we need to go beyond IC reporting. We are on the edge of something, but what?" (2013, p. 163). Dumay argued that adjustment is easy to make because "all [the accounting and reporting profession] needs to do is change their focus from reporting that does not provide any information that is relevant to share prices to timely disclosure" (Dumay, 2016, p. 179).

Building on the distinction between IC reporting and IC disclosure (Zéghal and Maaloul, 2011; Dumay, 2016), this article studies the Danish ICS experience and builds upon the previous contributions of Nielsen *et al.* (2016a, b) by answering the research question:

Can the Danish experience provide relevant insights on the value added value of embracing an IC disclosure approach rather than an IC reporting approach?

The empirical work thus focuses on identifying the predominant understandings of reporting versus disclosure practices in the DGP data. This paper aims at providing a range of valuable insights on the potential promise of a disclosure-oriented approach to the provision of accounting information over the traditional reporting-oriented model.

The next section provides the theoretical setting for disclosure and reporting, as well as challenges imposed on the users of corporate disclosures and reporting trends. In section 3, the research design is explained, while section 4 explains the principal findings. From the empirical data, themes related to the reporting and disclosure of IC are identified. We discuss these and provide suggestions for developing the relationship and strengthening companies' focus on IC disclosure rather than reporting.

## 2. Theoretical underpinning

#### 2.1 Disclosure versus reporting

Recently, Dumay (2016) suggested that researchers "need to abandon reporting, and concentrate on how an organisation discloses what 'was previously secret or unknown', so that all stakeholders understand how an organisation takes into consideration its ethical, social and environmental impacts" (p. 180). Similar arguments for the greater usefulness of disclosures for decision-making purposes have been aired, for example in relation to voluntary interim reporting (Leftwich *et al.*, 1981), in addition to mandatory reporting. To elaborate on this relationship between reporting and disclosure, a distinction between them needs to be made. Yet neither the concept of reporting or the concept of disclosure has a clear definition; rather, they have multiple definitions depending on the specific context in which they are mobilised. For the purpose of the current study, we propose the following definitions:

#### Disclosure is the act of making something known

Disclosure is the act of releasing or revealing all relevant information, new or secret, pertaining to a company that may influence an investment decision.

#### Reporting is a periodic process that creates a status

Reporting is the process of producing statements that communicate an organisation's financial status to management, investors, and the government for a certain period.

As such, IC reporting and IC disclosure, although both are mechanisms that are likely to support and complement one another's purposes, are very different processes. Looking at the distinction between reporting and disclosure in prior research, disclosure is often focussed on specifically in relation to providing voluntary information (Lang and Lundholm, 2000), in opposition to mandatory information. Such disclosures prompt the use of more direct communication channels, such as Internet-based channels (websites, social media) and private communication channels (annual general meetings, investor and analyst meetings and seminars, one-on-one meetings). However, in relation to strategic, extra-financial, and IC-related types of information, reporting seems to be the dominant concept (see, for example, Seetharaman *et al.*, 2002; Bukh, 2003). Periodic reporting of information might be considered of lesser relevance than more timely "on the event" disclosures about issues relating to IC. However, reporting may still play an important role as a context-providing mechanism for disclosures.

#### 2.2 Disclosure-specific problems

While contemplating IC disclosure rather than IC reporting might seem to be a viable route to take to improve the information environment of companies, we must be aware that, if companies were to concentrate their communication efforts on IC disclosures, this would impose a different (new) set of problems on the companies engaged in IC reporting (Nielsen and Madsen, 2009). Below, we highlight some of the problems traditionally associated with voluntary disclosures and reporting of the type that IC reporting constitutes.

#### Reliability

One weakness typically associated with voluntary disclosures is reliability. Many studies have argued that the incentives to report "strategically", i.e., over-optimistically, are important to take into consideration when evaluating the reliability of a voluntary disclosure (Gibbins *et al.*, 1990). In the case of initial public offerings, Lang and Lundholm (2000) questioned the role of voluntary disclosures as a means of reducing information asymmetry. They insinuated that the role is, rather, to hype the stock. According to Dye (2001, p. 184), "voluntary disclosures are a special case of game theory with the following central premise: any entity contemplating making a disclosure will disclose information that is favourable to the entity, and will not disclose information unfavourable to the entity". With these aspects in mind, companies need to consider how they might enhance the credibility of their voluntary IC disclosures, in turn also enhancing reliability.

#### Competitive aspects

Another factor that may be thought to hamper IC disclosure is concern about loss of competitive advantage, also called proprietary costs. Gelb and Siegel (2000) argued that companies with higher levels of R&D and advertising expenditures are less likely to provide extensive disclosures because of competitive considerations. This concern was reinforced by Elliott and Jacobson's (1994) analysis of costs, benefits, and incentives for disclosures and non-disclosures.

#### Out of context

The fact that voluntary disclosures may have to "stand alone" could be problematic. It has been argued that pieces of information by themselves may not convey much informative improvement (cf. Bukh, 2003; Holland, 2004). Another weakness would be that each "receiver" of the information would have his/her own prior understanding and the company disclosing the information would have greater difficulty "controlling the message" than would be the case with a reporting vehicle (Nielsen and Madsen, 2009).

It is emphasised that context is important and that merely providing a bulk of voluntary information, such as the types, e.g., put forward by the Jenkins Report (AICPA, 1994), does not necessarily constitute a useful solution for creating transparency. The structure provided by a reporting framework could potentially help explain the why's and how's of the information provided in relation to the company's value creation and profit generation processes. For example, Lev (2001) argued for the disclosure of a comprehensive set of interrelated measures relating to the value chain or business model of the company and, most importantly, that such measures should be empirically linked through value drivers.

#### Complexity imposes problems of understanding

In relation to the above, the aspect of complexity also problematises voluntary disclosures. According to Fincham and Roslender (2003, p. 76), a dilemma rests in the cognitive limitations of users of company information, implying that it is not sufficient simply to supply more and more information, as this would entail an information overload even to sophisticated users (Plumlee 2003). Therefore, overcoming this hurdle becomes a matter of disclosing just the relevant information in a clear and understandable fashion but, as we saw above, with sufficient context for it to make sense to the user.

#### 2.3 Reporting trends and the integration movement

"The future of reporting will be ..." continues to be a popular refrain that, of late, has been aired frequently in calls for extended and more comprehensive corporate communication and reporting (Eccles and Mavrinac, 1995; IIRC, 2013). Since the formulation of the ground-breaking corporate report concept in 1975 (ASSC, 1975), the Jenkins Report (AICPA, 1994) and subsequently intellectual capital statements have advanced this movement (Mouritsen *et al.*, 2003; Meritum, 2001; Edvinsson and Bounfour, 2004), as well as encouraged the advent of a series of sustainability guidelines (Heemskerk *et al.*, 2003; GRI, 2003; Oliveira *et al.*, 2010). Finally, in the most recent developments, we have witnessed the IR movement (Eccles and Kruz, 2010; IIRC, 2013). Simultaneous to the developments in extended reporting frameworks, additional methodologies for identifying performance measures are visible within the IC literature (e.g., Edvinsson and Malone, 1997; Roos *et al.*, 1997; Brooking, 1996; Sveiby, 1997a, b), along with management accounting frameworks such as the Balanced Scorecard (Kaplan and Norton, 1992, 1996), strategy maps (Kaplan & Norton, 2000; 2004), and value creation maps (Marr *et al.*, 2004).

Although these models were mainly concerned with measuring the non-financial aspects of performance, such as IC, according to Mouritsen (2004) they also represented starting points for actions to manage these resources in a strategic manner (Bukh and Johanson, 2003; Mouritsen and Larsen, 2005). Hence, these models and frameworks were built around the purpose of

managing value creation resources, thus having a management (accounting) perspective (Gowthorpe, 2009). Nevertheless, the capability of improving companies external reporting (Andriessen, 2004) is viewed as a concurrent effect that would improve the information environment around companies in general (Nielsen and Roslender, 2015).

