# The use of the Sustainability Balanced Scorecard Framework for Dutch SMEs as a tool for measuring the performance of their sustainability strategy

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#### **ABSTRACT**

A growing number of Dutch organizations nowadays combine their operations with the principles of sustainable business. There is a need, therefore, to adjust the ways performance in the field of sustainable practice is measured, to incorporate this trend. However, research has demonstrated that the use of performance measurement systems in SMEs (small- to medium-sized enterprises) is limited, especially regarding sustainability strategies. Given this observation, it can be argued that a structured approach to measuring performance in SMEs would improve strategic control. This study aims to analyze how managers of SMEs measure the results of their sustainability strategies, and in particular, where bottlenecks occur. Based on the results found, a Sustainability Balanced Scorecard Framework is developed. Using this Framework will allow managers of SMEs an easy, accessible way of measuring qualitative and quantitative results during the implementation of their sustainability strategy. During the implementation of this system, both direct and indirect stakeholders are involved in the entire process. This paper analyzes two cases, to illustrate that the Sustainability Balanced Scorecard Framework could be a powerful tool for Dutch managers to facilitate assessment of their implemented sustainability strategies.

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## Keywords

small- to medium-sized enterprises (SMEs); sustainability strategies; sustainability balanced scorecard; personal balanced scorecard; stakeholder engagement; performance measuring systems

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## 1. INTRODUCTION

Epstein and Roy (2001) found in a recent study that many Dutch SMEs recognize the importance of formulating a sustainability strategy – not only to take into account environmental impacts, but also to improve their own working conditions. The implementation of a sustainability strategy improves both internal and external social and environmental effects in many areas. However, when a strategy is established, its results must, of course, also be tracked and assessed. According to Murphy, Trailer and Hill (1996), "accurate performance measurement is critical to understand business success and failure" (p. 1). The measurement of performance has become especially important in modern management (Senge, Scharmer, Jaworski, & Flowers, 2008) - for example, keeping track of results is essential to gaining easier access to resources for the improvement of the strategy. The results also provide transparency for all stakeholders concerned, which in turn improves the performance of organizational processes (Moratis & Cochius, 2010). However, Hudson, Lean, and Smart (2001) found in a recent study that the general use of performance measures in SMEs is limited. Financial measurement systems are generally well developed - but operational measures lack formal structure and are typically ad hoc.

According to a study by the MVO Monitor (2015) (MVO – Maatschappelijk Verantwoord Ondernemen in Dutch – which translates as Corporate Social Responsibility in English) in collaboration with MVO Netherlands and Conclusr Research, it appears that the percentage of companies whose sustainability strategy includes measurable goals, decreases when the company size decreases (see figure 1). In the category of Dutch SMEs, there are still many organizations that do not measure their results at all. This is because there is a lack of a good method for measuring the performance of an implemented sustainability strategy (Winkler, 2009). In addition, sustainability strategies "includes issues which may be outside the direct control of the organisation, that are difficult to characterise and often are based on value judgements rather than hard data" (Keeble, Topiol, & Berkeley, 2003, p. 149).

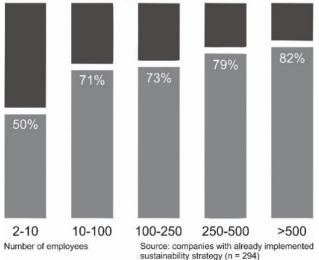


Figure 1. Percentage of companies whose sustainability strategy includes measurable goals. Source: MVO Monitor 2015

For a good, objective sustainability strategy performance measurement, it is also important to include all stakeholders (according to Collins English Dictionary, stakeholders are organizations or individuals that have an interest in any activity or decision of the organization) during the implementation. According to Moratis and Cochius (2010), the ISO 26000

standard states that: "stakeholder identification and engagement central to addressing an organization's social responsibility" (p. 98). However, there is still a long way to go in terms of integration among managers, employees and other stakeholders with respect to sustainability strategies. According to Rampersad (2006), "lack of engagement is endemic, and is causing large and small organizations all over the world to incur excess costs, underperform on critical tasks, and create widespread customer dissatisfaction" (p. 18). Figure 2 illustrates what percentage of Dutch companies involve their various stakeholders in the implementation of their sustainability strategy. Currently, top management alone is generally responsible for the sustainability strategy. Research by the MVO Monitor (2015) shows that 82.3% of organizations (n = 828) indicate that top management is responsible for the sustainability strategy; with just 8.7% of respondents stating that everyone in the organization is responsible for the strategy. However, to promote the integrity of sustainability strategies, it is obvious that the implementation of the required steps cannot only be the work of top management or a hired management consultancy (Winkler, 2009).

