

**A NEW CONCEPTUAL MODEL OF INFLUENCES DRIVING SUSTAINABILITY
BASED ON CASE EVIDENCE OF THE INTEGRATION OF CORPORATE
SUSTAINABILITY MANAGEMENT CONTROL AND REPORTING**

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Abstract

Case study evidence from a large industrial firm is analysed with the purpose of constructing a new conceptual model of the influences that drive companies towards sustainability, and showing the advantages of integrating sustainability reporting with management control systems, specifically the balanced scorecard. The new conceptual model suggests an important role for external stakeholders to influence balanced scorecard measures, sustainability report measures, and management focus. These three constructs influence each other and are reinforced by a system of assigning and enforcing the assumption of individual employee responsibility, whilst supporting a drive towards sustainability. The advantages of integration include better operationalization and internal communication of sustainability ideals through the use of the balanced scorecard (BSC), and a better understanding of BSC causality (between the BSC perspectives) through the more extensive stakeholder engagement that sustainability reporting calls for.

Keywords: Sustainability disclosure; Sustainability reporting; Balanced Scorecard; Management Control Systems

Acronyms:

MCS – management control systems

BSC – balanced scorecard

1. Introduction

This study is motivated by a literature that encourages further examination of the interaction between management control systems (MCS) and sustainability reporting (Adams and McNicholas, 2007; Arjaliès and Mundy, 2013; Gond et al., 2012; Pérez et al., 2007). Sustainability reports are often criticised for non-integration into day-to-day management activities, and for not advancing sustainability (Gray, 2010). Therefore, this paper focuses on the advantages of combining MCS with external sustainability reports and on the forces that drive companies towards sustainability.

This study examines a listed New Zealand company that uses MCS to underpin its sustainability reporting and uses this as an example of best practice. From the analyses of the case data, including in-depth interviews and documentary evidence, this paper concludes that organisations can benefit from the integration of sustainability reporting and internal MCS by employing approaches such as the balanced scorecard (BSC) combined with other MCS processes around management focus and employees' internalisation of sustainability measures. This allows sustainability to be operationalised and better understood, which aids sustainability reporting and stakeholder engagement. This research is timely given the increasing importance of environmental and sustainability issues (de Klerk and de Villiers, 2012; de Villiers et al., 2014; Glennie and Lodhia, 2013; Lawrence et al., 2013; Marx and van Dyk, 2011; Massa et al., 2015; Samkin, 2012; Schaltegger et al., 2013; Sharma and Kelly, 2014; Summerhays and de Villiers, 2012). In addition, recent developments around integrated reporting may further motivate companies to integrate management control systems with non-financial external reporting (Atkins and Maroun, 2015; Atkins et al., 2015; Stent and Dowler, 2015).

This paper makes several contributions, namely answering the call for further research into the use of MCS for sustainability (e.g., Arjaliès and Mundy, 2013; Gond et al., 2012), constructing a conceptual model that offers a new way of thinking about the influences that

drive companies towards sustainability, highlighting the advantages of integrating sustainability reporting into MCS from case evidence, and being one of the few case studies to focus on the integration of MCS with external sustainability reporting. The new conceptual model emphasises the fundamental importance of stakeholder engagement as an influence on three central constructs: BSC measures, sustainability reporting measures, and management focus. These central constructs mutually influence each other and form a MCS mechanism that is supported by the assumption of individual employee responsibility for sustainability measures.

Sustainability reporting and the BSC share several characteristics. Both employ different perspectives and categories and require significant resources to implement and maintain. Whereas the BSC locates measures under financial, customer, internal processes, and learning and growth perspectives, sustainability reporting groups measures around economic, social, and environmental performance (de Villiers, 2003). Both contemplate stakeholders other than shareholders. For example, the BSC considers shareholders in the financial perspective, customers in the customer perspective, and employees in the learning and growth perspective; whereas sustainability reporting encourages the consideration of all stakeholders, such as shareholders, employees, customers, government, society, the Earth, and future generations (Mitchell and Quinn, 2005). The main difference between the BSC and sustainability reporting is that the former is used as an internal management tool, whereas the latter is mainly used for external reporting purposes.

Management systems and methods are costly and costs needs to be weighed against associated benefits. One way of reducing the costs of using a new management system is to integrate it with existing systems already in use. The similarities between the BSC and sustainability reporting suggest that management may gain synergy from integration, leading to potential benefits and reduced costs.

The paper proceeds with a review of the literature and description of the research design. Next the organisation is described and its managers' perceptions of sustainability. The following section reports how the BSC and MCS interact with sustainability reporting, informing the next section's description of the new conceptual model. The final section discusses the results and concludes with suggestions for future research.

2. Literature review and background

The literature review will provide an overview of the state of knowledge by first reviewing prior work in the area in general, then positioning the case organisation within the options for integrating sustainability into the BSC, and finally discussing the most relevant case study based literature.

Prior research can be classified into case study and non-case study methods. The non-case study work introduces and discusses the advantages of concepts such as eco-control (Henri and Journeault, 2010), sustainability management control (Schaltegger 2010), and a sustainability balanced scorecard (Burritt and Schaltegger, 2010). While Arjaliès and Mundy's (2013) choice of the survey method for their study provides insights into the MCS used by companies to manage CSR strategy and into how companies use these MCS, they themselves admit that this method precludes a detailed understanding of the practices in any individual company. The prior case study research has taken different perspectives, such as the role of MCS in general corporate social responsibility activities (Crutzen and Herzig, 2012); the effects of MCS in motivating socially responsive decision making (Norris and O'Dwyer, 2004); sustainable leadership through MCS and organizational culture (Morsing and Oswald, 2009); and implementing sustainability strategies through MCS (Riccaboni and Leone, 2010).

