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Intellectual Capital Reporting:

Can a strategy perspective solve accounting problems?

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Abstract:
During the last decade many calls for improving disclosure practices in relation to intellectual capital and intangibles have been uttered in the standard-setting, academic and business communities. There seem to be two types of solutions to this problem. One angle of attack is to seek to improve transparency through implementation of global accounting standards and moving from historic value to fair-value practices. Another way of dealing with the problem is to step outside the accounting paradigm to see if transparency and relevance problems can be solved by way of supplementary disclosures. For some this is a logical step. However, for many this represents shaky ground. It is ironic that while supplementary information has been shown to reduce investors' uncertainty, it is not being acknowledged as a key element in solving the existing problems by standard-setters and academics. This chapter is a wake up call to the drowsy constituents of academia and policy-making, asking them to see beyond their normative accounting paradigm and

in turn showing them how far the strategy-oriented solutions they choose to ignore have come. In this chapter we thus illustrate for the reader how reporting and management of companies' knowledge resources and intellectual capital is possible through the strategic ideas of the Danish guideline for IC statements.

Key words: Intellectual capital, reporting, guidelines, standard-setting, strategy

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INTRODUCTION

There has been a lot of discussion in recent years of whether or not both accounting standards and firms' reporting of their assets of intellectual capital to the business environment are sufficient. This discussion is often coupled with the emergence of the knowledge society and the so-called 'new economy' where intellectual capital, rather than physical capital, has become the pivotal factor underlying value creation. These changes, associated with the developments in the business environment such as globalisation and faster innovation rates, have also altered the demands for organizational communication, because traditional financial reporting seemingly is unable to meet the information requirements of users. Hence, it is argued that the prerequisites for transparency have changed.

As such, this chapter promotes a link between the ongoing developments in global business and the necessity of managing intellectual capital – a link which can be attained through the strategic focus of the Danish guideline for intellectual capital reporting. Hence, the notion put forth here is that "accounting" for intellectual capital is a strategic management issue rather than an accounting-based measurement issue.

It is widely accepted that intellectual capital, strategy and other drivers of value creation constitute strategically important elements for the future profitability and survival of companies. Many firms already disclose much supplementary information in their management commentary regarding strategy, market competition, technological developments and products in the pipeline. Also, in the Nordic countries and more recently in a number of other European countries, companies have been experimenting with disclosing such voluntary and forward-looking disclosures through intellectual capital statements.

The problem - as well as the prospect - with strategy, is that it is about being different. Hence, the bundle of indicators on strategy, intellectual capital etc. that will be relevant to disclose will differ among firms. For such information to make any sense at all it should be inserted in the particular firms' strategic context thereby determining their relevance in relation to the company's value creation process. In other words, it does not make sense to insert such information into a standardized accounting regime.

Therefore, further elaborations will need to move on from the accounting agenda, and at the least recognize that these differing perspectives exist. It can be argued that the accounting agenda initially spurred the interest in supplementary business reporting (cf.

AICPA 1994), but that the debate in recent years has moved on and is now more preoccupied with visualizing strategy and the business model rather than measuring for example companies' intangible assets in monetary terms. There have been a number of attempts at constructing business reporting models inherently concerned with strategy and about showing future-oriented perspectives on the company which accounting cannot.

Business reporting is the generic term used to identify the type of reporting that the accountancy profession has come to recognise as, if not a direct successor to its highly successful corporate reporting approach, then at least a complement. Because of this, like corporate reporting business reporting is, at base, a further manifestation of financial reporting, the practice upon which a major part of the reputation of the accountancy profession is based. Assuming that the accountancy profession, one well known for its collective conservatism, is unlikely to willingly reconstitute itself in a radically different guise, it is reasonable to expect that a business reporting approach is unlikely to depart significantly from the predecessor corporate reporting approach.

A key motivation for rethinking the latter approach to financial reporting was the recognition that the principal users (Jenkins' "customers") of such reports, investors and analysts, were no longer sufficiently well informed about the performance of businesses. As a result of this situation, the actions of investors and analysts might prove detrimental to the future performance of business, perhaps resulting a measure of self-fulfilling prophecy. For example, investors might decide to sell doubtful stock, encouraged by the assessments of their analysts, which in turn might influence other investors to follow suit. As a consequence of this chain of events, businesses might find their commercial credibility called into question, resulting in precisely the underperformance supposedly portended in the initial financial information. Alternatively, given the increasingly close links between the cost of investment funds and the assessment of on-going financial performance, any shortcomings in reports of the latter might cost a business dearly in the medium to long term. In order to circumvent these problems, "customers" were to be better served by a revitalised reporting approach.