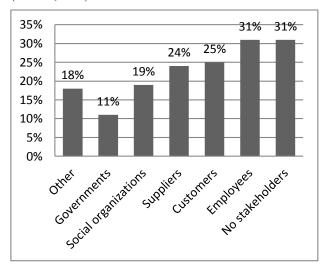


Figure 2. Types of stakeholder involvement at organizations with a sustainability strategy (N=291) - multiple answers possible. Source: MVO Monitor 2015

Winkler (2009) found in a recent study that the realization that mutual responsibility, motivation, inspiration, and integrity are important factors for an organization creates a practical problem: how can these 'vague' factors be measured? "What you cannot measure, you cannot manage". Moreover, it is difficult to ascertain a clear numerical relationship between hard proposed changes, and the associated costs; and secondly, to correlate the results in figures of revenue growth, cost savings, and so on. Developing a cost-benefit analysis, when it comes to downsizing, technological change, and improving infrastructure, is relatively easy. But when it comes to changes in mutual interaction, "posture", values, internal and external responsibility, and awareness of interconnectedness, then it suddenly becomes much harder to make a clear-cut analysis for costs, even though everyone might be aware that these changes are important.

Yet, given this importance, this research aims to identify the difficulties for SMEs to implement effective sustainability measurement systems and develops on this basis a comprehensive framework that allows SMEs to monitor progress, achieve sustainable goals and integrates sustainability strategies more with all stakeholders.

## 2. METHODS

"Increasing awareness is the start of all change - we have to start 'seeing our seeing' because we think we know what we see, but usually we only see what we want to see. 'Seeing our seeing' is just the beginning" (Senge et al., 2008, p. 2). Following this rationale, during this investigation, qualitative research methods will be used in order to gather as much information as possible from the organizations, and to figure out how SMEs undertake, and cope with, the measurement of the results of their implemented sustainability strategy. In-depth interviews with organizations in different sectors will be conducted; such an interview approach is used because this business topic requires exploration and the gathering of in-depth understandings from its research informants. In this form of qualitative research, the visual and verbal details are accurately recorded. This allows for the illustration of the various concepts which emerge (Belk, Fischer, & Kozinets, 2013).

The research is conducted among eleven Dutch SME organizations, which already have an implemented sustainability strategy. The sectors to which these companies belong are: 1. Retail, 2. Textile, 3. Chemistry, 4. Services, 5. Transport, 6. Tourism/recreation, 7. Care/welfare. These sectors differ from each other in terms of sustainability strategies, according to MVO Netherlands. Each sector has its own opportunities and associated risks, thus obtaining a variety of results regarding bottlenecks when assessing the implementation of the sustainability strategy. Hereafter, the results will be encoded to determine which problems are the most common. The results will be used to develop a framework which will stimulate the implementation of a performance measurement. After possible solutions have been found to facilitate the measurement of the results, the solutions will be analyzed within their respective organizations for two separate cases. It will then be assessed whether the framework can make a positive contribution to the organization. For example, it is checked whether the interviewees understand the framework, the implementation of the framework can be easily performed and what effects it could produce.

# 2.1 Theoretical Framework

In order to arrive at a suitable framework for evaluating sustainability strategies, several existing theories will be analyzed.

## 2.1.1 Balanced scorecard

As mentioned in section 1, sustainability strategies exist of many value judgments rather than hard data. In many scientific literature is therefore the "Balanced Scorecard" discussed as a method for the assessment of sustainability strategies. The term "Balanced Scorecard" refers to the classic Framework first described by Kaplan and Norton (1996). The classic Balanced Scorecard is a method by which the most important parts of an organization in a systematic manner can be measured. According to Figge, Hahn, Schaltegger, and Wagner (2002) The Balanced Scorecard supports the alignment of all business activities according to the strategic relevance by linking non-financial and operational business activities with causal chains to the longterm strategy of the organization. The classic Balanced Scorecard looks at the KPIs (Key Performance indicators) on four perspectives: Customers, Learning & Growth, Financial, and Internal Business Processes. Because both the qualitative and quantitative results can be displayed quickly and easily with this method, the Balanced Scorecard is suitable for use as a method for measuring sustainability strategies at Dutch SMEs. When creating a Balanced Scorecard, an organization should consider at each perspective the key performance indicators to achieve the vision and strategy of an organization (or at least consolidate).