However, research has also identified some drawbacks to extra-financial reporting, i.e., of the disclosure of IC information in a broader perspective (e.g., Van der Meer-Kooistra and Zijlstra, 2001; Holland and Johanson, 2003). Besides problems of comparing and assuring such information, the most frequently aired concern here is the loss of competitive advantage caused by the potential disclosure of sensitive company information. Hence, in terms of both extra-financial reporting and extra-financial disclosures, there might be some issues concerning IC information when, for instance, compared to traditional financial reporting. Companies' reluctance to disclose detailed information about what makes them special might be among the underlying reasons that IC reporting has not yet become perceived as truly value relevant. In turn, if companies do not really disclose what really matters, their reports suffer a lack of informative relevance to market actors.

Last, and very importantly, integrated reporting (henceforth IR) (IIRC, 2013) is an important contemporary movement related to corporate reporting and disclosure. This is made very clear by the IIRC in stating that IR's primary function is to enable businesses to communicate to investors the increasingly wide range of capital that companies depend upon for creating value. In particular, the IR framework is aimed at enabling companies to provide a broader narrative of the range of capital that companies mobilise other than those encouraged by conventional financial reporting. A key driver behind the development of integrated reporting (IR) was the perception that conventional reporting did not adequately explain how businesses mobilise this broader set of "capital" in creating financial value (Eccles and Kruz, 2010; 2014; Adams and Simnet, 2011). As such, looking to the DGP may provide valuable insights for further improving and sustaining the IR reporting vehicle.

## 3. Research design

The research undertaken here adopts a case study approach (Eisenhardt, 1989; Eisenhardt and Graebner, 2007) to shed light on the relationship and possible tensions between reporting and disclosure of IC information. The case study approach is specifically applicable to exploring new ground, here in the form of challenging existing propositions of the relevance of IC reporting.

#### Sample

The current paper benefits from a recent study on the fate of the ICS, as the principal output of the Danish Guideline Project (DGP) (Nielsen *et al.*, 2016a, b; Schaper, 2016). The study entailed an initial, very demanding, desk-research phase during which data concerning the 102<sup>1</sup> companies involved in the DGP project were gathered. The research conducted on this sample included the identification of the status of the companies and the tracing of the employees involved in the DGP

<sup>&</sup>lt;sup>1</sup> The total sample comprised 100 companies of both the DATI (DATI, 1999; 2000) and the DMSTI (Mouritsen *et al.*, 2003a) projects, as well as two coordination and consulting organisations.

during from 1997-2002. The passage of time meant that the identification of relevant<sup>2</sup> interviewees 10-12 years after their involvement proved challenging because of organisational restructuring and job changes. In total, the study reported in Nielsen *et al.* (2016a, b) located and interviewed 64 respondents.

#### Data management

From this initial work, respondents capable of informing the empirical basis of the current paper were identified. This selection comprised 16 companies that all participated in the DGP from 1999 to 2003, and 21 semi-structured interviews were conducted. Besides the interview data gathered, the case study protocol was further enriched by numerous emails with the participating companies in the DGP as well as other forms of secondary data, such as internal company reports and published intellectual capital statements.

<Insert Table 1 around here>

#### Table 1: Overview of respondents

Table 1 illustrates that the sample contains a wide variety of companies, including different sectors, sizes, and ownership structures<sup>3</sup>. The 16 companies represent a variety of sectors and both public and private companies, and this subsample is very similar to the total sample of 102 organisations. The overweight of large companies in our sample here can be partly attributed to the fact that the respondents here were generally more observant towards reporting topics because of the various regulations they had to comply with. In addition, differences in relation to ownership type and structure would play a major role in companies' perceptions of their key stakeholders and thus also in the aim of their communication strategies.

#### Data analysis

A semi-structured interview approach was chosen for the individual interviews. The interviews were captured with recording equipment. Table 1 indicates the means of data collection used in relation to each company and respondent. While all 16 companies took part in a telephone interview, respondents in five companies were interviewed face to face. The telephone interviews were the first to take place, and in each case, we asked whether a face-to-face interview was possible. Five companies chose to provide this additional access.

The semi-structured interviews were conducted with an interview guide and addressed a number of issues. These included i) the reasoning behind joining the DGP, ii) application of the ICS framework within the companies, iii) the organisation of the work in the project teams until the practice was abandoned, iv) the purpose of doing IC reporting, i.e., internal vs. external purposes, v) examples of differences between IC disclosures and IC reporting, and vi) perceptions of the integration of all reporting vehicles versus the non-integration of reports. Following the

<sup>&</sup>lt;sup>2</sup> In this regard, criteria were actual, direct involvement in the guideline project and covering as many years of involvement as possible.

<sup>&</sup>lt;sup>3</sup> This characteristic is mainly attributable to the original composition chosen for the DGP project (see DATI, 1999; 2000; Mouritsen *et al.*, 2003a).

suggestions of Eisenhardt (1989), subsequent to each interview, a quick summary was written of the pivotal impressions and logged into an Excel spreadsheet.

The content of all the interviews (lasting from about 20 minutes for the telephone interviews to up to 90 minutes for the face-to-face interviews) were transcribed in their entirety. The data were analysed in accordance with the distinction between reporting and disclosure. This process was similar to the template approach (see Miles and Huberman, 1994; Silverman, 2001), in which major themes are distilled via the categorisation of interview data and data have been sifted through using a thematic coding technique to identify themes related or relevant to the goal of the analysis. Arguably potential limitations, such as the difficulty of clearly recalling the course of events during the project some 10-12 years ago, is of lesser importance in the current article because of its focus on a more overall perception of IC reporting and disclosure rather than the description of detailed events.

## 4. Principal findings

In the theoretical section, a number of themes relating to the intersection between IC reporting and IC disclosure were identified. In line with the objective of the present paper, the empirical discussion below focuses on the three themes:

- 1. Differences between disclosures and reporting as seen from the companies
- 2. The predominant understandings of IC reporting
- 3. Reporting trends, including aspects of integrating reporting versus the non-integration of reporting

#### 4.1 Disclosure versus reporting

Through our empirical probing, we uncovered a number of considerations concerning IC disclosures versus IC reporting. For instance, one respondent from Company B commented that

"[...] we have moved more and more, let's say the information about the company itself to [our website] as well as other ways of communicating".

The resulting potential coordination problem deriving from the use of several channels to disseminate their disclosures was addressed by means of centrally indicating where to find all different forms of information directly in their annual report. This strategy led to two benefits:

- 1. It avoided overloading the actual annual report with too much information;
- 2. By referencing other disclosures in the "official" annual report, this could help legitimise them.

In relation to the first point, it can be argued that disclosures instead of reports have the intrinsic potential of reducing information overload. Indeed, disclosures allow a much more selective and targeted dissemination of information, right at the time of relevance. Just like yesterday's newspaper, this information might not be relevant after a certain period. Therefore, there would be no need to include all such information in a periodic report or statement. Further, engaging in a

dialogue would enable companies to adjust disclosures to their receivers' needs via a feedback mechanism. This mechanism is absent in reporting practices, where reports are produced to be "consumed" the way they are (one-way communication).

However, one reason for associating IC disclosure or referencing them in a more traditional type of IC report is legitimisation. Regarding this point, the legitimisation and validation of disclosures issued via innovative channels might somehow be connected to the concerns behind attempts at assuring IC reports, with the purpose of improving their reliability, as observed in Nielsen *et al.* (2016). One case company, a large utility company (D), attempted to handle the IC report similarly to the traditional financial report by having it assured. For this purpose, they integrated parts of it into the actual annual report. However, as stated by the respondent, this produced "clear negative effects", as it limited the potential of these reports. Similarly, also Company C had their IC report assured for a while but abandoned the practice.