Compounding this situation was the realisation that in many instances business performance was critically dependent on the success with which a novel category of resources was managed. Intellectual capital (or intangibles) was increasingly recognised as the foundation for long term value creation in many businesses. As such it demanded to be accounted for by the accountancy profession, i.e. taken into account in some way. Like intangible assets before them, the many constituents of intellectual capital posed major problems for the profession. As assets that promised long term value creation, the preferred solution is the determination of their financial value, enabling them to be included alongside the other bases of value creation. Leaving aside the not inconsiderable difficulty of identifying the totality of any business's stock of intellectual capital, the obstacle was a lack of objective valuations. All too many examples of intellectual capital defied such valuation, and so their place within the principal financial statements that formed the corporate report was at best contestable.

A possible solution promised by a business reporting approach to financial reporting was to make more extensive use of statements that were characteristically narrative in format rather than numerical. Such information promised to both supplement and complement the conventional representations that had long served the accountancy profession and those whose patronage they relied upon. The opportunity to extend the account provided in a business report was seen as a means of addressing some of the issues that worried users. This was particularly the case in respect of intellectual capital, for two interconnected reasons. First, talking about intellectual capital seemed a more appropriate way to proceed, especially where the narrative incorporated quantitative, albeit non-financial, metrics. Second, such narratives also provide a means of conveying information about the future prospects of the business, i.e. the long term value creation capacity associated with the various constituents of its intellectual capital.

Figure 1 below illustrates the argumentation of this paper chapter. The time-line indicates that it is time to issue a wake up call to the drowsy constituents of academia and policy-making, asking them to see beyond their normative accounting paradigm and in turn showing them how far the strategy-oriented solutions they choose to ignore have come. Thus we show how reporting and management of companies' knowledge resources and intellectual capital is possible through the strategic ideas of the Danish guideline for IC statements.

1990's	Late 1990's	2001-2002	Today
Rising mismatch between market values and book values	Accounting solutions were sought after, but no ground was broken. Some academics still reside here	Academia proposes strategy-based solutions but standard-setters do not listen	We illustrate how the Danish guideline helps companies to manage their intellectual capital

Figure 1: Illustration of the chapter's argumentation

The remainder of this chapter is structured as follows: We start off by identifying core evidence in relation to the value-relevance problem of the existing accounting regime. This leads to a review of the activities and lines of reasoning applied by the proponents who stand steadfast in the accounting paradigm. We discuss the prevailing ideas and use these as a point of departure from which we leap to a strategy perspective. We juxtapose the accounting and strategy perspectives in turn illustrating how the recent developments of the strategy oriented solutions refute the concerns stemming from the accounting paradigm.

THE LIMITED SPHERE OF ACCOUNTING SOLUTIONS

The empirical research on disclosure of IC tends to be divided into two branches. The first branch focuses mostly on the value relevance of specific IC indicators, e.g. research and development expenses (Lev & Sougiannis, 1996), possibly even with the purpose of showing how intangibles could be capitalized (e.g. Gu & Lev 2001), while the second branch of research focuses on the interconnectedness of the specific parts of IC, with the purpose of showing how integrated reports on IC could be designed and used both for disclosure purposes (e.g. Collier 2001; Mouritsen *et al*. 2001c) and for management control purposes (Mouritsen & Larsen 2005).

From the 'traditional' accounting perspective the first branch of literature often focuses on how various categories of intangible assets often classified as traditional intangibles, e.g. goodwill, brand names or patents, and deferred charges, e.g. advertising, research and development or training costs (cf. Hendriksen and van Breda 1992) relates to financial performance and decision making based on this. Cañibano *et al*. (2000) review a number of studies where the value relevance of other elements of IC, e.g. research and development expenses, advertising, patents, brands, customer satisfaction and human resources, are studied

The value of a firm can be referred to its physical and monetary assets as well as its intangible assets, which can be in the form of patents, customer relations, organizational structure and knowledge resources. There have been a number of attempts that seek to value intellectual capital from a stock perspective, most notable is Lev's "return on knowledge capital" (2001) and the VAIC approach (cf. Nazari & Herremans 2007). These "stock oriented" approaches, concerned with calculating the dollar value of intangibles, however, are still in their infancy and at the present their methodologies are weak and inconsistent.

In recent years, companies have become aware of the importance of managing their external communications more systematically due to the growing importance of investor relations activities. Various studies of investors and analysts' request for information indicate a substantial difference between the type of information found in companies' annual reports and the type of information demanded by the market (cf. Eccles & Mavrinac 1995, Beattie & Pratt 2002).

The perceived stability of intangibles and strategy statements, e.g. due to their historical performance, may affect the way they are included or excluded in the market for information participants' valuation process. Sakakibara et al. (2005) seem to suggest that the capital market is suspicious towards the cash flow generating abilities of intangibles, and thus they pay more attention to the types of intangibles that are more closely related to value creation or have a historically proven ability to generate cash flows. A good example of such a proxy is the attention which is paid to the track-record of top management.

Gelb (2002) argues that providing supplementary disclosures is especially important for firms with significant levels of intangible assets. This can be done through supplementary business reporting, like e.g. an intellectual capital statement. There are previous attempts at reviewing and comparing approaches to business reporting. A recent report from ICAEW's (ICAEW 2004) project of improving the existing model of corporate reporting sums up most of the problems we are facing. It is concerned with reviewing the present status and literature of the business reporting debate. However, the present report seems to fail in going beyond the "intangibles measurement debate" of the late 1990's; a debate which primarily took an accounting perspective to the intangible debate (cf. Aboody & Lev 2002), rather than a strategy perspective (cf. Bontis et al. 1999).