Figge et al. (2002) list three options for integrating sustainability into a BSC: i) incorporating such measures into the existing four BSC perspectives; ii) adding an additional

fifth perspective on sustainability; or iii) developing a specific BSC for sustainability. Reefke and Trocchi (2013) provides a blueprint for the implementation of option two within a supply chain, including the complexities around the interdependencies between firms within a supply chain. They also note the potential competitive advantage that can accrue to a supply chain that integrates social and environmental resources and knowledge. Notwithstanding these advantages, the case company reported on in this paper decided to follow Figge et al.'s (2002) first option, namely to incorporate sustainability measures into the existing four BSC perspectives. They followed this option to allow the structure of the BSC to reflect their overall strategy, which is not explicit about sustainability. Hansen and Schaltegger (2014) provide a comprehensive sustainability BSC literature review, which can be consulted for further information. However, given that the case company reported on in this paper does not use a sustainability BSC, (it uses option one from above), this literature review does not discuss it further.

There are few case studies on integrating sustainability into MCS and even fewer that deal with the integration of sustainability into MCS and external sustainability reporting. Lämsiluoto and Järvenpää (2012) describe the integration of environmental management into the existing four perspectives of a food processing company's BSC with the objective of reducing energy and waste while also centralising their existing information systems. The company did not use an additional perspective in the BSC but continued to report environmental performance in its annual report and in a specific environmental report for external stakeholders. While the notion of integrating MCS with sustainability reporting is attractive, integration is not always easy, as reported by Giovannoni and Maraghini (2003), who examine the efforts of an Italian firm to develop an integrated performance measurement system (not including sustainability reporting). Issues arose around conflicting targets between the creative designers and the production department, which were eventually solved by allowing complementary integrating mechanisms such as social interaction and knowledge

exchange. Issues can also arise when situations are complex and measurement is aggregated, as in the case of a petrochemical company where the BSC measure of energy efficiency was aggregated and where the cause of a change in the aggregated measure was hard to pin down (Virtanen et al., 2013). This led to frustration and dysfunctional behaviour among employees. Riccaboni and Leone (2009) describe how Proctor & Gamble incorporated sustainability thinking into their MCS without the need for radical change: “Thus, social and environmental issues could be effectively integrated into conventional strategic planning, organizational structures and performance measurement systems.” A major facilitator of this integration was the progressive inclusion of sustainability principles into the organisational culture through “ad hoc initiatives such as the ‘Earth Day’, leadership commitment and internal communication.” While Riccaboni and Leone (2009) do discuss leadership, none of the articles discussed in this paragraph deal with the integration of MCS with external sustainability reporting mechanisms or provide a conceptual model of sustainability drivers. Furthermore, none of these case studies provide a model of the influences driving sustainability that also focuses on the role of external stakeholders, managers, and employees.

Notwithstanding, there are two case studies that do deal with the integration of sustainability into MCS and the external reporting of sustainability matters. Morsing and Oswald (2009) describes how a Danish firm, Novo Nordisk A/S, integrated sustainability reporting and the BSC through a monitoring and advisory team. The BSC is used to cascade their sustainability reporting (triple bottom line) down into the organisation. The authors focus on leadership through MCS and organizational culture. Although this article deals with the concept of sustainability through leadership, it does not provide a model of the influences that drive sustainability.

A case-based article that does provide a model/framework is Schaltegger and Wagner (2006), who propose an integrated framework comprising a sustainability BSC combined with sustainability reporting. The sustainability BSC identifies social and environmental aspects

strategically relevant to the business, which are incorporated into strategy maps of cause and effect chains. Performance indicators are developed and the associated data feeds are identified. Finally, the reporting system is developed with ongoing reviews and monitoring. This article is instructive and very useful for the implementation of a sustainability BSC integrated with sustainability reporting. However, the framework does not deal with human factors in the implementation of, or the drive towards, sustainability. Although stakeholders, employees, and managers are mentioned in the discussion, they do not take a central role in the framework. These groups are important to the success of any implementation or organizational drive (Virtanen et al., 2013). For example, Norris and O'Dwyer (2004) describe how managers and employees resisted pressure to focus on traditional financial measures at the expense of previously espoused social objectives. Accordingly, manager and employee motivation and actions need to be addressed to ensure goal congruence and effective implementation. The importance of stakeholders, employees, and managers will be highlighted throughout the case analysis and in the newly constructed conceptual model.

The case studies discussed in this section illustrate different approaches to integration, and although they mention stakeholders, employees, and managers, these groups often appear to play a secondary role. It is noteworthy that none of these prior studies provide a conceptual model regarding the forces that drive sustainability or focus on the important roles of stakeholders, managers, and employees in this drive or on the integration of MCS and sustainability reporting.

In the case analysis, this paper focusses on how an organisation engages with its stakeholders, both internally and externally. Similar to the real-world case studies above, the case company also integrated its sustainability reporting within its existing four perspective BSC without adding a sustainability perspective.