Secrecy, for fear of losing competitive advantage, was a mechanism found to be working against the voluntary disclosure of IC information:

"[...] we came to the conclusion that, unless we are not "forced" by regulation, then we will not disclose too much information of this kind".

As the statement above from Company P illustrates, there was a general tendency for the companies to prefer to keep IC-related information secret. In some of our case companies, there were similar concerns in relation to the internal visibility of weaknesses. Hence, both reporting and disclosure in cases like this would probably lead to "zero output". Arguably, though forced by regulation, these companies most likely would prefer not to disclose value-relevant information.

#### 4.1.1 Orientation of the reporting

Besides the critique of the ICS framework for being too rigid, we also found evidence that respondents considered IC reporting backward-looking (e.g., Company G). The respondent from Company B argued that the annual report, because of its historic perspective, was unable to provide enough information to all stakeholder groups. In response, they had begun to provide more and more information via their corporate website. Searching for a dialogue and by using different forms of disclosure for different target groups, they tried to create a more targeted and stakeholder-oriented form of communication. Hence, this company represents a very particular case, pursuing targeted disclosures on the one hand and then consolidating them in the periodic annual report.

Another respondent, from Company H, described his concerns about the ICS framework in relation to its backward-looking nature:

"[...] I remember at the time we were evaluating it [...] there was a flow of thinking that it easily became 'backward looking': what have we done, how many courses have they taken... there was this danger in the layout that it is backward looking. [...] I was thinking that what we really needed was not an account of what we had done

but a way of showing of what we wanted to do and how the world was changing so that we could craft it and take relevant action in that connection.

The annual periodic issuance of the ICS was found to be problematic also by Respondent 2 from the Corporate Communication Department of Company C:

"By moving to a quarterly follow-up on the internal website, where we were able to monitor as we went along, so instead of being just once a year, it could have become, and I know it has not, but it could have become a more strategic tool rather than just an annual report".

This statement emphasises the call for a more dynamic form of disclosure. The respondent further explains:

"[...] after a few years, we decided that, on the Intranet, the internal website, we made the goals dynamic, so that instead of just annual reporting, we set up a system where managers updated their numbers every three months [...]".

Nevertheless, some of our case companies (Companies E and J) saw in the ICS the possibility of disclosing additional information to their customers and investors, something that could make them stand out from the crowd. In the latter case, these companies tended to use their ICS as a parallel disclosure tool: "I think it was used as a tool to communicate the story about the people in the company to our customers". This was confirmed by a large public organisation, Company I. The CTO exclaimed that "we see in ICS the opportunity to tell, to show something more, something they couldn't show with the financial reports". The criticised backward-looking nature might be an indication that reporting has an accountability function. Alternatively, merely the problem that arises when IC is attempted is constructed as a periodic phenomenon.

#### 4.1.2 Perceptions about the value relevance of IC reporting and disclosures

A number of respondents questioned the intrinsic nature of the ICS as a value-relevant reporting practice. Connected to the discussion in section 4.1.1 concerning the backward-looking nature of reporting, the respondent from Company B linked the intrinsic nature of their IC reporting to its value relevance for analysts and investors:

"We have seen over the years that the annual report is, first of all, let's say, a background; it's a profile document of the company, but more and more it actually has a fairly short lifetime, in the sense that, from the day the annual report or the quarterly statement comes out, two to three days later, it is mainly used by, for instance, your work to understand the company, what have we reported over the years. But from the main purpose of an annual report and a quarterly statement, the analysts and the stock market, the value after two to three days is limited".

Further, Respondent 1 from Company C emphasised that there was a clear correlation of the attention to a particular reporting form and the existence of a particular community of practice behind it. Further, he added an interesting reflection, which also applied to their later CSR report:

"[...] but at the end of the day, we were actually a little bit sceptical about who actually read the report; who did we write it for? [...] So, in the end, we just said: 'Okay, let's close it down; nobody actually reads it'".

Describing this even more clearly, he stated:

"[...] the next learning-point was 'Does it make any sense to do these kind of reports? Does it add any value to the company?' Oh, we doubt that as well".

This consideration might lead to the assumption that, in general, there is supposed to be a "selective perception" of reporting and disclosures. New forms of reporting might turn out to be more or less self-consumed within the community they stem from, hence being indirectly targeted towards it, while more or less being widely ignored by other stakeholder groups.

Indeed, another respondent from the communication department of Company F believed that

"[...] investors, outside in the market, they don't care, they don't value the IC data, they value our bottom line, and only that. So if you can prove that the investors care about this data, you have your story".

Further along in the interview, he added:

"[...] it should be as reliable as the economic report; I think that's the most important thing. If you have to be considered serious about this, you have to be transparent and accountable; otherwise it doesn't matter, really".

The lack of interest the respondent from Company F was talking about might in part be caused by the low reliability and transparency of the ICS. This in turn would arguably not have been different when considering that the assurance attempts mentioned earlier did not produce any real interest in these reports. In addition, the Chief of Administration of Company L, another case company in the utility sector, explained that they did not use the ICS actively but more as a reporting initiative without any real value added, something they did not seem to mind.

These examples are in line with Dumay's (2016) considerations of the lacking price sensitivity of IC disclosures and his critique that IC and non-financial reporting in general augments companies' wealth creation, i.e., market values, or reduction of the cost of capital in funding processes, as well as with Dumay's (2012) critique of the line of thinking that IC disclosure would lead to greater profitability. Thus, based on the insights above, it might be assumed that reporting initiatives are not considered the way disclosures are, i.e., in some instances not even read since they most likely do not contain any "interesting" or "relevant" information. Rather, they are activities that companies perform for the sake regulatory or social compliance.

### 4.2 What were the predominant understanding(s) of IC reporting?

First, we searched for evidence concerning the respondents' own understandings of what reporting IC meant and why reporting IC was important. The respondent from Company D, a government-owned utility company, argued that IC reporting was a natural perspective to take on their company:

"I think we took part in the project because we had to report on IC anyway; it's not a big issue. As a publically listed company, we have to write our annual report anyway, in a similar way to our CSR".

Another respondent, from Company E, a small advertising company, explained that they believed IC reporting would be of real interest for investors:

"As an Internet-based company, to find measures to assist in explaining that we are good at doing, maintaining (skilled staff), etc., is interesting for investors. [...] you should keep it simple, as a learning process (step by step)".

It was also noted that the regulative requirements for large companies to produce several different forms of reporting, i.e., IC reporting, CSR reporting, environmental reporting, etc., somehow drove them towards integrated forms of reporting (see also section 4.3 Integrating versus not integrating reporting vehiclesbelow). In general, our respondents took a rather critical stance towards IC reporting, indicating that it was more "nice to have" than "needed to have". For instance, Company B, a large industrial manufacturer, commented:

"[...] it is not so that we have felt that it is necessary to have an IC report as a specific focus area with separate reporting, etc.".

Probably also driven by these critiques, a series of experimentations with the defined intellectual capital statement (ICS) framework developed in the Danish guideline (Mouritsen *et al.*, 2003a) took place among the interviewed companies.

#### 4.2.1 Experimentation with the ICS reporting framework

It seemed to be the norm in the DGP to experiment with the form and structure of the ICS. Regarding reasons for this, Respondent 1 from Company C commented that standardised forms of reporting might be of less use for all types of companies and that the proposed ICS structure therefore was at risk of becoming too rigid:

"[...] we kind of agreed that this model didn't make any sense to us. It was okay, but it was not in the way we wanted to do it. We wanted it to be more about [Company C] and there were some topics you had to write about which didn't fit us [...] we just wanted our own structure because this was more meaningful to us actually".

