

THE INCREASING INVOLVEMENT OF ACCOUNTANTS IN CORPORATE SUSTAINABILITY MANAGEMENT

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Abstract

This paper reports on a research project which examined the current practice of sustainability accounting in leading sustainability companies in the UK and Germany in 2009 and 2010. The topic of investigation was the role of the accounting function in generating and using sustainability-related information. A series of sixty interviews helped to identify the extent and nature of the involvement of accountants and the accounting function in corporate sustainability management and how sustainability accounting has developed over time. The findings suggest that there is a significant involvement which has tended to increase over time.

1. The motivation behind the involvement of accounting

1.1. Growing economic importance of corporate sustainability management

With the apparent impact of their business activities, companies have been held largely responsible for either causing

adverse impacts on the natural environment and society or at least for failing to address them adequately (Gladwin, Kennelly & Krause 1995). The concept of sustainable development has frequently been translated in companies into ‘corporate sustainability’, covering their environmental and social as well as their financial performance on the organisation and on the society at large (Schaltegger & Burritt 2005). Several factors have driven this: on the one hand poor social and environmental performance have jeopardised some companies’ financial performance. On the other hand numerous companies have been able to gain competitive advantage by recognising the importance of environmental performance and adapting their business activities accordingly (e.g. Klassen & McLaughlin 1996; Schaltegger & Wagner 2006), although further empirical evidence for diverse relationships between sustainability performance and financial success is still needed (Boatright 1996; Gioia 1999; Wood 2000; Schaltegger & Synnestvedt 2002; Schaltegger & Wagner 2006).

The number of companies taking action to reflect the environmental and social aspects of their performance continues to increase (Gray, Owen & Adams 1996; GRI 2008) though some critiques perceive these actions as unnecessary, non-value-adding costs (Walley & Whitehead 1994). Furthermore, many such activities have often been carried out on a single-project basis, although a trend towards their integration in day-to-day business activities has been observed (Schaltegger & Wagner 2006). This has drawn attention of many companies to the challenge of integrating positive social and environmental intentions into the core

of their business, developing overall strategies of organisational change and formulating long-range plans, allocating resources, planning and controlling the cost of activities and measuring the performance (Porter 1985; Schaltegger & Wagner 2006).

1.2. Moving towards well-informed sustainability-related decisions

Given that (a) “the essence of management is coping with change” (Chakravarthy 1982, p. 35), (b) the fact that sustainability issues are societal, regulatory and market drivers of change, and (c) the purpose of management accounting is to support management by the provision and use of accounting information, it is logical to conclude that management accounting should be involved in supporting sustainability-related management activities.

Corporate sustainability-related activities have developed rapidly during the last decade (e.g. Steger 2004; Herzig & Schaltegger 2009), with both the number of companies getting involved and also the spectrum of challenges being addressed, increasing steadily. Companies now have more tools at their disposal than two decades ago when the concept of sustainability was still relatively new. The focus has therefore been shifting from the early approach of single projects and activities towards a more integrated approach to both the activities and measurement of their performance. Even at a single-project level, as projects develop, their performance needs to be monitored and evaluated based on reliable information rather than merely subjective judgements or random proxy indicators. Otherwise a rational creation and management of a positive link between social, environmental and economic performance remains anecdotal or coincidental.

This means that reliable and relevant information is needed. However, whether non-financial information is managed through a centralised information collection system similar to most companies’ accounting systems or separate, dedicated systems has not been explored to date. Consequently, the responsibility of data handling and information management has often been assigned to a particular individual who is directly involved in these projects which means that the project management can obtain an overview and keep track of its progress and its related costs and benefits. A senior manager would then have to cope with information about the performance of a number of different projects which had arisen from a number of different sources, often presented in a variety of formats, and make his/her own evaluation of its significance. Providing information on a consistent basis is essential for senior management, and one way in which this might be achieved could be by using recognised rigorous information-handling methods such as those deployed by accountants.