According to Kaplan and Norton (1996) organizations that not work with the Balanced Scorecard often unaware of the actual work they performed. If they are going to measure things it often turns out that the results are not consistent with the strategic objectives. Using the Balanced Scorecard for the sustainability strategy, managers can clear (and measurable) formulate objectives , so that the sustainability strategy can be better implemented. According to Drury (2012), the Balanced Scorecard is not simply a collection of general performance measures. The measures are derived from an organizations' own strategy and objectives.

## 2.1.2 Personal balanced scorecard

To improve the integration of sustainability strategies internally within the organization, the use of the Personal Balanced Scorecard is analyzed.

The Personal Balanced Scorecard was developed in 2008 by Rampersad, and involves a personal evaluation of both work and non-work performance, based on self-examination. The Personal Balanced Scorecard provides for internal involvement in the person's work; when a PBSC is written, the employee gets a better idea what he or she is doing. The PBSC ensures that the employee gains more insight, is more pro-active and self-assured, and will think more clearly and learn faster. It encompasses the personal vision, objectives, critical success factors, performance measures, targets, key roles, and improvement actions of the employee. (Rampersad, 2008).

# 3. RESULTS

Eleven Dutch SME companies are investigated in this research, to find out why they do not, or barely, measure the results of their sustainability strategies. The results of the reasons uncovered, and the degree of the frequency of each of these reasons, are shown in figure 3.

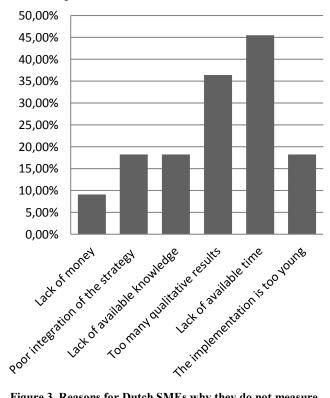


Figure 3. Reasons for Dutch SMEs why they do not measure their sustainability strategy results (N=11)

It appears that the lack of available time, and the difficulty in the measurement of the variety of qualitative results, are the two most important bottlenecks.

# 3.1 Sustainability Balanced Scorecard Framework

Dutch SMEs present the following issues in the assessment of their sustainability strategies: lack of stakeholder involvement; difficulty integrating the strategy throughout the organization; too many qualitative results regarding sustainability strategies, and too little time to pay close attention to these. As a solution to facilitate ease of implementation covering all these points, the Sustainability Balanced Scorecard Framework has been developed (see figure 4).

and product differentiation. The fifth perspective is also seen as an instrument through which an organization can focus on social and environmental responsibility as a core value; it makes a clear and strong commitment to these issues and goals.

# 3.1.2 Employee engagement

All employees are, in fact, essential for the proper functioning of the established strategy. Although strategies, policies, and procedures can be developed by central management, it is important that managers understand how important sustainability