Most of the participating companies made slight alterations to the ICS framework. Among the case companies that produced IC reports for a long time, the tailoring of content to stakeholder groups

and the identification of the most appropriate communication channels were regarded as important.

Company C – a large IT company – had tried out almost every other form of external reporting initiative, including "homemade" integrated reporting. For instance, they had decided to change reporting channels since their audience for the traditional financial report was found to be disinterested in their IC reports. Although driven by the strategic goal of improving the company's image, in the end, they turned back to traditional reporting, preserving only a few IC-related KPIs in this vehicle. On the topic of altering the guideline structure, the respondent from Company K, an engineering and construction company, provided the following insights on their experiences:

"We developed our own guidelines and followed that practice. We established our own structure; we didn't follow the national guidelines. In fact, we published our ICS before the guidelines were revealed. Of course, we looked at it and took out some elements, but we thought our own structure was better".

Our empirical probing indicates a natural inclination towards adapting the ICS guideline as a more flexible form of disclosure, tailoring it to the particular needs of the company instead of applying it as a rigid and periodic reporting framework. Other cases illustrated that companies took inspiration from the ICS and applied it to related contexts. For instance, at Company O – a medium-sized ministerial institution – though they issued only one IC report during the DGP project, they kept working on quantifying their human resources through KPIs. This resulted in the creation of a concept for public workplace "organisational KPIs" (15 KPIs that make up a report on their website). Thus, IC reporting was actually not abandoned but was the starting point for developing a report for a wider audience, although it was limited to the narrower HR-related perspective. The high degree of adaptation to the guidelines inevitably means that comparability between companies will become more difficult. Herein, perhaps, lies a potential explanation for the abandonment of support for these voluntary statements from, for example, the accounting profession and perhaps even from policy-makers.

#### 4.2.2 Searching for an appropriate reporting channel

The use of online communication channels such as websites, newsletters, discussion forums, and social networks for communicating with stakeholders has exploded over the last decade. For this reason, Dumay (2014) questioned the validity of the traditional annual report as the central communication vehicle for IC information. Several respondents in the current study used their website for publishing their ICS or their combined IC/CSR report as well as more general information about the company. Still, in relation to CSR reporting, an example of the combination of several channels is provided by Respondent 1 from Company C:

"[...] we produced a separate report for IC for one or two years, but then, you know, discovering that nobody read it we just put the two pages in the annual report and then we concentrated on our CSR activities being communicated on the Internet via our corporate website, having videos and stuff like that. So, it's just shifting. Why make something if nobody reads it?"

Hence, this company adjusted their IC reports to meet requirements from their audience. Based on a two-page compliance, they made use of a combination of the several communication channels they had at their disposal to target communication more efficiently. In other cases, as explained by the respondent of Company N, the potential use of the Internet was not as appealing as it seemed to be for other companies:

"Other companies could put their IC report on the Internet, other online channels, etc., ... but when you are a public school like us, the customers don't look at the website to see how this organisation works with knowledge management; that's why there was no target group for it [...]"

In relation to the use of the annual report as a communication vehicle, Company F included the ICS in the annual report because this was the cheapest solution for them. Additionally, they wanted to augment the ICS's perception by integrating it into the annual report. However, later, it was integrated with other platforms, such as in corporate magazines and investor relations material. The respondent, a previous employee in the communications department, argued that the ICS idea was good, but apparently, investors did not really care about this additional information. The latter point was also addressed by Dumay (2012; 2016) in opposition to Bismuth and Tojo's (2008) wealth-creation theory of IC reporting as a mechanism for lowering the cost of capital for companies.

Instead of the predominant understanding of IC reporting, our empirical investigation suggests that the companies in general perceive IC reporting as something that has to have some sort of (strategic) benefit. The management assistant of Company M explained:

"I think that we don't make money from printing annual reports, and I guess we just try to do this as cheaply and efficiently as possible".

Hence, it can be argued that, in the case of imposed forms of reporting, the aforementioned benefit might already be represented by the most (cost) efficient production and issuance of these reports. This in turn might result in the phenomenon of combining several reports, i.e., integrating them into the annual report (as further discussed in section 4.3 Integrating versus not integrating reporting vehicles).

#### 4.3 Integrating versus not integrating reporting vehicles

A recent study by Nielsen *et al.* (2016b) neither confirmed nor affirmed whether the IC report should be a separate report or be integrated with other forms of voluntary reporting in the annual report. Indeed, the opinions in this regard, including in the present sample, were more or less equally split. However, based on the few companies continuing to do IC reporting, a clear trend of integrating the ICS within the annual report was found by Nielsen *et al.* (2016a). A respondent from case Company A, a company that had continued to produce a standalone IC report for almost 10 years, explained:

[...] the Danish government has decided that the 1,000 largest companies in the country have to produce a CSR report. So we have to do this [CSR], and I thought we

are not going to produce both an ICS report and a CSR report. Thus, we have to rethink the whole concept of how to report and how to use it for our board of directors [...]"

Nevertheless, after almost ten years of issuing separate IC statements, this company also started integrating IC into their CSR report. Simultaneously, they also aimed at engaging in a dialogue with customers through different channels (e.g., their website, social media, etc.). Hence, this company made consistent use of new technological and innovative communication channels to reach their stakeholders, but mainly on topics that were not directly linked to IC.

On the one hand, an integration with the annual report was perceived as legitimising the IC information; on the other, it was regarded as lowering its potential to provide a more appealing narrative than that of the annual report. While some companies chose to integrate the ICS into the annual report to foster legitimisation, Company A's decision to continue issuing a separate IC report for many years was driven by the goal of increasing interest in it. The respondent defined the annual report as a "boring" communication vehicle that key aspects such as IC or CSR could easily disappear within. Further, they tried to make the report understandable to a mainstream audience while also making use of their website to communicate the company's corporate values. The fact that the companies were forced to produce new types of reporting meant that they were more inclined to start integrating their reports. Based on this, it might become natural to ask whether the trend of integrating reporting is (also) a matter of efficiency and thereby actually indirectly policy driven.

Hence, might it be worth looking at integrated reporting as a reaction to regulation or a reaction to different subsets of regulation? As explained by one respondent, a similar trend can be observed at Company K: "In the beginning, the IC report was separate, and then we integrated it (into the annual report)". This changed both the structure of the report and the communication channel.

Probably the most detailed explanation of the integration phenomenon is found in Company B, a large manufacturing company, which pursued both integration on the one hand versus targeted reporting on the other hand. This strategy was based on the assumption that separate reports tended to mislead the stakeholder, while an integration into the annual report in a way associated it with the "core business brand", which can be seen as a legitimisation mechanism. Further, this respondent viewed an integrated form of reporting as somehow natural because things become more integrated in business as well:

"I guess that has been a result that we have not seen a specific purpose of the ICS as standing alone; we have seen it being more appropriate to integrate relevant parts in our annual reports and on our communication on our website like we have also moved into a more integrated reporting form like also our sustainability report [...] so I think we have moved to more and more integration of reporting versus previously we had more stand-alone reporting on specific subjects".

He added a consideration that fits quite will with the notion of IC disclosure:

"But then, on the other hand, the trend I see also clearly goes towards more and more targeted communication and not only communication but also dialog".

Hence, although it was stated in general terms, this company provides a clear example of an orientation towards engaging in a dialog with key stakeholders.