3. Research design

As mentioned, the broad aim of this research is to enhance the understanding of the benefits of integrating sustainability reporting with the BSC. Knowledge of how sustainability reporting is used within organisations is limited. Thus, inductive reasoning is used, beginning with specific instances and allowing “issues and theories to emerge out of the case, rather than being imposed on it” (Scapens, 1990, p. 274). Few New Zealand organisations have adopted sustainability reporting (KPMG, 2013; Milne et al., 2003), even though shareholders seek such disclosures (de Villiers and van Staden, 2010; de Villiers and van Staden, 2012). Thus this paper uses an exploratory and descriptive case study, relying on in-depth semi-structured interviews and documentary evidence. A large company that uses MCS as an integral part of their sustainability reporting is examined.

Case study research has certain limitations. Given the aims of this research, depth is preferred over breadth. Notwithstanding, the limitation on breadth, using the case study method means that, while the findings are not generalisable to a wider population, they are generalisable to theory (Scapens, 1990; Yin, 1994).

An important problem with case studies is the possibility of interviewer bias that can reduce reliability and completeness (Snow and Thomas, 1994, p. 471). Bias problems can be reduced by the use of multiple researchers, data coding and triangulation between sources of evidence. Triangulation was obtained from multiple sources of evidence through corroborating interview data with documentary evidence and other interviews.

The in-depth, semi-structured interviews focused on the concept of sustainability, the use of and the reasons for sustainability reporting, the MCS including the BSC, and integration between sustainability and the MCS. The answers to the key interview questions were summarised in tables and reviewed by interviewees. Relevant internal and external documentation was obtained and reviewed and inconsistencies between interviewees clarified. The managers were interviewed with most interviews being conducted in person and two by

telephone. Sixteen of the seventeen interviews were audio taped and interviews ranged in length from half an hour to two hours. In order to get an overview of procedures around the MCS and the sustainability reporting in the company, the chief executive officer, selected line managers, champions of the BSC, those involved in the implementation and use of the BSC, and the manager and employees in the department responsible for health, safety and the environment were interviewed. The taped interviews were transcribed and then read and re-read several times in order to identify common themes. Apart from the interview data, internal and external documents reviewed included board reports, internal memos and newsletters, reports prepared by external consultants, annual reports, sustainability reports, information from the company web site, and newspaper articles. These sources of information were identified through internet searches, and through the comments made by interviewees. Documents interviewees mentioned were obtained from them during or after the interviews thus enabling their opinions to be corroborated. The common themes identified as important for the purpose of the analysis were those that directly addressed the company's drive towards sustainability, their MCS, and their sustainability reporting.

After completing the case analyses, the paper follows Eisenhardt and Graebner (2007) by using the insights gained to construct a new conceptual model of the influences that drive companies towards sustainability.

4. Findings: Background

KIWI is a large New Zealand company with 11,000 employees that specialise in forestry products and operations in New Zealand and Australia. The company is over 100 years old and is listed on both the New Zealand and Australian stock exchanges.

KIWI had implemented a BSC over a period of six months with the assistance of external consultants and had used the BSC for several years organising its annual report around the BSC categories. Shortly before this research commenced, the organisation had

been restructured from six groups into over 30 businesses. This transformation required a major review of the BSC and BSCs were prepared for each of the new businesses.

The BSC is organised in the four traditional perspectives, but renamed financial, performance, leadership, and innovation, in order to be consistent with the three themes of KIWI's overall strategy, namely transformation through performance, leadership, and innovation. Within the BSC perspectives, shareholder needs are addressed mainly in the financial perspective, customer needs primarily in the performance perspective, and employee needs in the leadership perspective (although industry and market leadership are also included in this category by some business units).

One manager explained it as follows:

“Performance is the things we are doing today, innovation is the things we are doing for tomorrow's profit, and leadership is about people.” (2)¹

Performance, innovation and leadership are seen as causing the financial result. Other linkages are implicit, for example, innovation and leadership are seen as causing performance. The most important stakeholder group for KIWI are considered to be the shareholders, whilst remaining cognisant of the importance of other stakeholder groups.

“The primary stakeholder is the shareholder... We have to satisfy the customers and the employees in order to deliver shareholder returns.” (2)

All managers interviewed stated that measures relating to shareholder value were most important for KIWI. Other important stakeholders specifically mentioned in interviews included potential investors, internal stakeholders (management and employees), others in the supply chain (customers and suppliers), the government (regulatory authorities, occupational safety and health, regional and district councils), and society (neighbours, community, Maori, environmental groups, unions). These views on stakeholders could be seen to influence the construction of the BSC.

¹ This number identifies each manager interviewed.

In addition, the views of stakeholders influence the consideration of sustainability. Sustainability is perceived differently at different levels within the organisation. Managers working for the KIWI corporate office described sustainability *holistically* in terms of being careful with resources.

"Ensuring that what we do today we can do in 10 years' time or a hundred years' time." (5)

"It means not undermining the resource that you use to produce the goods that you do as a company. It's looking after the natural and physical resources that you use..." (16)

In contrast, four managers working for KIWI businesses described sustainability more in financial terms using expressions such as "value" (1) and (4), "growth" (2) and (4), "gain", "loss" (1), "surviving", "cash results" (7).

KIWI has published environment, health and safety reports since 1994 because of its responsibilities as a large company.