The accounting system represents potentially the most important information resource for decision-makers (e.g. Schaltegger & Burritt 2000) for several reasons. Information collected by management accounting systems is expected to be reliable due to the robust mechanisms of internal checks and controls in the processes of data collection and verification, and is also often verified by routine internal audits. This also makes use of the expertise of accounting professionals in handling information, i.e. their ability to extract relevant and useful information from data that serves the needs of managers, regulators and the public. However, the accountant’s involvement in sustainability management activities has been limited to date, as shown in Section 2.

Sustainability management is not the first challenge in management history in which the involvement of the accounting function has developed and increased gradually over time. A look at (management) accounting history shows that numerous changes have occurred in the past that required accountants to expand their expertise to a new field (Evans et al. 1996; Burns & Yazdifar 2001; Scapens et al., 2003; Alexander 1991). In recent decades a re-evaluation of management accounting, in terms of developing new techniques and systems, has also been observed (Scapens 1990). However, several publications suggest that some organisations prefer to use traditional management accounting systems rather than adopt novel management accounting approaches (Bromwich & Bhimani 1989; Burns, Ezzamel & Scapens 1999), which may partly explain the slow rate of dispersion of new methods.

Therefore, the following paper looks into the extent to which accountants and the accounting function of the company are involved in sustainability management activities. Furthermore, it tries to provide an explanation of why such an increasing involvement is likely to be expected.

2. Literature review

2.1. Scientific progress

To date, only limited documentation of the involvement of accountants in sustainability management exists. With only a few exceptions (e.g. Gray 1992; Schaltegger & Burritt 2000; Bebbington 2001; Wilmshurst & Frost 2001), accounting research has largely neglected the role of the accountants in corporate sustainability management. Furthermore, research in sustainability education outlines the insufficient involvement of the accounting profession in the above field (Schaltegger, Windolph & Harms 2002; Tingey-Holyoak & Burritt 2009; Gray & Collison 2002).

In contrast, there has been substantial descriptive accounting research aiming at throwing light on accountants' involvement in other new developments in management. With the constant development of management accounting practices (Ittner & Larcker 2001) to serve the changing needs of information customers (Kaplan 1984), not only has the accountant's function been evolving but also their involvement in various activities. For example, Hertenstein and Platt (1998) argue that management accountants should be involved in the process of new product development for six main reasons:

- to determine the financial feasibility of a proposed new product during the conceptual phase by developing cost estimates based on the designer's ideas;
- to help the team to anticipate and develop financial information, for example, product cost estimates or projections of required investment, that would be necessary to obtain approval at the successive go/no go decision points;
- to provide expertise in the development of capital proposals which may be needed to gain approval for the purchase or development of new equipment required to produce the new products;
- to provide support in framing the cost-benefit discussions that need to take place between the product development team and senior management in order to move the product through the development process;
- to remind team members that the cost of a product and its financial success are key goals that the product design must satisfy; and
- management accountants are also in a position to estimate not only initial product costs, but also costs to the distributor, consumer, and manufacturer over the entire life of the product.

Hertenstein and Platt (1998) gave these reasons in the specific context of product design, yet these are also sufficiently generic to be equally relevant for other operations and activities in the company, including sustainability management.

However, several researchers have reported that although environmental management accounting (EMA) is well-developed and known in certain quarters, it still often lacks the support of many management accountants (Bebbington et al. 1994; Davey & Coombes 1996; Schaltegger & Burritt 2000; Schaltegger & Burritt 2010; Burritt & Schaltegger 2010). Research has indicated that accounting professionals are in fact sometimes involved in environmental management, although “[...] 39% [of the interviewed CFOs] indicated that environmental issues were outside the realm of the accountant, and there was only marginal support (23%) for the quantification and reporting of environmental impact” (Wilmshurst & Frost 2001, p. 141). As the authors point out, it is the extent to which an issue is considered of long-term importance as opposed to merely a “passing fad” that is important for engaging a wider number of relevant professionals. Thus, it can be expected that as the issue of the environment and sustainability continues to gain importance, accountants will increasingly be involved in future.