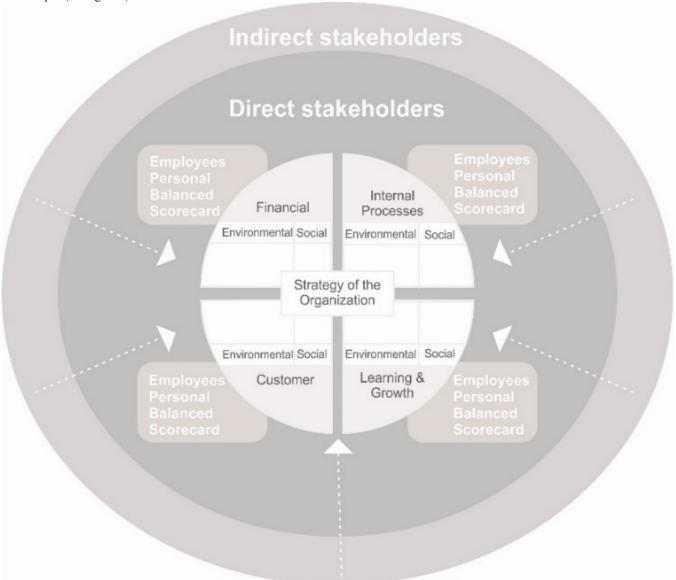


Figure 4. The Sustainability Balanced Scorecard Framework for Dutch SMEs

# 3.1.1 Environmental and social responsibility

At each point of this scorecard, a distinction is made between environmental and social issues. These indicators highlight the importance of environmental and social responsibility as an organizational objective (Epstein & Wisner, 2001). In 2008, Epstein and Buhovac also found that the fifth perspective is important for organizations that have identified sustainability as a core value. The fifth perspective should emphasize the importance of accountability, in term of sustainability, as a stated organizational goal. This provides competitive advantage through factors such as corporate image, enhanced reputation,

performance is for the whole organization. In the sustainability strategy, the diversity of talent and responsibilities of various departments should be visible – and at the same time, common values for the whole company should be created and established. Because of the importance of the involvement of the whole organization during the implementation of a sustainability strategy, the "Personal Balanced Scorecard" (PBSC) in included in the Sustainability Balanced Scorecard Framework to align the individuals' personal ambitions and goals with those of the organization. "Alignment means working through core values and critical success factors to link the organization's vision, mission and core values on the one hand with the individual's personal vision, mission, and core values on the other" (Angel & Rampersad, 2005, pp. 4-5).

## 3.2 Case Rent a Plant

There has been extensive qualitative research conducted by the organization Rent a Plant as to the actual operational practice of the Sustainability Balanced Scorecard Framework. Rent a Plant is an organization that provides and maintains interior landscaping throughout the Netherlands. Its emphasis is on the quality of the plants provided to the customer, and everything in the organization is designed towards maintaining the highest level service to the customer. Rent a Plant is one of the leading players in the field; their vision ensures that a good maintenance service system is in operation, to provide short arrival times with a high service level. The flat organizational structure means that there are short lines of communication, allowing for speedy response and appropriately efficient activity thereafter.

# 3.2.1 Sustainability balanced scorecard framework – rent a plant

Figure 5 shows the core part of the applied Sustainability Balanced Scorecard for the organization, across all five perspectives. For example, as part of the learning and growth perspective there is an effort to try to make suppliers more sustainable; as more organizations understand the "common journey" (the necessity for sustainability development), the whole business world moves towards sustainability (Moore & Manring, 2009). Thus, Rent a Plant indirectly makes its own contribution to sustainability in this respect.

In relative terms, given the number of employees, Rent a Plant has implemented a comprehensive sustainability strategy. Through the successful implementation of this strategy, a substantial core of the Sustainability Balanced Scorecard Framework has been developed. However, there is still room for improvement. The sustainability strategy of Rent a Plant is led by its two directors only. The other employees are allotted tasks and duties that reflect this commitment, but problem areas can be identified. In the future, Rent a Plant would like to have a strategy that is passed on to the entire organization. For this stakeholder and employee engagement, the Personal Balanced Scorecard will be a useful tool. According to the directors, diversity amongst the staff is very wide. There are two social workplace employees in the organization. This scheme accommodates in the workplace people with a disability, or who have been long-term unemployed. A social workplace employs people who are unable to work in a regular company, on account of either physical or mental disabilities, events and problems in their personal lives, or health problems. It appears that these two people do not enough understand the implementation of the sustainability strategy. It is therefore, according to the directors, very difficult for the organization to implement tasks that advance its implementation. According to to the board, it will be very useful therefore to introduce the use of a Personal Balanced Scorecard to improve the involvement of the employees. Employees can then easily display their interpretation of the sustainability strategy, and show what they think about the outcomes and benefits of the strategy. These results can then be compared with the results of the two board members who lead the sustainability strategy. These results can be analyzed to find out where the "gaps" in the integration of the sustainability strategy, throughout the organization, occur.