"...reason for doing the [Environment Health and Safety] Report was because we're a big company... Even though it's not mandatory that we do it, it's the whole good corporate citizen thing..." (6)

Sustainability reporting is promoted by the Chief Executive and is seen as morally responsible, good business, and attractive to socially responsible investors. The company has received high rankings in local corporate environmental responsiveness surveys and its sustainability report won the Large Companies category of the New Zealand Chartered Accountants Reporting Awards.

5. Findings: How the BSC and other MCS interact with Sustainability Reporting

KIWI implemented the BSC as a way to focus on translating strategy into action, ensuring that social and environmental issues are highlighted, and communicating accountability throughout the organisation. The BSC provided the anticipated alignment of

strategy and action by raising the profile of important goals in a format that employees could understand.

“The... BSC process was an... incentive to make strategy a part of everyday life.” (5)

In contrast, sustainability reporting has a broader role and is seen as a means of engaging with stakeholders (de Villiers, 1998; de Villiers, 1999).

“It's recognition that there are more issues out there than dollars. There is a growing awareness and acceptance that there's an environmental impact... a broader range of stakeholders. It helps you focus on... the broader spectrum of stakeholders.” (3)

The BSC is used by the entire company, including the environment, health and safety area, and facilitated management-by-exception by showing performance against targets. Managers focus their managerial input on areas where the BSC shows performance to lag behind targets.

“What ideally should happen out of a balanced scorecard is that if you're colour-coding the results and you've got some way of measuring red, then there should be an activity to get rid of reds . . . and it should then be a rallying call for efforts to get it back into the green zone.” (4)

KIWI's BSC includes environmental incidents and the total incident rate for health and safety. The BSC also has measures relating to shareholders, employees and customers that could be regarded as sustainability reporting measures. Their inclusion in the BSC ensures that social and environmental issues are seen as important areas to manage.

“They raise the profile of those areas in the company. ...We've got to track against [the measures] and we've got to improve those figures. ...It's on the agenda. ...people can see that the company's interested and it's not just lip service.” (6)

There came a point in time when the number of BSC measures used to rank the various business units was reduced to six. Managers debated whether the environmental incidents and the total incident rate for health and safety should remain part of the ranking. The two

measures were combined into one and the combined measure is now one of the six ranking measures. This ensured that social and environmental issues remained (and still remain) central to managers' focus and decision making.

The focus on stakeholders and social and environmental issues by incorporating them into the BSC, had the effect of managers starting to take-for-granted that these external stakeholders and social and environmental issues are important aspects to consider. The BSC is primarily used as a tool for implementing intended strategy, although it also assists with the formulation of strategy. In contrast, sustainability reporting has a broader focus and the interaction with stakeholders has more impact on changing what is taken-for-granted.

“[Balanced scorecard sustainability reporting is] taking companies more towards being like people... I can't get my mind away now from the person side of it all” (3)

Thus, the BSC provided the anticipated alignment of strategy and action by raising the profile of important goals, including new people oriented goals.

KIWI's monthly BSC reports are used primarily as a diagnostic control system throughout the entire company, including the environment, health and safety areas. Performance is shown against targets allowing managers to focus on areas where performance lags behind targets. A concise, one page summary of key performance indicators with green, orange and red colour-coding provides a visual representation of performance. The sustainability reporting measures included in the BSC emanate from the environmental management systems (including ISO 14001) and the monthly health & safety, environment and risk reports.

Another important MCS in KIWI is the mechanism of key accountabilities. These are individual performance goals for employees that represent a breakdown of BSC and sustainability metrics to ensure individual responsibility is taken. Each salaried employee has a formal monthly meeting with his/her manager where the employee's personal monthly scorecard is reviewed and discussed. This mechanism further emphasised sustainability goals.

“The fact that you are forced to report against these enables the issue to be highlighted... If it's good you get recognised. If it's bad you figure out a way to resolve issues.” (13)

The BSC is used for monthly board reporting, as well as monthly reporting along with commentary to the top 900 KIWI employees. Monthly face-to-face presentations by management to employees include BSC measurements. The balanced business strategy, balanced business plan, and BSC are often used to communicate plans to employees in a way that is understandable to lower levels of employees, enhancing its ability to influence.

Turning next to sustainability reporting, stakeholder feedback is another important factor that influences sustainability in KIWI. When the company sends out the annual Environment Health and Safety Report, stakeholders are asked for feedback.

“We've always sent out an evaluation slip on the document itself saying ‘is there more information that we could put in here, is the information in here useful to you, is it meaningful, what sort of information would you like to see in there, do we go far enough’. ...” (6)

Feedback is sought from the government and societal stakeholder groups in particular. In this way, relationships are built and the company manages stakeholder relations through their Manager Investor Relations; Manager Government Relations; General Manager Environment, Health, Safety, Risk and Partner Relations; and General Manager Corporate Affairs.

“It's developing relationships with these people. Not just trying to feed them information.” (6)

In fact, building relationships with stakeholders is regarded as a very important component of sustainability reporting as a means of both enhancing and protecting the company's reputation and public relations.

“To be able to say to [stakeholders] we do all of this in the environmental area... That aspect of sustainability reporting is very useful... There'll be something in it that you

can sell as a good story... The other thing... is that it helps put out in the open some of the downside... [if]... you're down in one but up in others it means that it's easier to talk about.” (3).