2.2 The practitioner’s viewpoint

Not only companies and their decision makers but also various professional accounting bodies and similar (e.g. standard-setting bodies) have acknowledged the urgent nature of the challenge of sustainability and have been working on developing a strategy on sustainability to relate sustainability and the accountancy profession (e.g. IFAC 2005; MoE Japan 2005; ICAEW 2008; FEE

2000; BCG 2009). This has been seen as particularly important as it touches on many areas of traditional accounting competencies. The case has been made in numerous publications (e.g. Jasch 2006; Schaltegger et al. 2008).

3. The research project – objectives, methods and further considerations

3.1. Research background and objectives

The project involved research to investigate current corporate practice in sustainability accounting and the potential contribution of the accountant. It was conducted in the UK and Germany in cooperation between the University of Gloucestershire and the Centre for Sustainability Management at the University of Lueneburg. The main part of the project was an exploratory study of the sustainability accounting practices of 16 leading British and German companies, adopting a grounded theory approach (Glaser & Strauss 1967) to look into their practices related to producing, managing and using sustainability-related information for management purposes. Furthermore it looked into the role of the accountant in the above activities.

While on the one hand the literature research prior to conducting the interviews provided only moderate evidence of accountants’ involvement in sustainability management to date, it showed that management accountants would be in a position to contribute to tackling sustainability challenges (as discussed in Section 2.1). Since the companies researched in the project were selected as being amongst leaders in sustainability management in two major European countries with an established tradition of conventional accounting, it was anticipated that their accountants would be likely to be involved in sustainability accounting at least to some extent.

3.2 Research method

The companies approached and invited to participate as research subjects were those which were identified as likely to be at the forefront of sustainability management, based on reputation (e.g. companies with sustainability awards) and documentary evidence of their leadership in environmental and social performance, such as high-quality published corporate sustainability reports or listing in a sustainability ranking such as the Dow Jones Sustainability Index. They can therefore be considered as likely to be exemplary for understanding the nature and processes behind utilising information for sustainability management. Since internal sustainability information and its use are typically confidential, the actual (as opposed to expected) level of sophistication of the information management systems in regard to sustainability management could only be anticipated but not actually tested prior to the project. Eight companies in the UK and Germany agreed to participate, and a total of 60 interviews were conducted. Since these were deliberately not intended to be a representative cross-section, the results are clearly not representative of the majority of the business world but should rather be understood as a revelatory insight (Yin 2009) into maybe leading corporate practice with regard to this topic.

Initial interviews with accounting executives and facilitators of published corporate sustainability reports were followed by interviews with internal users of sustainability information and administrators of the required data, over the period 2009-10. The interviews were based on a questionnaire with predominantly open-ended questions, and additional information collected in the form of field notes. The initial interview was generally with an individual who was

himself closely involved with the company's sustainability management, to gain an overview of related internal processes and to identify further providers and users of such sustainability-related information. In particular, the research consciously focused on the role of the accountant in the process and so far as possible interviews with staff with an accounting background or originally working in the company's accounting department were conducted.

4. Results

4.1. Defining the involvement

A varying extent of accounting involvement was observed in the sample companies. However, before presenting the results, a definition of involvement of the accountant is needed. Based on the evidence collected, four groups of accountant involvement were set up: no integration at all, little integration, only certain issues integrated, and high involvement (Table 1). Functions which carried out tasks of an accounting nature but under other job titles such as (for example) "metrics manager" and "non-financial indicator manager" were also considered as being sustainability accountants in this analysis.