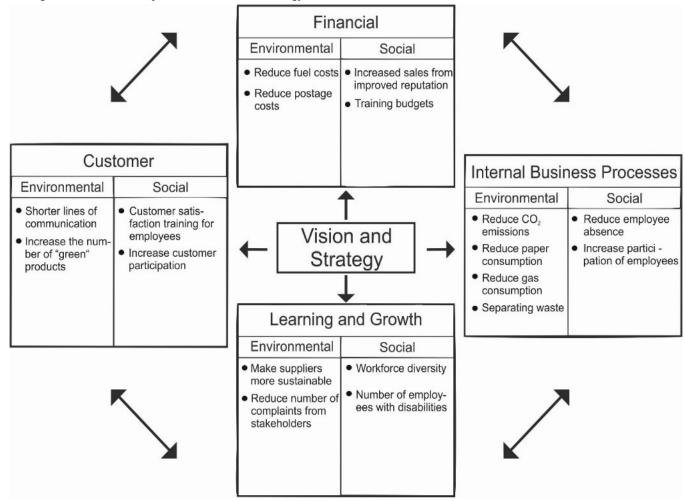


Figure 5. Core part of the applied Sustainability Balanced Scorecard for Rent a Plant

The integration of all stakeholders in the outcome measurement of Rent a Plant is very important. The two executives said that the internal sustainability can be implemented very successfully. However, the organization currently has a lot to do regarding unsustainable appointed stakeholders. For example, many of their business service firms (direct stakeholders) often send their correspondence by post. Additionally, the separation of waste is complicated by the government and municipality departments (indirect stakeholders) with which Rent a Plant has to deal . The limited number of available grants for sustainable products is also a major factor. To apply the Sustainability Balanced Scorecard Framework measurement results to both the external and internal area may help in the forming of a more complete picture and assessment of the entire sustainability strategy.

# 3.3 Dtex Solutions – a Sustainability Balanced Scorecard Example

There is also extensive qualitative research conducted by the organization Dtex Solutions, a digital textile organization. The organization exists since one year and has two distributors in the Netherlands. Dtex Solutions is part of Muta Sports BV.

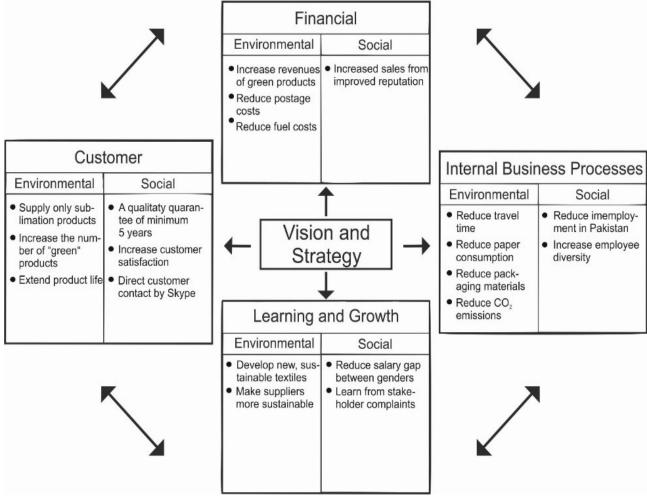
## 3.3.1 Sustainable sportswear

Dtex Solutions makes sportswear, all on sublimation basis. According to Collins English Dictionary, sublimation is the transition of a substance from the solid state to a gas phase without passing through the liquid state, As a result, sublimation inks have the ability to enter into a connection with polyester

surfaces. The sublimation technology ensures that sportswear is much more sustainable. For example, the imprint remains for years in good quality, so the clothes are not quickly thrown away. Another environmental advantage is, compared to classic print, the negligible consumption of water. The water consumption in the use of this technique is considerably reduced, which is good for the environment.

# 3.3.2 Sustainability balanced scorecard – dtex solutions

Dtex Solutions has its own production and design department in Pakistan, so the organization has little direct external stakeholders such as suppliers. The organization-specific core of the Sustainability Balanced Scorecard Framework (see figure 6) shows that Dtex Solutions is very busy with their sustainability strategy. They improve unemployment and working conditions in Pakistan, the two distributors work at home in order to reduce various expenses such as gas consumption and live/work travel expenses and most correspondence with customers and employees is via E-mail, Skype or phone so that there are no wasted paper and postage costs. The integration with the staff in Pakistan in the field of sustainability is very different from that at Rent A Plant. Communication lines by foreign production become much longer. The Pakistani employees just do their production work and get paid for this in accordance with good working conditions. Thinking of all employees with the implemented sustainability strategy therefore has no use, the employees can only say how they view the working conditions.