These relationships and the feedback received have resulted in (social and environmental) changes. For example, the company’s environmental activities now extend up and down the value chain through supplier environmental guidelines and environmental product certification. Environment, health and safety are considered in due diligence, capital expenditure decisions, and risk management. The company has monthly health and safety, environment, and risk reports with environment, health and safety goals included in the balanced business strategy flowing down to measures in the BSC and the business ranking. These reports all show performance against targets and can be used for management-by-exception.

A key aspect is that the sustainability report and the BSC use a common language and thus help to communicate a shared vision to employees and managers.

“We've got more people speaking the same language. The fact that people now can understand about setting measures and targets.” (5)

The benefits of the relationships between sustainability reporting and the MCS for KIWI are that the MCS explicitly includes some previously excluded stakeholders, and facilitates communication to align strategy and action (particularly through the key accountabilities). For instance, the BSC influenced and changed what was taken-for-granted as being important in the business, with sustainability now being seen as very important.

“There is a high level of emphasis ...on environmental and social issues.” (4)

“We ...focus on safety and the environment. ...it’s got a life of its own...” (5)

Nevertheless, although sustainability reporting is seen to be of value, the value is often hard to measure internally.

“It's a bit hard to measure [the benefit]. Without having gone out to the shareholders or the stakeholders ... you won't know for sure.” (6)

Furthermore, although the concept of sustainability reporting is not universally known throughout KIWI, this is compensated for by its relationship with the MCS. This occurs because the BSC and the key accountabilities mechanism communicate the specific sustainability targets, measures, and responsibilities that each individual is responsible for, and emphasise the importance of these specific issues to the success of the business.

The BSC and sustainability reporting are integrated in the sense that the BSC provides a mechanism for the implementation of some sustainability reporting goals.

“The natural integration comes from the fact that both look at a broader range of issues. ... There is a natural fit to the BSC because you can bring some of those issues into your BSC to make sure that you're focusing on performing to them.” (3)

In short, sustainability reporting focuses on external reporting without detailing the internal strategic management processes. The BSC is more internally focused and includes implementation processes, whereas sustainability reporting is meant for external stakeholders.

“I personally see the BSC as much more of a tool that I'd use internally, whereas sustainability reporting I see ... as ... reporting to stakeholders or the community.” (3)

“The more you openly state your strategy in the context of the elements of sustainability reporting, the more you'll be held to it. The more it'll help you be focused to it. Having the issues contestable out there is healthy. ... Sustainability reporting gives you the opportunity of exposing much more of the good things that you're trying to do.” (3)

The relationship is also not one-sided, since the sustainability report is based on the environmental management system, information contained in the BSC, as well as in other monthly internal reports, and thus integrated with internal control mechanisms.

Nevertheless, while sustainability reporting is important it is unlikely to be sufficient on its own to ensure improvement. The KIWI *strategy into action* framework includes the five-year balanced business strategy, one-year balanced business plan, BSC, and key accountabilities. All of these together provide a framework that *translates strategy into action* and feeds back into strategy formulation, ensuring that strategies are robust and achievable.

“If you have environmental measures showing a path of improvement, then it is likely that will interrelate to the profitability because ...if you're making more money you can afford to put more money into remediation.” (3)

This comment implies that the level of profitability drives the level of spend on environmental issues, contrasting with the view that social and environmental performance drives economic performance.

“...there is value in the eyes of the stakeholders, in us being seen as a good corporate citizen on the environmental side. It is worth putting money into that. ...it's worth putting money into health and safety, so we have fewer injuries... They feel better at work so they work harder.” (3)

In summary, sustainability reporting is integrated into KIWI's MCS in the form of its BSC and accountability mechanisms. In large organisations, it is time-consuming and difficult to involve everyone in discussions of strategic uncertainties. This is where the BSC plays an important role in communicating intended strategy throughout the organisation, and at the same time influencing what managers and employees take-for-granted to be important to the success of the business.

6. A New Conceptual Model of Influences towards Sustainability

This case analysis has identified the most important influences by examining the case data for matters that were emphasised by individual interviewees, as well as mentioned by

multiple interviewees. This leads to a better understanding of the key influences that drive corporate sustainability as depicted in Figure 1.