In the case of Company D, these IC reporting practices were initiated in a format integrated with the annual report, but they experienced negative side effects of having to assure the information it contained. Accordingly, they started taking parts of the annual report out and incorporating them into a stand-alone CSR report. In a similar fashion, according to Respondent 2 from Company C, this company wanted to give the ICS a similar status to that of the annual report:

"[...] the top management decided to have it not in two separate publications but in one common publication. [...] it was definitely a signal from the top management to say that we want to take this work seriously and we want to use it, just as we use the annual report".

Hence, besides integration, the issue of the assurance of IC reports emerges in interesting and contrasting forms. On one hand, the process of assurance has been perceived as a mechanism for enhancing reliability, while on the other hand, it limits their potential to include different pieces of qualitative information. Therefore, besides the reaction to an overload of policy-driven reporting demands, the desire of assuring non-financial information might also be one of the reasons for the movement towards integrated reporting practices. Indeed, integrating new and not yet legitimised reporting forms into traditional, established, and assured reports could help in boosting their credibility.

While reports may be assured, disclosures cannot be. Disclosures are instead regulated by laws of value relevance rather than laws of auditing and accounting. This takes its clearest form in the case of listed companies that are obligated to disclose all value-relevant and price-sensitive information, but it is equally relevant to SMEs and other unlisted companies. Concerning the legitimisation of IC reports, a very interesting perspective arose in the interview with Company F:

"We discussed: do we integrate it or do we not, and we voted for integration because, from my side, as Head of Communication, I think it was a very good way to present the data, also because it was my excuse to bring people into the IC report. I used the IC report to bring people in and to create some testimonials and interviews. To do so, for communications, it was a good thing".

As in this case, emergent and especially "soft metrics" reporting practices might struggle internally to be accepted and embedded (see also Nielsen *et al.*, 2016. for further considerations). Therefore, the integration of these new forms of reporting, like ICS in this case, might also foster legitimisation within the organisation itself, helping the new practice to establish itself and to become embedded. Hence, integration might be used to enhance legitimisation for external

stakeholders, as in the case of Company C, which wanted to send a clear signal to both external and internal stakeholders.

The current study confirms that companies are moving more and more towards integrating ICS or IC information with other reporting forms. However, there also seems to be evidence of another trend of separating disclosures again to engage in more targeted forms of reporting. In this regard, a certain trade-off appears. Using different forms of disclosures might create "too much information", which in turn means that the information might lose its value or at least be perceived as being of lower importance. This reflection supports some avenues of disclosure theory, especially those arguing that even professional users have limited information processing capabilities (Botosan, 1997).

Based on these observations, it might be speculated whether a fruitful avenue on this account would be to separate the information into individual disclosures and then subsequently use the reporting vehicle to summarise the period and provide an overview linking to the next period. This was the practice conducted by Company B. Finally, in relation to the use of innovative communication channels, we find evidence for creating reports and disclosures that are easy to understand and making these available on corporate website as a means of reaching as broad an audience as possible. This was practiced actively by companies A, B, and E.

## 5. Concluding remarks and future perspectives

In accordance with the structure of the theoretical underpinnings in section 2 and the principal findings in section 4, these concluding remarks follow the same organising structure before the contemplation of future perspectives commences this article.

#### 5.1 Differences between disclosures and reporting

First, considering the differences between disclosures and reporting as seen by the companies, many of the participating companies in the DGP complained that the ICS guideline was too rigid for their needs. The idea of creating a common structure was, according to Mouritsen *et al.* (2003a), to allow comparability between the IC reports of different companies (p. 67). We found evidence that companies' experimentation with their IC reporting structure and IC disclosure was in part driven by the goal of creating more relevant reporting. This indicates that the shift from IC reporting to IC disclosure in fact began some 15 years ago, despite only headlining the IC research agenda recently. This study indicates that, while IC reporting was related to periodically informing, i.e., being compliant with regulation, IC disclosure was concerned with (pro)actively and promptly communicating to reveal information, perhaps to a targeted audience.

Focusing on disclosure rather than reporting would arguably result in more relevant, higher-quality information that, through the several existing communication channels, could further be directly targeted to an audience. Additionally, this would reduce the information overload that analysts and investors regularly claim to be facing. The larger companies in our sample in particular argued that the audiences from the financial market need to be at least partly interested in IC for it to make sense to provide more information about it externally. This evolution also raises questions about whether disclosing IC leads to greater profitability, one of

the grand theories of IC identified by Dumay (2012). Indeed, the fact that IC reports are widely ignored somehow disproves the theory that IC information could reduce companies' cost of capital. But is this the same for IC disclosures? Could focusing on IC disclosures in this manner eventually represent a new beginning or a natural evolution for IC?

The current study provides evidence that IC disclosure is and should be a communication activity, meaning that, to be efficient, the disclosing companies need to understand their target audience(s). Instead of periodic one-way reporting, companies need to listen to their audiences' feedback on a more regular basis. In addition, disclosing IC rather than reporting it has the potential to overcome the problems of the backward-looking, non-value-relevant perspective of reporting. While IC reporting is periodic, which means scheduled according to the financial calendar, IC disclosure is both more content oriented and data driven, meaning that it will be communicated only if there is relevant data to be published. Hence, moving away from IC reporting and towards IC disclosure is expected to reduce the pressures of collecting data "merely for filling out" a predefined report at a given scheduled time. Indeed, continuous and two-way communication would allow much more value-oriented disclosure practices.

In relation to the latter, the current study did not provide evidence of companies being able to establish two-way dialogues or provide much evidence of the companies using Internet-based communication, i.e., websites, social media, etc., in relation to IC disclosures. One explanation might be a slow progression towards these communication channels and towards greater customer engagement. However, another potential explanation could be the companies' considerations of whether IC disclosures are relevant in such a context at all. Issues relating to the legitimisation of the disclosures made through online communication channels are similar to issues of assuring IC reports. A lack of legitimisation might pose a barrier for the recognition of such IC information by existing communities of practice. Based on these findings, two simultaneously evolving trends of corporate reporting and communication seem to arise: i) more integrated forms of reporting and ii) a more targeted and tailored trend of communication (disclosure).

This study identifies that, in addition to the synonymous use of the terms "reporting" and "disclosure", many companies also use the term "communication" quite frequently, though usually to identify a unidirectional information practice. If the companies were to take up more sender-receiver oriented communication, this would represent a value-added development to IC disclosure. As observed in Dumay (2012, 2016), it might be concluded that the reporting of IC information is not as price sensitive, value relevant, or wealth creating as might optimistically and naively have been envisaged by the IC-propaganda of the 1990s. While compliance and legitimisation motivates managers to pursue reporting activities (Deegan, 2002), research and policy-making are asked to create triggers to augment their motivation towards value added disclosures. Therefore, as suggested by Edvinsson (2013), "[we] need to go beyond IC reporting, to think in terms of cross-disciplinary systematised perspectives that will increase the IC consciousness" (p. 169).

#### 5.2 Predominant understandings of IC reporting

In relation to the predominant understandings of IC reporting, the ICS was clearly from its inception perceived as a reporting exercise rather than a disclosure exercise. This is not surprising, considering that IC reporting was largely informed by and promoted from an accounting perspective. The aim of the DGP was to produce a framework with similar qualities to that of the traditional annual report (see Mouritsen *et al.*, 2003b). This aspect is further confirmed by the empirical examples illustrating assurance and the integration of IC reporting into already assured reports to enhance its credibility. While the ICS had the explicit ambition to enable continuous knowledge management activities inside the companies (Mouritsen *et al.*, 2003a), its representation to the outside world was not planned to be equally continuous and incremental, for example by disclosing certain pieces of information at the time of relevance. Rather, the ICS was conceived as being disclosed on a periodic basis in the form of a report.

We found indications that the companies in our sample reported on IC mainly to be compliant or to legitimise themselves (see Deegan, 2002). It appears that the companies neither perceived value in constructing their IC reports nor conveyed any value (relevant) information through these reports.