In general, companies, investors and analysts are becoming more aware of the importance of factors not included in the financial statement, although traditional financial information is still considered to be of greatest importance. Users request more reliable information on e.g. managerial qualities, expertise, experience and integrity, customer relations and personnel competencies – all factors related to intellectual capital – since these factors are considered important for the company's ability to generate value.

According to Bontis et al. (1999), intellectual capital is the collection of intangible resources and their flows. Hence, the point made here, is that merely depicting the company's stock of intellectual capital in a cost-based asset fashion is insufficient. Regardless of the construction of global standards and the introduction of fair-value valuation practices, historical accounting measures are still not going to be able to convey a fair enough view of the economic potential of intellectual capital. Because intellectual capital is a strategic resource, accounting for it in financial terms is difficult. Perhaps for this reason, most recent contributions turn to a more narrative orientation (cf. Fincham & Roslender 2003) when it comes to accounting for intellectual capital, something which is not particularly regarded by the traditional accounting institutions like e.g. the London-based Institute of Chartered Accountants in England and Wales (ICAEW 2004).

HELP FROM THE IASB?

Previous reviews of developments within the intellectual capital reporting agenda seem to paint a rather rosy picture. A more realistic assessment can be gleaned from looking at what might reasonably be regarded as the leading edge of practitioner thinking at this time, the Management Commentary discussion paper issued in October 2005 by the International Accounting Standards Board (IASB). It draws on over a decade of narrative reporting, including the US Management Discussion and Analysis requirement, the UK Operating and Financial Review experience, the German Business Report and similar initiatives in the European Union, Australia, Canada and New Zealand, as well as the position adopted by the International Organization for Securities Commissions. The definition proposed by the IASB is that:

> Management commentary is information that accompanies financial statements as part of an entity's financial reporting. It explains the main trends and factors underlying the development, performance and position of the entity's business during the period covered by the financial statements. It also explains the main trends and factors that are likely to affect the entity's future development, performance and position. (IASB, 2005, para19).

The primacy of financial reporting is clearly evident here, with Management Commentary being commended as serving to enhance the traditional financial statements. The IASB's proposal is that while the inclusion of such a commentary is mandatory, its content is to be determined by those who manage the business entity, in ways that they deem to be relevant to their own situation. Quite how practitioners will respond to this freedom to choose what to comment on will be interesting, since it markedly contrasts with the very prescriptive manner in which they are called upon to construct their financial statements. A sceptic might conclude that despite all the talk of Management Commentary providing complementary and supplementary information in the discussion paper, for many practitioners the real accounting information will continue to be found in the financial statements.

What makes the Management Commentary project particularly important, however, is that it emphasises the significance that now needs to be accorded to "future developments" in any financial (business) report. In principle, such information is incommensurate with the historical information that has characterised the generality of financial reporting for generations. Future information is more the province of management reporting (accounting), traditionally the poor relation of financial reporting. Although the volume of prospective information has increased within financial statements in recent times, it has often been contained within those pages not subject to the same levels of attestation by the audit profession. Again, this may be taken to signify that such information is not to be regarded as having equal importance to that contained within those (financial) statements that are subject to the highest levels of attestation. Management Commentary, if embraced by the accountancy profession, may become subject to rigid scrutiny (IASB, 2005, para 194).

The term "future developments" is a potentially broad one, which can encompass many different things. It is clear from the IASB discussion paper that the strategies of any business are viewed as being of critical importance in the context of such developments and, therefore, likely to be the major feature of any Management Commentary. To those working in the strategy field, this belated acknowledgement of the importance of 'strategy' by the accountancy profession, and more particularly the dominant financial reporting constituency, will be welcome. As such it provides the basis for a long overdue dialogue. For despite its considerable success as a business function throughout the greatest part of the past century, there are very few signs that the accountancy profession has ever been much interested in strategic issues. Consequently, it seems reasonable to conclude that the profession will be able to accommodate such issues either readily or painlessly.

The IASB is not in the business of identifying problems in respect of encouraging a greater degree of narrative reporting in the guise of Management Commentary. Its role is to promote practical solutions through a process of debate among interested parties. It falls to accounting academics to identify and debate such problems, in this case the observation that accounting, in the specific guise of financial reporting, has traditionally exhibited few signs of being able to account for strategy. Financial reporting is not focused on strategic issues. It is principally about the provision of a detailed account of the historical performance of a business. While it is true that this information may be of value to senior management in their deliberations on the future direction (strategy) of the business, this entails bringing many more information sets to bear, something that is increasingly evident in the manner in which such reports are presently framed within the broader set of financial statements. The business report concept is underpinned by recognition that an enhanced approach to financial reporting is now needed, with the accountancy profession itself embracing the challenge of accounting in a more strategically relevant way.