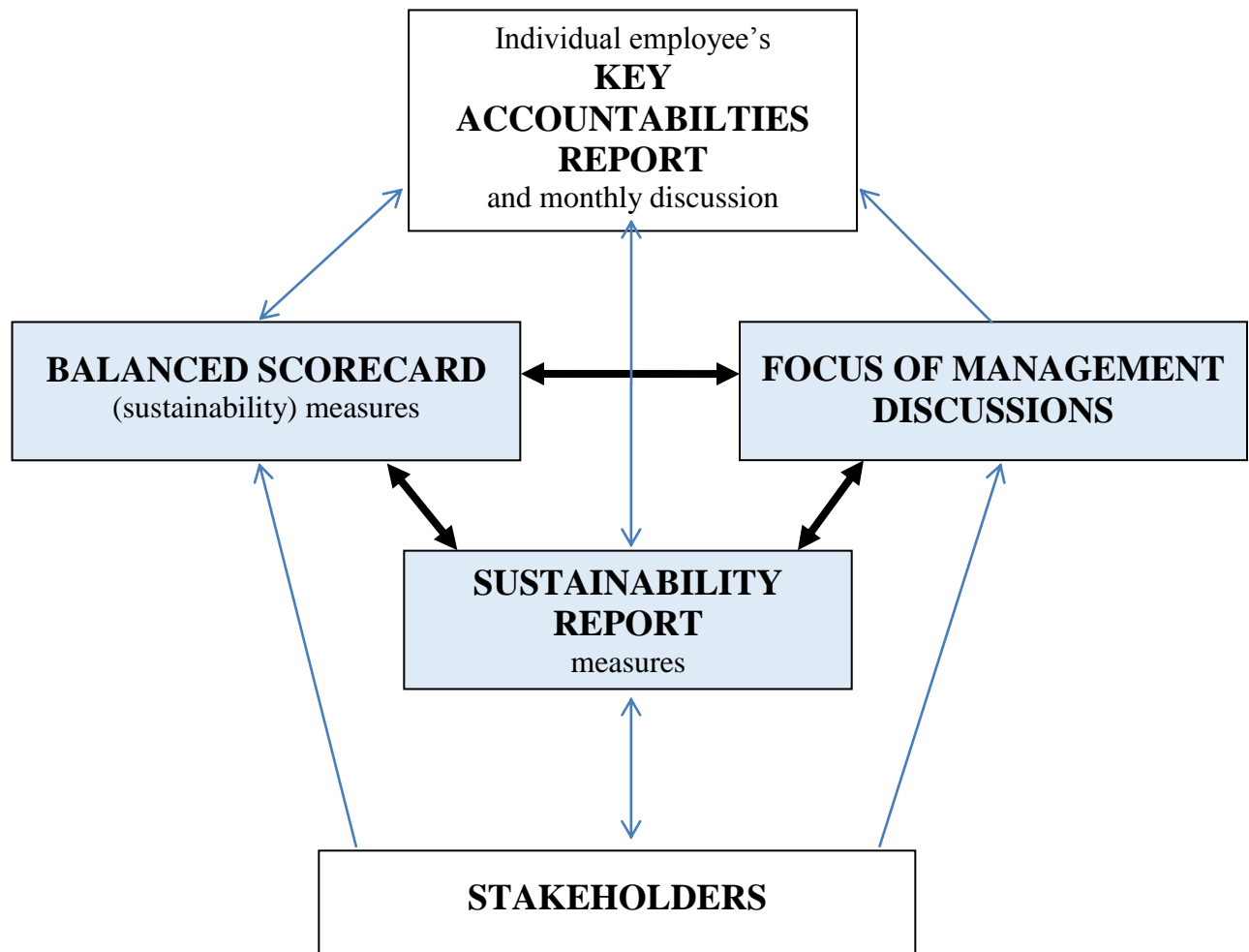


Figure 1: Model of Key Influences Driving Corporate Sustainability

The new conceptual model emphasises the fundamental role played by stakeholders if proper stakeholder engagement is pursued. Stakeholders influence the measures chosen for both the BSC and the sustainability report and influence what managers focus on. Note that the sustainability report influences stakeholders by communicating good and bad aspects of sustainability performance. In addition, the model emphasises the central role played by the interaction between the BSC measures, the sustainability report measures, and management focus. The individual employees' key accountability measures are fed by these three central constructs and form the capstone of the model, because this MCS sharpens individual

employee's focus on the sustainability measures that fall within their ambit and maximises the potential for actively working towards sustainability.

Stakeholders, managers, and employees are identified as important driving forces in the new model. This emphasis differs from Schaltegger and Wagner's (2006) framework. The recognition of these groups is only implicit in Schaltegger and Wagner's (2006) framework through the process of identifying social and environmental aspects and determining their relevance. This paper's new conceptual model shows that external stakeholders influence what managers and the MCS focus on. Individual employees are held accountable (or controlled) by their individual accountabilities reports and the monthly discussions they have with their supervisors and managers around these reports. These individual accountabilities reports represent another control mechanism that reinforce the drive towards sustainability. This control aspect contrasts with the decision support function emphasised by Burritt et al. (2002) and may be seen as constricting. However, this form of control appears to be effective in KIWI and to operate without negative consequences. Finally, in contrast with Schaltegger and Wagner's (2006) more detailed approach, the new model's minimalism focusses the attention on the most important aspects required for a sustainability drive.

The implication of the new model's greater emphasis on stakeholders and employees is that behavioural aspects play an important role in the success of any venture, including MCS and a move towards sustainability. Therefore, managers have to ensure they motivate individuals to buy into their drive towards sustainability if it is to stand any chance of success. Indeed, with motivated individuals behind a project, their collective energies can be harnessed to further the project's goals.

7. Discussion and Conclusion

This paper examines the combined usage of sustainability reporting and BSC systems in an organisation. The case analysis provides several new insights and leads to the construction

of a new conceptual model of the influences that drive companies towards sustainability, depicted in Figure 1. The new conceptual model emphasises the role of stakeholders in influencing BSC and sustainability report measures, as well as management focus areas. These three constructs (BSC measures, sustainability report measures, and management focus) influence each other and are central to a company's drive towards sustainability. A mechanism to ensure individual employee responsibility for the three central constructs is critically important to a sustainability drive.

This paper also highlights several advantages of integrating sustainability reporting and the BSC. First, the case study shows that sustainability reporting objectives can be better operationalised when incorporated into a MCS mechanism such as the BSC. Specifically, the BSC provides the discipline to express the aspects covered in sustainability reporting by way of objective measures.