It emerged that, in a context characterised by increasing reporting obligations, the companies often integrated their IC reports with several other forms of reporting to create reporting efficiencies and cost savings. Therefore, it might be considered that the trend of integrating reports is at least in part a reaction to an existing reporting overload. Hence, trying to convince regulators and authorities to impose some form of integrated reporting framework or other forms of extra-financial reporting mandatorily as suggested in Dumay (2016) will arguably not achieve the desired effect of producing value-relevant information. Instead, this will lead to fuzzy messages, value-irrelevant, and price insensitive reports that no one will read because they are not really targeted at any specific audience. Perhaps the major risk towards Integrated Reporting is that it might well also be captured by accountants.

#### 5.3 Reporting trends and integrated reporting

Last, the considerations of the current paper provide a series of valuable insights for academic researchers and policy-makers regarding future trends in extra-financial and integrated reporting. First, when considered from a disclosure perspective, IC and extra-financial information has the ability to become a strategic component by being targeted, i.e., deciding what, when, to whom, and how it is to be disclosed. The latter might prove a profitable practice, in turn creating the motivation for continuing the practice, i.e., creating incentives for companies to engage in communication activities based on the disclosure of information that really matters right at the time that it matters. In line with Zéghal and Maaloul's (2011) conclusions, disclosure should be understood as a supplementary activity and in being an integration to the financial statements.

The study indicates that the coexistence of timely, relevant disclosure activities, e.g., via the emerging new communication channels, as well as periodic and institutionalised reporting activities, would constitute a more comprehensive solution. In turn, we partially share Dumay's (2016) conclusion, which we questioned in an empirical context in the current study. Disclosures

provide value-relevant information, while reporting as a natural supplement accomplishes compliance and accountability (Zéghal and Maaloul, 2011).

Several opportunities for future research emerge from the current study. First, the use of communication channels for IC disclosures to establish direct communication with stakeholders and the relationship with IC reporting is an interesting direction for future research. A particularly valuable activity would be to conduct longitudinal studies, e.g., surveying companies' IC disclosure and IC reporting practices over time. This would enable the study of the implications of policies in the field of extra-financial reporting and of regulation in general. Nevertheless, Dumay's (2014) call to "[go] back to the methodological drawing board" (p. 1261) needs to be kept in mind when designing future research projects. Eventually, even the general impression that IC reporting today is a deceased phenomenon might be due to inadequate ways of observing and studying it in practice. Hence, some re-thinking and re-design are needed when IC researchers claim to investigate current forms of IC disclosure.

#### References

Adams, S. and Simnet, R. (2011), "Integrated reporting: an opportunity for Australia's not-for-profit sector", *Australian Accounting Review*, Vol. 21 No. 3, pp. 292-301.

AICPA. (1994), Improving Business Reporting – A Customer Focus: Meeting the Information Needs of Investors and Creditors; and Comprehensive Report of the Special Committee on Financial Reporting, American Institute of Certified Public Accountants, New York, NY.

Alcaniz, L., Gomez-Bezares, F. and Roslender, R. (2011), "Theoretical perspectives on intellectual capital: a backward look and a proposal for going forward", *Accounting Forum*, Vol. 35 No. 2, pp. 104-117.

Andriessen, D. (2004), IC valuation and measurement: classifying the state of the art. *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 230-242.

ASSC. (1975), *The Corporate Report: A Discussion Paper Published for Comment*. Accounting Standards Steering Committee of the Institute of Chartered Accountants in England and Wales.

Bismuth, A. and Tojo, Y. (2008), "Creating value from intellectual assets", *Journal of Intellectual Capital*, Vol. 9 No. 2, pp. 228-245.

Botosan, C.A. 1997. Disclosure Level and the Cost of Equity Capital, *The Accounting Review*, Vol. 72, No. 3, pp. 323-349.

Brennan, N. and Connell, B. (2000), Intellectual capital: current issues and policy implications. *Journal of Intellectual Capital*, Vol. 1 No. 3, pp. 206-240.

Brooking, A. (1996), "Intellectual capital: core assets for the third millennium enterprise, Thomson Business Press, London, UK.

Bukh, P.N. (2003), "The relevance of intellectual capital disclosure: a paradox?" *Accounting, Auditing and Accountability Journal*, Vol. 16 No. 1, pp. 49-56.

Bukh, P. N. and Johanson, U. (2003), "Research and knowledge interaction: guidelines for intellectual capital reporting", *Journal of Intellectual Capital*, Vol. 4 No. 4, pp. 576-587.

Cañibano, L., Garcia-Ayuso, M. and Sanchez, P. (2000), "Accounting for intangibles: a literature review, *Journal of Accounting Literature*, Vol. 19, pp. 102-130.

DATI (1999), Developing Intellectual Capital Accounts: Experiences from 19 Companies, Danish Agency for Trade and Industry, Copenhagen

DATI (2000), A Guideline for Intellectual Capital Statements—A Key to Knowledge Management, Danish Agency for Trade and Industry, Copenhagen.

Deegan, C. (2002), "Introduction: the legitimising effect of social and environmental disclosures – a theoretical foundation", *Accounting, Auditing & Accountability Journal*, Vol. 15 No. 3, pp. 282-311.

Dumay, J. and Tull, J.A. (2007), "Intellectual capital disclosure and price-sensitive Australian Stock Exchange announcements", *Journal of Intellectual Capital*, Vol. 8 No. 2, pp. 236-255.

Dumay, J. (2012), "Grand theories as barriers to using IC concepts", *Journal of Intellectual Capital*, Vol. 13 No. 1, pp. 4-15.

Dumay, J. (2014), "Reflections on interdisciplinary accounting research: the state of the art of intellectual capital", *Accounting, Auditing & Accountability Journal*, Vol. 27 No. 8, pp. 1257-1264.

Dumay J., (2016),"A critical reflection on the future of intellectual capital: from reporting to disclosure", *Journal of Intellectual Capital*, Vol. 17 No. 1, pp. 168-184.

Dumay, J. and Garanina, T. (2013), "Intellectual capital research: a critical examination of the third stage", *Journal of Intellectual Capital*, Vol. 14 No. 1, pp. 10-25.

Dye, R.A. (2001), "An evaluation of 'essays on disclosure' and the disclosure literature in accounting", *Journal of Accounting and Economics*, Vol. 32 No. 1, pp. 181-235.

Eccles, R.G. and Kruz, M.P. (2010), One Report: Integrated Reporting for a Sustainable Society, John Wiley & Sons, Hoboken, NJ.

Eccles, R.G. and Kruz, M.P. (2014), *The Integrated Reporting Movement: Meaning, Momentum, Motives, and Materiality*. New York: Wiley & Sons.

Eccles, R.G. and Mavrinac, S.C. (1995), "Improving the corporate disclosure process", *Sloan Management Review*, Vol. 36, No. 4, pp. 11-25.

Edvinsson, L. (2013), "IC 21: reflections from 21 years of IC practice and theory", *Journal of Intellectual Capital*, Vol. 14 No. 1, pp. 163-172.

Edvinsson, L. and Bounfour, A. (2004), "Assessing national and regional value creation", *Measuring Business Excellence*, Vol. 8, No. 1, pp. 55-61.

Edvinsson, L. and Malone, M.S. (1997), *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*, HarperBusiness, New York, NY.

Eisenhardt, K. (1989), "Building theories from case study research", *Academy of Management Journal*, Vol. 14 No. 4, pp. 532-550.

Eisenhardt, K.M. and Graebner M.E. (2007), "Theory building from cases: opportunities and challenges, *Academy of Management Journal*, Vol. 50 No. 1, pp. 25-32.