There have been a number of initial attempts to develop business reporting, dating back to the Jenkins' Report in 1994 (AICPA 1994). Many of these approaches have not addressed the strategy issue directly, although they have drawn attention to the growing importance of a range factors that now need to be taken into account, and which merit the designation 'strategic'. A recent ICAEW report (ICAEW 2004) identified eleven examples of new (business) reporting models including the Balanced Scorecard, the Jenkins' Report, the Global Reporting Initiative and PwC's ValueReporting initiative (ICAEW, 2003). The ICAEW acknowledges that this set of developments is very much a work in progress, much the same as Management Commentary/narrative reporting developments that the IASB has focused on (IASB 2005). Both organisations would, with some justification, retort that it is still very early days in the process of developing what in truth is likely to be a very different approach to financial reporting.

Nevertheless, it is difficult to avoid the conclusion that to date the omens are not too promising. Neither the ICAEW nor the IASB makes any reference to the various frameworks that have recently emerged to report on intellectual capital. Several of these are potentially promising including the Intellectual Capital Statement and Intellectual Capital Report frameworks developed in the Danish MSTI (2003) and EU Meritum (2002) projects respectively, together with Sveiby's (1997) earlier Intangible Assets Monitor, Lev's (2001) Value Chain Scoreboard and the IC-index developed by Roos *et al.* (1997).

What is particularly interesting about the developments above is that they have in large part emerged as a response to the difficulties involved in using a valuation approach to report intellectual capital in financial statements, identified earlier as being a critical factor informing deliberations about the need to develop a business reporting approach to financial reporting. All these intellectual capital reporting approaches have the capacity to incorporate a considerable narrative content and consequently may provide some lessons for the IASB Management Commentary project, which only refers to intellectual capital in passing (para A40). It may be considered problematic that institutions by many regarded as leaders in global thinking are so narrow-sighted that they are not aware of the developments within intellectual capital and business reporting that have taken place elsewhere over the last decade.

FROM STOCKS OF ASSETS TO ILLUSTRATING STRATEGY AND FLOWS

The point of departure for many of the recent developments in IC reporting, especially the so-called narrative models is to illustrate the flows of value creation, by linking indicators to strategy and supporting an understanding of them by providing a context giving narrative. Mouritsen & Larsen (2005) label this a process of "entangling" the indicators, arguing that individual pieces of IC information and measurements by themselves can be difficult to relate to any conception of value creation. As such, this "flow" approach is concerned with identifying which knowledge resources drive value creation instead of assigning a specific dollar value to those resources (Bukh 2002).

Even though the precise definition of an intellectual capital report in the literature is connected with some ambiguousness, the statements that have been disclosed in Denmark over the past few years do have similarities, which can also be found in the literature. In relation to IC reports, intellectual capital is often thought of as intangible value drives systematized under the headings employees, organisation, and customers (e.g. Edvinsson & Malone 1997; Sveiby 1997; Roos et al. 1997). In practice intellectual capital statements contain a number of financial and non-financial information, i.e. staff turnovers and job satisfaction, in-service training, turnover split on customers, customer satisfaction, precision of supply etc. (cf. Bukh *et al*. 2001; Mouritsen *et al.* 2001a) as well as a substantial narrative part positioning the indicators within a strategic framework. See Guthrie (2001), Petty & Guthrie (2000) and Andriessen (2004) for an overview of the literature and approaches to measuring intellectual capital.

Most literature on intellectual capital suggests that it grasps the key value drivers of the company and that it is strategically important. But strategy, at least competitive strategy in Porter's sense "is about being different", which means "deliberately choosing a different set of activities to deliver a unique mix of value" (Porter 1996; see also Sandberg 2002). Thus, the bundle of IC indicators that would be relevant for disclosing intellectual capital are likely to differ among firms and likely to be difficult to interpret by analysts and investors unless they are inserted in the strategic context that determined their relevance. Hence, the main point in this commentary is that the intellectual capital report should, actually, communicate managements understanding of strategy and value creation, and not only indicators of general interest. This implicates that an intellectual capital report cannot be read only by comparing indicators between firms, because strategies and value creation models are likely to differ between firms and that disclosure of intellectual capital should be done in the framework of the firm's strategy for value creation, i.e. the value creation model should also be disclosed.

From a strategy theory point of view such a framework for disclosure is offered by the concept of a *business model*. Business models have been intimately connected with e-business (e.g. Kodama 1999; Sweet 2001), see Hedman & Kalling (2001) for a review. However, the concept as such has a much more general meaning in recent management literature, where Joan Magretta sees business models as "stories that explain how enterprises work" (Magretta 2002, p. 4). A business model not only shows how the firm makes money but also how –by answering the fundamental questions: "Who is the customer? And what does the customer value" (Magretta 2002, p. 4). Further, a basic idea of the business model concept is that it should spell out what the unique value proposition of the firm and how it should be implemented. For customers the value creation could be related to “solving a problem, improving performance, or reducing risk and cost” (Sandberg 2002, p. 4) which might require specific value configurations (cf. Sweet 2001) including relationships to suppliers, access to technologies, insight in the users needs etc.