Second, the BSC influences what employees and managers take-for-granted as being important for the company. Including sustainability measures on the BSC emphasises its importance. A BSC framework helps in gathering disparate ideas and reformulating them into principles, objectives and measures.

Third, the BSC provides a formal mechanism for communicating sustainability reporting internally with the added advantage that the BSC requires mechanisms for identifying measures of sustainability reporting principles. The BSC is typically constructed within the formal reporting system of organisations and sustainability reporting measures that are included in this are more likely to be perceived by staff as representing the 'official' or formal organisation view.

Fourth, a key part of KIWI's MCS was a process that formalises the assumption of individual responsibility for specific sustainability measures/issues that are included in the BSC, focusses manager and employee attention and maximises the potential for change towards improved sustainability. Thus, sustainability reporting as part of the BSC ensures that

sustainability becomes a normal part of the MCS to feature in management discussions and focus.

Finally, building a relationship between sustainability reporting and the MCS stimulates greater interactions with both internal and external stakeholders. The case organisation put significant effort into building and maintaining relationships with stakeholders. The motivation for stakeholder engagement is to increase shareholder value. Nevertheless, the emphasis on stakeholder engagement suggests that organisations that support values relating to sustainability and the satisfaction of a wider group of stakeholders are more likely to integrate sustainability reporting into their MCS, the BSC being the most important example in this company. This is more likely to occur in organisations with significant social and environmental impacts.

There are several avenues for future research. This research study suggests that the BSC is an enabling framework for integrating sustainability reporting into the management control system given its ability to operationalise sustainability reporting objectives and communicate these via a formal reporting framework. But there are also benefits that sustainability reporting provides to the BSC in “an expanded bottom line” as well as increasing interactions with stakeholders. Further research into the interaction between these two systems would increase the understanding of the causal mechanisms at work.

References

- Adams, C.A., McNicholas, P., 2007. Making a difference – sustainability reporting, accountability and organisational change, *Account. Audit. Account. J.* 20, 382–402.
- Arjaliès, D. L., Mundy, J., 2013. The Use of Management Control Systems to Manage CSR Strategy: A Levers of Control Perspective, *Manage. Account. Res.*, 24 (4), 284–300.
- Atkins, J., Maroun, W. 2015. Integrated reporting in South Africa in 2012: Perspectives from South African institutional investors. *Meditari Account. Res.*, 23 (2), 197–221.
- Atkins, J. F., Solomon, A., Norton, S., Joseph, N. L., 2015. The emergence of integrated private reporting. *Meditari Account. Res.* 23 (1), 28–61.
- Burritt, R. L., Hahn, T., Schaltegger, S., 2002. Towards a comprehensive framework for environmental management accounting—links between business actors and EMA tools. *Austr. Account. Rev.* 12 (2), 39–50.

- Burritt, R.L., Schaltegger, S., 2010. Sustainability accounting and reporting: fad or trend?, *Account. Audit. Account. J.* 23 (7), 829-846.
- Crutzen, N., Herzig, C., 2012. Sustainability, strategy and management control: a review of the literature, Paper presented at the 2012 CSEAR Conference, St Andrews, UK.
- de Klerk, M., de Villiers, C., 2012. The value relevance of corporate responsibility reporting: South African evidence, *Meditari Account. Res.* 20 (1), 21-38.
- de Villiers, C., 1998. The Willingness of South Africans to Support more Green Reporting, *S. Afr. J. Econ. Manage. Sci.* 1 (1), 145-167.
- de Villiers, C., 1999. Corporate social reporting in South Africa: Signs of a pygmy awakening? *Soc. Environ. Account. J.*, 19 (2), 5-7.
- de Villiers, C., 2003. Why do South African companies not report more environmental information when managers are so positive about this kind of reporting?. *Meditari Account. Res.*, 11 (1), 11-23.
- de Villiers, C., Low, M., Samkin, G., 2014. The institutionalisation of mining company sustainability disclosures. *J. Clean. Prod.*, 84, 51-58.
- de Villiers, C., van Staden, C.J., 2010. Why do shareholders' require corporate environmental disclosure?, *S. Afr. J. Econ. Manage. Sci.* 13 (4), 437-446.
- de Villiers, C., van Staden, C.J., 2012. New Zealand shareholder attitudes towards corporate environmental disclosure, *Pacific Account. Rev.* 24 (2), 186-210.
- Eisenhardt, K.M., Graebner, M., 2007. Theory Building From Cases: Opportunities and Challenges, *Acad. Manage. J.* 50, (1), 25-32.
- Figge, F., Hahn, T., Schaltegger, S., Wagner, M., 2002. The Sustainability Balanced Scorecard – linking sustainability management to business strategy. *Bus. Strat. Environ.* 11, (5), 269-284.
- Giovannoni, E., Maraghini, M.P., 2013. The challenges of integrated performance measurement systems, *Account. Audit. Account. J.* 26, (6), 978-1008.
- Glennie, M., Lodhia, S., 2013. The influence of internal organisational factors on corporate-community partnership agendas: An Australian case study, *Meditari Account. Res.* 21, (1), 52-67.
- Gond, J.-P., Grubnic, S., Herzig, C., Moon, J., 2012. Configuring management control systems: theorizing the integration of strategy and sustainability, *Manage. Account. Res.* 23, 205–223.
- Gray, R., 2010. Is accounting for sustainability actually accounting for sustainability...and how would we know? An exploration of narratives of organisations and the planet, *Account. Org. Soc.* 35 (1), 47-62.
- Hansen, E. G., Schaltegger, S. 2014. The Sustainability Balanced Scorecard: A Systematic Review of Architectures. *J. Bus. Ethics*, forthcoming, 1-29.
- Henri, J-F., Journeault, M., 2010. Eco-control: the influence of management control systems on environmental and economic performance, *Account. Org. Soc.* 35 (1), 63-80.
- KPMG., 2013. The KPMG Survey of Corporate Responsibility Reporting 2013, available at: <https://www.kpmg.com/Global/en/IssuesAndInsights/ArticlesPublications/corporate-responsibility/Documents/corporate-responsibility-reporting-survey-2013-exec-summary.pdf> (accessed 11 July 2014)
- Lämsiluoto, A., Järvenpää, M., 2012. Integrating greenness into a balanced scorecard in a food processing company, *TQM J.* 24, (5), 388-398.
- Lawrence, S. R., Botes, V., Collins, E., Roper, J., 2013. Does accounting construct the identity of firms as purely self-interested or as socially responsible?, *Meditari Account. Res.* 21, (2), 144-160.
- Marx, B., van Dyk, V., 2011. Sustainability reporting and assurance: An analysis of assurance practices in South Africa, *Meditari Account. Res.* 19, (1/2), 39-55.
- Massa, L., Farneti, F., Scappini, B., 2015. Developing a sustainability report in a small to medium enterprise: process and consequences. *Meditari Account. Res.* 23 (1), 62-91.