The analysis covered not only the extent to which accountants are involved in their companies' sustainability management but also on how rapidly the extent of their involvement is changing and the type of contribution provided: i.e. not just the current status quo but the development and evolution that has led to this over time. Since the project's objective was to investigate the generation and use of accounting information in sustainability management, a number of the interviewees were either accountants, accounting professionals in charge of some kind of non-accounting activity or involved in accounting activities (Table 2).

Table 1: Defining the extent of involvement in four categories

Extent of accountant's involvement	Description
No involvement	No evidence of the accountant's involvement was obtained during the interviews
Little involvement	Accountants were only involved to support some aspects but not all
Partial involvement	Accountants were involved to a high extent but for certain issues only (e.g. legal compliance, energy use, etc.)
High/complete involvement	Accountants were involved to support the majority of the processes that require or benefit from the accountant's expertise

Table 2: Number of interviewees and their accounting background in accordance with Table 1.

Interviewee related to accounting practices	Number of respondents (percentage of all interviewees)
Accountants	11 (20%)
Fulfilling accounting tasks	19 (35%)
Non-accounting functions	24 (45%)

4.2 The accountant's role

The accountant's role was investigated and documented in respect of the functions of (sustainability) management accounting, i.e. the steps in the process. CIMA (1981) identified seven functions of (sustainability) management accounting, in relation to management information:

- identification,
- measurement,
- accumulation,
- analysis,
- preparation,
- interpretation and
- communication.

The results from the research were analysed in relation to these seven accounting functions, as reported in Table 3.

Table 3 represents the extent to which the accounting function is involved in sustainability management practices. The size and the selection criteria of the sample do not allow any generalisable conclusions to be drawn about the activities most supported by accountants, yet several observations can be made.

Table 3. Results in relation to involvement of the accounting function in sustainability management practices (total 16 companies).

Function	ID	MEA	ACC	AN	PREP	INT	COM
Number of companies	5	6	13	8	8	7	8

ID identification, MEA measurement, ACC accumulation, AN analysis, PREP preparation, INT interpretation, COM communication.

The identification of information in our sample was often initiated by sustainability managers and those with a similar function, hence the relatively limited evidence of involvement of the accounting function. The same applies to the analysis and interpretation of sustainability information. The accountant's involvement in the final step, communication, was also only rarely observed as this was typically the domain of the functions that use the information.

The absence of any pattern in the different types of activities between the different companies in the sample suggests that they are not simply following generally accepted best practice or mimicking other companies which are generally perceived as representing best practice, but are instead trying to find solutions to specific problems by using the accounting resources at their disposal.

Table 4 presents the fields to which accounting professionals are potentially able to contribute and are currently involved in, as well as a description and

examples of the advantages of this. These examples show that although accountants' expertise may have been neglected for a number of issues, the sample companies face particular challenges that have been resolved – both in the past and today – by involving accountants and therefore their involvement can now be beneficial in sustainability management.

However, on several occasions interviewees expressed doubts as to whether the accountant's expertise is required to support simple (as opposed to complex) activities which are currently managed without their support, possibly on the presumption that the accounting profession is at present too remote from sustainability challenges to be able to provide valuable support. In the cases where accountants were not involved, interviewees also reported that involvement of accountants is not necessarily seen as advantageous. This was justified with the presumption that latter need an understanding of sustainability issues, which is currently focused in the sustainability department.

Table 4. Application of the accountant’s expertise in corporate sustainability management activities