Elliott, R.K. and Jacobson, P.D. (1994), "Costs and benefits of business information disclosure", *Accounting Horizons*, Vol. 8 No. 4, pp. 80.

Fincham, R. and Roslender, R. (2003), *The Management of Intellectual Capital and Its Implications for Business Reporting*, Institute of Chartered Accountants of Scotland, Edinburgh, Scotland.

Gelb, D.S. (2002), "Intangible assets and firms' disclosures: an empirical investigation", *Journal of Business Finance & Accounting*, Vol. 29 No. 3-4, pp. 457-476.

Gelb, D.S. and Siegel, P. (2000), "Intangible assets and corporate signaling", *Review of Quantitative Finance and Accounting*, Vol. 15 No. 4, pp. 307-323.

Gibbins, M., A. Richardson & J. Waterhouse. 1990. The Management of Corporate Financial Disclosure: Opportunism, Ritualism, Policies and Processes, *Journal of Accounting Research*, Vol. 28, No. 1, pp. 121-143.

Gowthorpe, C. (2009), "Wider still and wider? A critical discussion of intellectual capital recognition, measurement and control in a boundary theoretical context", *Critical Perspectives on Accounting*, Vol. 20 No. 7, pp. 823-834.

GRI. (2011), Sustainability Reporting Guidelines, Global Reporting Initiative, Amsterdam, The Netherlands.

Guthrie, J., Ricceri, F., and Dumay, J. (2012), "Reflections and projections: a decade of intellectual capital accounting research", *British Accounting Review*, Vol. 44 No. 2, pp. 68-92.

Heemskerk, B., Pistorio, P. and Scicluna, M. (WBCSD). (2003), *Sustainable Development Reporting: Striking the Balance*, World Business Counsel for Sustainable Development.

Holland, J. (2004), *Corporate Intangibles, Value Relevance and Disclosure Content*, Institute of Chartered Accountants of Scotland, Edinburgh.

Holland, J. and 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.

IIRC. (2013), *Business Model: Background Paper for Integrated Reporting*, International Integrated Reporting Society.

Johanson, U. (2003), "Why are capital market actors ambivalent to information about certain indicators on intellectual capital?" *Accounting, Auditing & Accountability Journal*, Vol. 16 No. 1, pp. 31-38.

Kaplan, R.S. and Norton, D.P. (1992), "The Balanced Scorecard – measures that drive performance", *Harvard Business Review*, Vol. 70 No. 1, pp. 71-9.

Kaplan, R.S. and Norton, D.P. (1996), *The Balanced Scorecard: Translating Strategy into Action*, Harvard Business School Press, Boston, MA.

Kaplan, R.S. and Norton, D.P. (2000), "Having trouble with your strategy? Then map it", Harvard Business Review, Vol. 78 September/October, pp. 167-176.

Kaplan, R.S. and Norton, D.P. (2004), Strategy Maps: Converting Intangible Assets into Tangible Outcomes, Harvard Business School Press, Boston, MA.

Lang, M.H. and Lundholm, R.J. (2000), "Voluntary disclosure and equity offerings: reducing information asymmetry or hyping the stock?" *Contemporary Accounting Research*, Vol. 17 No. 4, pp. 623-662.

Leftwich, R.W., Watts, R.L., and Zimmerman, J.L. (1981), "Voluntary corporate disclosure: the case of interim reporting", *Journal of Accounting Research*, pp. 50-77.

Lev, B. (2001), *Intangibles: Measurement, Management and Reporting*, Brookings Institution Press, Washington, DC.

Marr, B., Schiuma, G., and Neely, A. (2004), "The dynamics of value creation: mapping your intellectual performance drivers", *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 312-325.

Meritum. (2001), *Measuring Intangibles to Understand and Improve Innovation Management*, Target Socio-Economic Research, European Commission, Brussels.

Miles, M.B. and Huberman, A.M. (1994), Qualitative Data Analysis: An Expanded Sourcebook, Sage.

Mouritsen, J. (2004), "Measuring and intervening: how do we theorise intellectual capital management?" *Journal of Intellectual Capital*, Vol. 5 No. 2, pp. 257-267.

Mouritsen, J. and Larsen, H.T. (2005), "The 2nd wave of knowledge management: the management control of knowledge resources through intellectual capital information", Management Accounting Research, Vol. 16 No. 3, pp. 371-394.

Mouritsen, J., Larsen, H.T., and Bukh, P.N.D. (2001b), "Intellectual capital and the 'capable firm': narrating, visualising and numbering for managing knowledge", *Accounting, Organizations and Society*, Vol. 26 No. 7-8, pp. 735-62.

Mouritsen, J., Bukh, P.N., Flagstad, K., Thorbjørnsen, S., Johansen, M.R., Kotnis, S., et al. (2003a), *Intellectual Capital Statements—The New Guideline*, Danish Ministry for Science, Technology and Innovation, Copenhagen.

Mouritsen, J., Bukh, P.N., Johansen, M.R., Larsen, H.T., Nielsen, C., Haisler, J., et al. (2003b), *Analysing Intellectual Capital Statements*, Danish Ministry for Science, Technology and Innovation, Copenhagen.

Nielsen, C. and Madsen, M.T. (2009), "Discourses of transparency in the intellectual capital reporting debate: moving from generic reporting models to management defined information", *Critical Perspectives on Accounting*, Vol. 20 No. 7, pp. 847-854.

Nielsen, C., Roslender, R., and Schaper, S. (2016a), "Continuities in the use of the intellectual capital statement approach: elements of an institutional theory analysis", *Accounting Forum*, Vol. 40 No. 1, pp. 16-28.

Nielsen, C., Roslender, R., and Schaper, S. (2016b), "Explaining the demise of the intellectual capital statement in Denmark", *Accounting, Auditing & Accountability Journal* (forthcoming).

Nielsen, C., Rimmel, G., and Yosano, T. (2015), "Outperforming markets: IC and the long-term performance of Japanese IPOs", *Accounting Forum*, Vol. 39 No. 2, pp. 83-96.

Oliveira, L., Rodrigues, L., and Craig, R. (2010), "Intellectual capital reporting in sustainability reports. *Journal of Intellectual Capital*, Vol. 11 No. 4, pp. 575-594.

Petty, R. and Guthrie, J. (2000), "Intellectual capital literature review: measurement, reporting and management", *Journal of Intellectual Capital*, Vol. 1 No. 2, pp. 155-176.

Plumlee, M.A. (2003), "The effect of information complexity on analysts' use of that information", *The Accounting Review*, Vol. 78 No. 1, pp. 275-296.

Porter, M.E. and Kramer, M.R. (2011), "The big idea: creating shared value", *Harvard Business Review*, Vol. 89 No. 1, p. 2.

Roos, J., Roos, G., Dragonetti, N.C., and Edvinsson, L. (1997), *Intellectual Capital: Navigating in the New Business Landscape*, Macmillan, London. UK.

Schaper S. (2016), "Contemplating the usefulness of intellectual capital reporting: reasons behind the demise of IC disclosures in Denmark", *Journal of Intellectual Capital*, Vol. 17 No. 1, pp. 52-82.

Seetharaman, A., Helmi Bin Zaini Sooria, H., and Saravanan, A.S. (2002), "Intellectual capital accounting and reporting in the knowledge economy", *Journal of Intellectual Capital*, Vol. 3 No. 2, pp. 128-148.

Silverman, D. (2001), *Interpreting Qualitative Data: Methods for Analysing Talk, Text and Interaction*, Sage, London, UK.

Stewart, T.A. (1997), *Intellectual Capital: The New Wealth of Organisations*, Doubleday-Currency, London, UK.

Sveiby, K.E. (1997a), "The intangible assets monitor", *Journal of Human Resource Costing & Accounting*, Vol. 2 No. 1, pp. 73-97.