Accounting for intellectual capital has been associated with the coming of a new economy or a knowledge society where knowledge and information “have become the economy’s primary raw material and its most important outcome” (Stewart 1997, p. x). Understanding what this implies at firm-level demands, as Sweet (2001, p. 71) states, a focus on the logic of how value is configured. New forms of value configurations and thus new business models are emerging. New knowledge-based business model that identifies knowledge resources are needed in order to show how knowledge based resources have become key elements in value creation and accordingly managers as well as analysts must recognize that business models are made up of asset portfolios but not traditional physical and financial assets alone since these asset portfolios include intangibles. Therefore, “Every company needs to create a business model that links combinations of assets to value creation” (Boulton *et al.* 1997, p.33).

The main point here is, that value creation based on knowledge resources, i.e. intellectual capital, are brought forward and that new value creation models are linked with an understanding of who the customers are, what they need and how value is created for the customers, i.e. the business model. When uniqueness and hence competitive advantage from a management point of view is to be found in the development and implementation of the business model it becomes natural to take this as a starting point for structuring the disclosure of the company’s intellectual capital.

When it comes to information on the business model, including the specific value creation processes, an integral reporting of intellectual capital is more likely to convey relevant information. The recent research interest for new value configurations (Ramirez 1999; Stabell & Fjeldstad 1998; Sweet 2001) reflects a change in the competitive landscape towards more variety in value creation models within industries where previously the “name of the industry served as shortcut for the prevailing business model’s approach to market structure” (Sandberg 2002, p.3), competition now increasingly stands between competing business concepts (Hamel 2000). If firms within the same industry operate on the basis of different business models, different competencies and knowledge resources are key parts of the value creation and mere benchmarking of intellectual capital indicators does not provide insight in the profit or growth potential of the firm. A comparison of the specific firm with its peer group requires interpretation within an understanding of differences in business models.

If firms only disclose intellectual capital indicators without disclosing the business model that explains the interconnectedness of the indicators and why the bundle of indicators is relevant for understanding firms strategy for value creation, this interpretation must be done by the analysts. Currently, there exists no research based insight into how this reading and interpretation is conducted and it is very likely that this understanding of firms' value creation would be facilitated if companies disclosed the information on intellectual capital as an integral part of strategy disclosure.

Despite the Jenkins' Report identifying that a significant element of any business report might be constituted by what is normally regarded as management (accounting) information, the general emphasis of extant business reporting approaches has not reflected this. The ICAEW report identifies the Balanced Scorecard as its first exemplar of a business reporting model, but refers to it as "one of the most important management ideas of the past 15 years" (p23) without ever acknowledging its origins in management accounting. The IASB discussion paper makes no reference to the Balanced Scorecard, presumably on the basis that it is most readily understood to offer a solution to the problems associated with developing a more inclusive approach to internal reporting rather than external reporting. Although the Balanced Scorecard is most commonly associated with the use of a combination of financial and non financial performance metrics, chosen to best represent the past, present and future performance of the business, a more narrative based format is by no means precluded. For this reason, some observers regard the Balanced Scorecard to be suitable for intellectual capital reporting purposes, as an alternative to the Skandia Navigator, the Intangible Assets Monitor and the Value Chain Scoreboard (Fincham and Roslender, 2003).

The merits of the Balanced Scorecard as a potential business reporting framework are further strengthened when one recalls that for the past decade its principal advocates, Kaplan and Norton, have identified it as being more than simply a performance measurement and reporting system. In their view, the Balanced Scorecard forms the "foundation of an integrated and iterative strategic management system." (Kaplan and Norton, 1996:85). It is an enabling mechanism that allows management to translate strategy into action, and as such can be understood to constitute a 'strategic' management accounting development. In this way it is the sort of development that has allowed management accounting to make a higher level contribution to the management process, the level that Anthony (1965) designated strategic planning in contrast to management control and operational (or task) control. Consequently, the Balanced Scorecard would seem to promise the accountancy profession a credibility within the highest echelons of management that financial reporting, despite its centrality to the management (control) process, has not achieved. The observation that the Balanced Scorecard originated within the 'poor relation' internal reporting branch of accounting, which for much of the twentieth century was essentially subordinate to financial reporting (Johnson and Kaplan, 1987), only serves to reinforce our belief that while financial reporting might wish to retain its primacy in the guise of business reporting, for the latter to be truly successful business reporting requires to be based on fundamentally different foundations.

The Balanced Scorecard is not a panacea, however, and has been widely criticised in recent years. One criticism has been that in the second phase of thinking about the Balanced Scorecard, Kaplan and Norton are guilty of only crudely linking it with the strategy process (Roslender and Hart, 2002). With the emergence of the strategy map concept in their subsequent output, the potential for a more robust marriage between accounting and strategy is potentially on offer, although worries remain about the centrality that Kaplan and Norton accord the cause and effect relationship between the different levels (formerly the four perspectives of the Balanced Scorecard). In this regard, the business model concept might offer much needed assistance in clarifying the way of seeing that is a strategy map.