- Milne, M.J., Tregidga, H.M., and Walton, S., 2003. The Triple Bottom Line: Benchmarking New Zealand's Early Reporters, *Univ. Auckl. Bus. Rev.* 5 (2), 36-50.
- Mitchell, C.G., Quinn, N.W., 2005. Environmental reporting disclosure in South Africa: A comparative study of the expectations of selected groups of preparers and users, *Meditari Account. Res.* 13 (2), 17-33.
- Morsing, M., Oswald, D., 2009. Sustainable leadership: management control systems and organizational culture in Novo Nordisk A/S. Corp. *Governance* 9, (1), 83-99.
- Norris, G., O'Dwyer, B., 2004. Motivating socially responsive decision making: the operation of management controls in a socially responsive organisation, *British Account. Rev.* 36, 2, 173-196.
- Ormazabal, M., Sarriegi, J.M., 2012. Environmental Management Evolution: Empirical Evidence from Spain and Italy, *Bus. Strat. Environ.*, DOI: 10.1002/bse.1761
- Pérez, E. A., Ruiz, C. C., Fenech, F. C., 2007. Environmental management systems as an embedding mechanism: a research note, *Account. Audit. Account. J.* 20 (3), 403-422.
- Reefke, H., Trocchi, M., 2013. Balanced scorecard for sustainable supply chains: design and development guidelines, *International J. Productivity Perform. Manage.* 62, (8), 805–826.
- Riccaboni, A., Leone, E.L., 2010. Implementing strategies through management control systems: the case of sustainability, *International J. of Productivity Perform. Manage.* 59, (2), 130-144.
- Samkin, G., 2012. Changes in sustainability reporting by an African defence contractor: a longitudinal analysis, *Meditari Account. Res.* 20, (2), 134-166.
- Scapens, R.W., 1990. Researching Management Account. Practice: The Role of Case Study Methods, *British Account. Rev.* 22 (3), 259-281.
- Schaltegger, S., 2010. Sustainability as driver of corporate success, *Controlling-Zeitschrift (Controlling J.)* 22 Nos. 4/5, 238-43.
- Schaltegger, S., Gibassier, D., and Zvezdov, D., 2013. Is environmental management accounting a discipline? A bibliometric literature review, *Meditari Account. Res.* 21 (1), 4-31.
- Schaltegger, S., Wagner, M., 2006. Integrative management of sustainability performance, measurement and reporting, *Int. J. Account. Audit. Perform. Eval.* 3, (1), 1-19.
- Sharma, U., Kelly, M., 2014. Students' perceptions of education for sustainable development in the accounting and business curriculum at a business school in New Zealand. *Meditari Account. Res.* 22 (2), 130-148.
- Simons, R., 1995. *Levers of Control: How Managers use Innovative Control Systems to Drive Strategic Renewal*, Harvard Business School Press, Boston, MA.
- Snow, C.C., Thomas, J.B., 1994. Field Research Methods in Strategic Management: Contributions to Theory Building and Testing, *J. Manage. Stud.* 31 (4), 457-480.
- Stent, W., Dowler, T., 2015. Early assessments of the gap between integrated reporting and current corporate reporting. *Meditari Account. Res.* 23 (1), 92-117.
- Summerhays, K., de Villiers, C., 2012. Oil Company Annual Report Disclosure Responses to the 2010 Gulf of Mexico Oil Spill, *J. Asia-Pacific Centre Environ. Account.* 18, (2), 103-130.
- Virtanen, T., Tuomaala, M., Pentti, E., 2013. Energy efficiency complexities: A technical and managerial investigation, *Manage. Account. Res.* 24, 401-416.
- Yin, R., 1994. *Case study research: Design and methods* (2nd ed.). Beverly Hills, CA: Sage Publishing.