Field of contribution of accountants	How	Why	Example
Identification	Develop performance indicators; develop suitable systems to manage sustainability-related information	Use accounting experience to develop systems for managing non-financial information	The Sustainability Balanced Scorecard supports such an indicator development process
Measurement	Introduce a group-wide system to obtain uniform performance indicators	Increase comparability between sustainability-related projects	Defining indicators that are calculated based on the same scope and base year
Accumulation	Use established data flow paths; provide information that is already existing in other forms; collect additional information	Resource efficiency increase, since the underlying data does not need to be collected or verified again	Deciding about the physical information behind the monetary information normally provided
Analysis	Measure performance by evaluating managers’ sustainability activities	Produce information that describes the success of activities	Developing uniform indicators for sustainability performance
Preparation	Establish the links between environmental, social and financial performance	Identify and create a business case for sustainability	Preparing the sustainability report
Interpretation	Interpret environmental and social impacts in monetary terms	Provide relevant information in a uniform and expected format	Estimate costs and benefits of a project
Communication	In other corporate information systems, so that they do not need to be run separately	Develop a single user-friendly data management system for more efficient information management and use	Modules of an internet-based sustainability reporting can be feed from the sustainability accounting system

5. Interpretation of the results and discussion

The exploratory nature of the research provides indications which can be interpreted with regard to several aspects. Three aspects are particularly worth describing:

- involvement of the corporate accounting function against background literature;
- involvement of the accounting professional and
- the areas (in accordance with Section 4.2) in which the accountant's involvement was predominantly observed.

The increasing involvement of the accounting function seems to reflect the increasing integration of sustainability activities in the core activities of the companies examined. Engagement of the companies in sustainability matters (selection prerequisite, see Section 3.2), leads to the expectation that these activities have evolved into business as usual, and use the infrastructure and resources of the company. A similar evolution pattern in relation to accounting involvement has been observed in previous research (e.g. Hertenstein & Platt 1998). Whereas the first observation may be considered unsurprising in view of the type of companies researched and their commitments to sustainability, the evidence indicates that at least some leading companies are taking advantage of accountants' expertise in tackling sustainability challenges.

The results also reveal that in the majority of the cases, perhaps in contrast with what might have been initially anticipated, the involvement of accountants is recognisable. As Table 4 shows, the accountants and accounting professionals in the sample were in a position to provide support in dealing with specific sustainability challenges as opposed to offering generic support on information management issues. This does

not necessarily suggest that the accountants have undergone training on sustainability issues but rather they have been successfully involved in sustainability management activities. Another interesting observation that can be made in this context is the various ways in which accounting professionals have been able to contribute to sustainability activities, therefore it can be expected that their involvement is on the rise in other companies as well.

The third observation was made with regard to the areas with which the accounting function was involved. Reference to Table 3 reveals that the accountant's involvement was focused on the accumulation of information, which vice versa leaves the other functions less populated. Whereas the research did not aim to look for an explanation of this phenomenon, it can be assumed that the large amounts of information from and to various data providers, recipients and users might overtax sustainability managers, so that they seek to organise information flows with accounting approaches to reduce costs and to increase the efficiency of related activities.

These deliberations can be explained from several viewpoints. From an operational perspective, using available corporate resources and knowledge rather than establishing parallel systems is likely to decrease resources needed and therefore decrease the transaction costs of dealing with sustainability issues. Examples of such transaction costs are both internal and external to the sustainability management activities. Examples of the former include more efficient information distribution and less effort for providers of information (e.g. by inputting all data into a single system), whereas the latter can be exemplified by the additional transparency created e.g. in management reports, whereby sustainability aspects are related to other corporate activities.

Another interesting interpretation of the results as opposed to the existing body of literature is the perception of accountancy by other professionals. In other words, much of the existing literature is based on empirical results that measure the perception of other professionals in relation to both the potential and actual contribution of the accountant. As the intention was to investigate involvement of accountants in corporate sustainability management, it was possible to identify a higher than expected involvement, based on prior research, thus the suggestion that increasing involvement is likely to be observed. In strictly scientific terms, however, these results need to be validated on a larger scale and at least at two points in time.

Whether the results are also applicable to an extended pool of companies requires further research. Of particular interest would be extending the research over a larger sample of companies, so that companies of various size, culture and sustainability engagement are investigated. Also the potential benefit from the accountant's involvement should be researched in detail to provide evidence on critical areas of support needed.

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