It is thus evident that illustrating stocks and flows is not something completely new. In the intellectual capital literature, and the much related fields concerning business models and performance measurements, i.e. Balanced Scorecard, we find notions of illustrating flows, albeit in slightly different ways. The next section describes the framework of an intellectual capital statement in terms of the Danish guideline, thereby illustrating an example of how it is possible to entangle individual indicators of intellectual capital into a narrative of strategic flows.

INTELLECTUAL CAPITAL STATEMENTS – ENTANGLEMENT OF INDICATORS

Some observers regard the balanced scorecard as offering a means of reporting management's success in growing their stocks of intellectual capital or intangibles. Kaplan and Norton have acknowledged this since their 1996 monograph, although to date they have not provided a detailed discussion of the connection. As a possible intellectual capital reporting framework, the balanced scorecard exhibits a number of similarities with the Skandia Navigator (Edvinsson & Malone 1997, Mouritsen et al 2001a), the Intangible Assets Monitor (Sveiby 1997) and the Value Chain Scoreboard (Lev, 2001). All seek to provide a set of relevant indicators of intellectual capital growth, using a combination of financial and non information organised in some form of scorecard (Fincham and Roslender, 2003; Starovich and Marr, 2004).

An intellectual capital statement is best understood as being the next step in developing a framework for intellectual capital reporting. The most widely discussed example of such a framework is the Intellectual Capital Statement developed in Denmark (DATI 1999, DMSTI 2003). The Meritum Report (2002) also provides a variation on the same model, not least as a result of extensive participation by a number of Danish researchers in that project (Bukh and Johanson, 2003). More recently a comparable set of principles for fabricating intellectual capital statements have been proposed in Australia (Boedker, 2005). The principal difference between the intellectual capital statement approach to intellectual capital reporting and the scorecard approach is that the former is based in narrative rather than numerical indicators. This said, advocates of the use of such statements commend the incorporation of a wide range of qualitative forms of reporting, and sometimes talk in terms of visualising intellectual capital rather reporting on it. Equally there is always a place for relevant indicators, confirming the view that as a twenty first century accounting development, an intellectual capital statement is is underpinned by a very extensive interpretation of what 'accounting' entails.

Following the Danish Ministry of Science, Technology and Innovation (2003), the purpose of an intellectual capital statement is to communicate the use value, knowledge resources and most important challenges for the management of a company to overcome in the process of value creation. The use value outlines, in a narrative form, the ambition of the company's knowledge management activities. In doing so, it not only accounts for present performance but also formulates a strategy for the company's know-how in the future. The structure of this model is presented in figure 2 below.

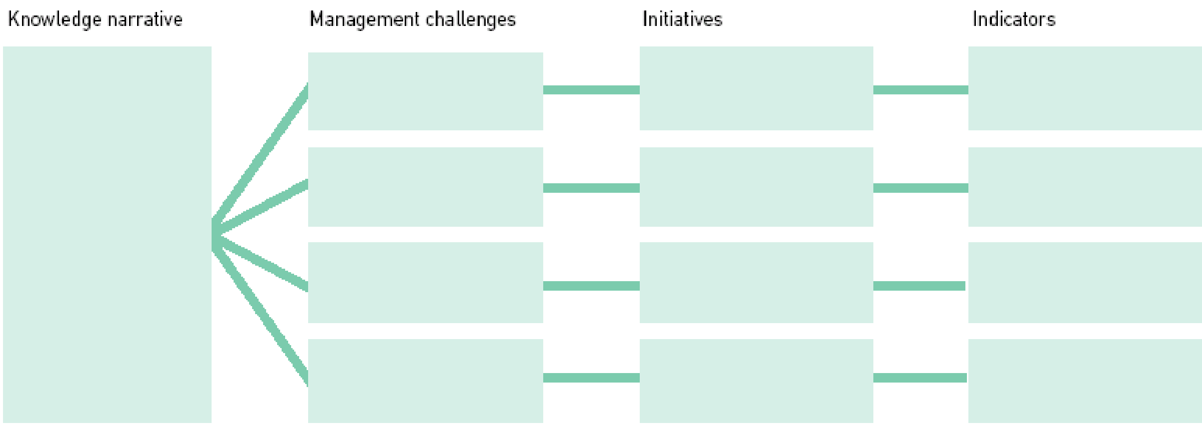

Figure 2: The Danish guideline for intellectual capital statements model (DMSTI, 2003: 13)

The founding knowledge narrative is a story about how the company seeks to create value for its customers through the utilisation of its knowledge resources. The knowledge narrative pinpoints the ambition of the company's knowledge management, because it not only accounts for present performance, but also formulates a strategy for the company's know-how in the future. The knowledge narrative fulfills this objective by describing three elements: how the customer is taken into account by the company's products or services, called the use value; which knowledge resources – in the form of employees, customers, processes and technologies – it must possess in order to deliver the described use value; and lastly the particular nature of the product or service in question. In order to formulate the knowledge narrative, companies need to provide answers to a number of key questions. Among these questions are: what product or service does the company provide; what makes a difference for the customer; what knowledge resources are necessary to be able to supply the product or service; and what is the relationship between value and knowledge resources?