Sveiby, K.E. (1997b), *The New Organizational Wealth: Managing and Measuring Knowledge-based Assets*, Barrett-Kohler, San Francisco, CA.

Van der Meer-Kooistra, J. and Zijlstra, S.M. (2001), "Reporting on intellectual capital", Accounting, Auditing and Accountability Journal, Vol. 14 No. 4, pp. 456-476.

Wyatt, A. (2008), "What financial and non-financial information on intangibles is value-relevant? A review of the evidence", *Accounting and Business Research*, Vol. 38 No. 3, pp. 217-256.

Zéghal, D. and Maaloul, A. (2011), "The accounting treatment of intangibles – a critical review of the literature", *Accounting Forum*, Vol. 35 No. 4, pp. 262-274.



| 1           |                                 |
|-------------|---------------------------------|
| '           |                                 |
| 2           |                                 |
| 3           |                                 |
| 1           |                                 |
| _           |                                 |
| 4<br>5<br>6 |                                 |
| 6           |                                 |
| 7           |                                 |
| ٠<br>د      |                                 |
| 0           |                                 |
| 9           |                                 |
| 1           | 0                               |
| 1           | 12345                           |
| !           | 1                               |
| 1           | 2                               |
| 1           | 2                               |
| 1           | 4                               |
| ,           | _                               |
| ı           | Э                               |
| 1           | 6                               |
| 1           | 7                               |
| 1           | Ω                               |
| 1           | 0                               |
| 1           | 9                               |
| 2           | 0                               |
| 2           | 6<br>7<br>8<br>9<br>0<br>1<br>2 |
| _           | 1                               |
| 2           | 2                               |
| 2           | 2<br>3<br>4<br>5<br>6           |
| 2           | 4                               |
| _           | _                               |
| 2           | 5                               |
| 2           | 6                               |
| 2           | 6<br>7                          |
| _           | 0                               |
| _           | Ø                               |
| 2           | 8<br>9                          |
| 3           | 0                               |
| 2           | 4                               |
| 0           | 1                               |
|             | 2                               |
| 3           | 3                               |
| 3           | 4                               |
| 2           | _                               |
| 3           | 5                               |
| 3           | 6                               |
| 3           | 7                               |
| 3           | 6<br>7<br>8                     |
|             |                                 |
|             | 9                               |
| 4           | 0                               |
| 4           |                                 |
|             |                                 |
| 4           |                                 |
| 4           | 3                               |
| 4           |                                 |
|             |                                 |
| 4           | S                               |
| 4           | 6                               |
| 4           | 7                               |
| 4           | ρ                               |
| 7           | ~                               |
| 4           |                                 |
| 5           |                                 |
| 5           |                                 |
| 5           | 2                               |
|             |                                 |
| 5           |                                 |
| 5           | 4                               |
|             | 5                               |
|             |                                 |
| 5           |                                 |
| 5           | 7                               |
| 5           | 8                               |
| _           | 9                               |
|             |                                 |
| C           | Λ                               |

| Page 27 of 28                        | #  | Company   | Data collection Journal   | Interviewee of Intellectua                                   | Period<br>I Capital                  | Size   | Sector  | Owner-<br>ship                                 |
|--------------------------------------|----|---|---|--|--------------------------------------|--------|---|--|
| 1 2                                  | 1  | A – Utility<br>company  | Telephone interview<br>& Face to face<br>interview                | Communicati<br>ons- and<br>development<br>Consultant         | 2007 →                               | Medium | 55 - Utilities  | Public   |
| 3<br>4<br>5<br>6<br>7                | 2  | B – Industrial<br>Manufacture<br>r                                    | Telephone interview<br>& Face to face<br>interview                | Senior Vice<br>President,<br>Sustainability                  | 1999 →                               | Large  | 2010 -<br>Capital<br>Goods                            | Private/<br>since<br>2005<br>publicly<br>owned |
| 8<br>9<br>10<br>11<br>12<br>13<br>14 | 3  | C – Public<br>sector IT<br>provider                                   | Telephone interview & Face to face interview  Telephone interview | 1- Project leader of annual reporting 2- Corporate           | 2000 →                               | Large  | 2020 -<br>Commercial<br>&<br>Professional<br>Services | Public/<br>since<br>2008<br>privately<br>owned |
| 16<br>17<br>18<br>19                 | 4  | D – Utility company   | Two telephone interviews  | Communicati<br>on Dep.<br>Head of<br>Finance                 | 1998 →                               | Large  | 55 - Utilities  | Public   |
| 20<br>21<br>22                       | 5  | E –<br>Advertiseme<br>nt  | Telephone interview   | Sales<br>Director  | 1998 – 2009                          | Small  | 4510-<br>Software &<br>Services                       | Private  |
| 23<br>24<br>25                       | 6  | F –<br>Consulting<br>Engineers  | Telephone interview<br>& Face to face<br>interview                | Communicati<br>on<br>Department                              | 2000 -2010                           | Large  | 2010 -<br>Capital<br>Goods                            | Private  |
| 26<br>27<br>28<br>29<br>30           | 7  | G –<br>Managemen<br>t Consulting                                      | Telephone interview   | Senior<br>Consultant,<br>advisor,<br>auditor and<br>assessor | 1994 →                               | Small  | 2020 -<br>Commercial<br>&<br>Professional<br>Services | Private  |
| 31<br>32<br>33                       | 8  | H – Higher<br>education<br>Institution                                | Telephone interview   | Unknown position   | → 2009                               | Medium | Other -<br>Tertiary<br>education                      | Public   |
| 34<br>35<br>36                       | 9  | I –<br>Ministerial<br>Institution                                     | Telephone interview   | Chief<br>Technical<br>Officer - CTO                          | 1998 →                               | Large  | Other -<br>Ministerial<br>and others                  | Public   |
| 37<br>38<br>39                       | 10 | J – IT<br>consultants   | Telephone interview   | Director   | 1997 – 2003                          | Large  | 4510-<br>Software &<br>Services                       | Private  |
| 40<br>41<br>42<br>43<br>44           | 11 | K –<br>Engineering<br>and<br>construction<br>company                  | Telephone interview   | Group<br>Executive<br>Director                               | 1995 - 2003                          | Large  | 2010 -<br>Capital<br>Goods                            | Private  |
| 45<br>46<br>47<br>48<br>49<br>50     | 12 | L –<br>Administrati<br>on<br>organisation<br>of an utility<br>company | Telephone interview<br>& Face to face<br>interview                | Chief of<br>Administrati<br>on                               | 2010 →<br>(successor of<br>original) | Medium | 2020 -<br>Commercial<br>&<br>Professional<br>Services | Public   |
| 51<br>52<br>53                       | 13 | M –<br>Software   | Telephone interview   | Managemen<br>t Assistant                                     | 2000 →                               | Large  | 4510-<br>Software &<br>Services                       | Private  |
| 54<br>55<br>56                       | 14 | N - Higher<br>education<br>institution                                | Telephone interview   | Developmen<br>t consultant                                   | 2000 – 2008                          | Large  | Other -<br>Tertiary<br>education                      | Public   |

| 15 | O -<br>Ministerial<br>Institution    | Telephone interview | HR<br>consultant      | Employed<br>when<br>interviewed | Medium | Other -<br>Ministerial<br>and others   | Public  |
|----|--------------------------------------|---------------------|-----------------------|---------------------------------|--------|--|---------|
| 16 | P – Medical<br>Equipment<br>Retailer | Telephone interview | Assistant<br>Director | Employed<br>when<br>interviewed | Large  | Health Care<br>Equipment &<br>Services | Private |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |
|    |                                      |                     |                       |                                 |        |  |         |