The company's management challenges are necessarily informed by its knowledge narrative. Management challenges are a set of meaningful and lasting elements in the managerial agenda that provide continuity in handling the development and composition of knowledge resources. Thus, these management challenges relate to the needs for knowledge management which can be derived from the knowledge narrative and which the company must address in order to fulfill the ambition defined in it. This activity involves a number of strategic choices in implementing the knowledge narrative and is informed by the answers to a further set of questions, including: what are the challenges that the organisation is experiencing; which of the organisations' existing knowledge resources should be strengthened; and what new knowledge resources are required?

In combination, the knowledge narrative and management challenges have to take on the form of a coherent tale. In this way they constitute a coherent knowledge management strategy designed to explain how the company seeks to enact its on-going value creation activities. They therefore communicate the company's ambition for knowledge management and how the company intends to realise this. To develop and compose knowledge resources and the key management challenges, a series of initiatives are derived about "knowledge containers" such as employees, customers, processes or technologies. In addition to initiatives designed to increase or decrease the extent of the latter, management are also required to adopt positions on launching particular initiatives and in this context which initiatives should be prioritised.

The first three elements of an intellectual capital statements assume a narrative form, where necessary being embellished using appropriate qualitative modes of visualistion, e.g. illustrations. In the final element, the effects of the initiatives and management challenges described above are monitored using quantitative indicators, as in scorecard approaches. As ever, the precise choice of indicators is informed by the information needs believed to be most relevant to users. A number of key indicators have been identified, including staff turnover and job satisfaction, in-service training, turnover split on customers, customer satisfaction, precision of supply etc. (cf. Bukh et al. 2001; Mouritsen et al. 2001b), indicating the extent these have been implemented and thus the status for the company's realisation of its management challenges.

Like the earlier scorecard approaches to intellectual capital reporting, intellectual capital statements were initially devised for internal reporting purposes. The type of information that is disclosed in intellectual capital statements is only to a limited degree present in financial reports, which mainly focus on financial information reflecting the tangible value of the company, and they thus represent knowledge resources relatively poorly (Barth *et al.* 2001). In the case of the Danish initiative, the researchers, supported by the government, were keen to promote a measure of external reporting of such information. Throughout the research project the audit profession was represented and provided a range of insights on how to make such a reporting framework more credible for external reporting purposes. The principal outcome of the project was a detailed guideline for the development and use of intellectual capital statements, intended to assist those companies interested in such activities. To date, in excess of 150 Danish organisations have expressed some degree of interest in using intellectual capital statements, with a number of them, including Coloplast, the Carl Bro Gruppen and Maxon Telecom A/S, making extensive use of this approach.

The guideline also provides a series of practical inputs relating to the communicating and construction of the intellectual capital statement to external stakeholders. Among the important points that might be considered are: who is the target audience; what is the principal message to be communicated; which media should be used to deliver the message; should the intellectual capital statement be part of the annual report or should it be a separate document; and what are the relevant legal requirements? The final part of the guideline addresses the work process involved in preparing an intellectual capital statement and provides suggestions for how to organise an intellectual capital reporting project and project team by raising questions such as: who should be a part of the project team; what is the role of senior management; how can management commitment ensured; and how can companies ensure that their intellectual statements will become embedded in the organisation?

Examples of Intellectual Capital Reporting

In order to provide an impression of how the guideline described above is applied in practice, a couple of examples are provided in the tables below according to the model presented in figure 2. The first example is a medical technology company listed on the Copenhagen Stock Exchange. The example illustrates how this company through insights into patient needs and employee competences seeks to strengthen its research and development activities. As such, the management challenges lead to the deliverance of the proposed use value, while the activities and indicators leverage the management issues and performance measurement necessary for managing the intellectual capital.

Knowledge narrative	Management challenges	Activities	Indicators
Use value of products is delivering quality of life by helping a reducing the effects of a physical handicap	Product development	Investing in R&D New patents New products	R&D spending Total number of patents Number of patents pr. year New products' revenue share
	Gathering knowledge about the users situation	Measuring satisfaction of users Focus group activities	No. of meeting with users and nurses
	Excellence in product quality	Quality control systems and processes	Index for complaints Internal auditing Documentation costs Total customer satisfaction
	Employee development	Self-controlled groups in production Jobrotation Employee development progammes	Employee loyalty Employees with more than 3 year education Jobrotation and overseas job exchanges Employee satisfaction index

Table 1: Managing the Intellectual Capital of a medical technology company

The second example is from a medium-sized advertising agency which had problems in retaining the best employees. In addition to this, one of the main management challenges became knowledge sharing and ensuring the documentation of existing knowledge and solutions across several branches of the firm. The example illustrates how the company mobilized its strategy for knowledge management through a series of performance measures.

Knowledge narrative	Management challenges	Activities	Indicators
Delivering effective communication which creates results for the customers	Attracting and retaining competent and innovative employees and developing them professionally and personally	Employee satisfaction survey Training programmes for employees	Pct. of employees looking forward to going to work every day Education costs pr. employee No. of employees engaged in training Pct. of employees able to work form home
	Retaining and developing customer relationships	Surveying reasons for customer loyalty	Customer satisfaction Image Customer dependency
	Knowledge management	Knowledge sharing via Intranet Documenting customer solutions	Intranet activity No. of solutions applying shared knowledge
	Optimizing information technology		IT-costs pr. employee

Table 2: Managing the Intellectual Capital of an advertising company

CONCLUDING REMARKS

It is often argued, both in the accounting and management literature that voluntary information is important for understanding value creation and that such disclosures would improve e.g. investment and credit decision-making. From the accounting perspective, improved disclosure is more or less about including the asset values of intellectual capital resources in the balance sheet of the company’s financial accounts, i.e. capitalizing the value of intangibles. From a business reporting perspective, like e.g. that of intellectual capital statements, improved disclosure is rather concerned with illustration the flows in the company that create value, benchmarking performance of specific value creation metrics such as strategy, IC, future prospects etc. Rather than integrating IC in financial accounts, the suggestion made here, is that it ought to be entangled in the strategic statements, or management commentary, of the company.

It is, however, questionable whether this would improve anything. The analysts and professional investors already have deep insight in a lot of details, and the most important information on intellectual capital are likely to be related to the specific strategies of the firms and hence difficult to compare and interpret unless it is disclosed as an integral part of a framework that explains how value is created. Since understanding the importance of intellectual capital in terms of value configurations and customer value creation is more of interest from the strategy side of the world a possible reconciliation of the reporting-understanding gap could for the firm be to disclose the business model, i.e. the story that explain how enterprises work, who the customer is, what do the customer value – and based on this how the firm is supposed to make money. Exactly how this disclosure should be reported is maybe not easy to say. Some experiments by proactive firms are needed and the business climate in some countries, e.g. Denmark, might be more favourable for firms' experiments with reporting.

Experiences from Danish firms issuing intellectual capital reports (cf. Bukh *et al*. 2001; Mouritsen *et al.* 2001a, 2001b, 2001c, 2002) show that, intellectual capital is not only about knowledge resources in the form of human capital, customer capital, structural capital etc. as separate categories. It is just as much about their complementarities, the productivity of one resource may improve by investments in another resource. It may be that investments in employee development will improve effectiveness of IT technology, or effectiveness of customer-relations. If this is the case, human capital is neither separate from organizational capital, from customer capital, nor is there a causal relationship between them, because overall effectiveness is a collective effect that cannot be explained by the sum of its parts. This is what Nielsen & Dane-Nielsen (2008) denote the emergent properties of intellectual capital.

Hence, intellectual capital reports are as argued in Mouritsen et al (2001c) not to be read simply by analyzing the indicators and imposing an explanatory model linking the elements in a causal relationship. As there is more to an intellectual capital report than just the numbers, the reading is different than reading a traditional financial statement. Textual representation, indicators and pictures about the knowledge management activities of the firm compose intellectual capital reports, and there are no specifically stated ways of reading and interpreting IC reports. This makes the comparison of different IC reports difficult.

Another way of dealing with the problem is to step outside the accounting paradigm to see if transparency and relevance problems can be solved by way of supplementary disclosures. For some this is a logical step. However, for many this represents shaky ground. It is ironic that while supplementary information has been shown to reduce investors' uncertainty, it is not being acknowledged as a key element in solving the existing problems by standard-setters and academics.

From the analyst point of view IC indicators disclosed in the annual report or in a supplementary intellectual capital report is only one part, maybe even an inferior part, of the information needed to make recommendations to clients, because they are in a privileged position to “get more information – and sooner – than all except the very largest investors” (Eccles et al. 2001, p. 274). It might be that the information has value relevance but the analysts have already a much more detailed understanding about e.g. the research and development activities than what could be gained from reading about the aggregate research and development expenses.

Since private investors do not have the same access to information, greater disclosure of intellectual capital information could, however, at least for them be an improvement. Despite the fact that such improvements undoubtedly would improve “market fairness”, most private investors would still be left with little clue about how the IC indicators should be interpreted. This is because there exist few rules of thumb from which to interpret such new information. Future research should denote attention to such problems.

This chapter has constituted a wake up call to the drowsy constituents of academia and policy-making, asking them to see beyond their normative accounting paradigm and in turn showing them how far the strategy-oriented solutions they choose to ignore have come. Especially the Danish guideline for intellectual capital statements has the ability of illustrating the strategic imperatives of the firm and entangling intellectual capital indicators into a story of value creation.

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