Fgure 6. Core part of the applied Sustainability Balanced Scorecard for Dtex Solutions

The Personal Balanced Scorecard has therefore in the case of Dtex Solutions not such a profitable effect. However, the two employees agree on working together in order to compare them with each other. Because the organization still exists one year, assessment of the implemented sustainability strategy is very difficult. Since the creation of the organization, it operates in a sustainable manner. However, the two Dutch employees are always searching for more sustainable solutions. For example, research is being done on a new kind of "green" type of fabric to make the current product range more sustainable. In this organization the Sustainability Balanced Scorecard Framework can therefore be applied, but they still has to wait for the real visible results. Although there are still not really clear results measurable, the two distributors do believe that the development of the framework is a good method to determine future measurable goals in an effective manner.

# 4. CONCLUSION AND DISCUSSION

Research has shown that many Dutch SME organizations find it difficult to assess their implemented sustainability strategy; there is mainly a shortage of time, too many qualitative points to assess and the strategy has not yet been integrated well with all stakeholders. A large company often has the resources to find answers from a number of people responsible for the development and presentation of results. However, many Dutch SMEs, because they are small companies, are more concerned with their profit margins and essential business than with the implementation of a sustainability strategy; it is often the case that all staff members are needed, at all times, to carry out the organization's necessary work.

The Sustainability Balanced Scorecard Framework is therefore a good practical solution for managers of Dutch SMEs in measuring the results of sustainability implementations, because it brings together all the problems in a simple, fast and inexpensive way to still achieve a good result. There is also good theoretical support for the execution of a sustainability strategy; however, to date, there has been no business management framework that has put together all the elements of this support despite the fact that the importance of such a model has been demonstrated theoretically. According to Harmon, Fairfield and Wirtenberg (2010), an effective implementation of sustainability strategy is associated with change management, people systems, and stakeholder and employee engagement. Therefore, the Sustainability Balanced Scorecard, is a system in which multiple existing models are combined, in the pursuing of a common goal, towards a better understanding and monitoring of the effects of implementing the strategy.

As mentioned above, completing the Sustainability Balanced Scorecard Framework takes generally little time, if the targets are already fully or partially known. However, for less experienced organizations or those just starting out with this task, it takes some time to analyze and determine the goals.

Judging by the outcomes for Dtex Solutions, small companies with few employees (two employees in this case) do not yet fully embrace the importance of the integration of the strategy throughout the whole organization. The integration of the Personal Balanced Scorecard has had, for this organization, little effect. However, the importance of the inclusion of internal and external stakeholders in the outcome measurements for the sustainability strategy is considered by the scientific literature as important. How big or small, inexperienced or experienced the organization is, stakeholder involvement is very important to the performing of a sustainability strategy.

In this article, the cases have not yet been fully schematically mapped on the basis of the framework. Only the core part of the framework is shown schematically. For future research, more extensive research can be done at the actual stakeholder identification and engagement of Dutch SMEs making it possible to show a larger schematic representation of the complete Sustainability Balanced Scorecard Framework.

As a final point, it was found, during the research process, that often an organization uses its sustainability strategy as a marketing tool, or simply because it wants to improve its own working conditions. This is in line with Masurel (2007) who argues that "improving the working conditions within the firm is the most important reason given by entrepreneurs in SMEs for investing in environmental issues" (p. 199). In addition, these days, many organizations are still focused solely on hard financial results. However, a well-executed sustainability strategy can indirectly create more profit, through for example, an improved reputation, and therefore could work in line with the organization's existing aims.

It would be a key subject for future research, to assess whether the targets set, and results measured, are actually associated with the desired results. By looking at this relationship, a better understanding could be formed of the effectiveness of the results measurement methodologies for sustainability strategies which have been implemented.

## 5. REFERENCES

- Angel, R., & Rampersad, H. (2005). Do scorecards add upp. CA Magazine, 138, 30-35.
- Belk, R., Fischer, E., & Kozinets, R. V. (2013). *Qualitative consumer and marketing research*. Thousand oaks, CA: SAGE Ltd.
- Drury, C. (2012). Management and cost accounting (8th ed.).
  Andover, United Kingdom: Cengage Learning EMEA.
- Epstein, M. J., & Buhovac, A. R. (2008). Making sustainability work: Best practices in managing and measuring corporate social, environmental, and economic impacts. San Francisco, CA: Berrett-Koehler.
- Epstein, M. J., & Roy, M.-J. (2001). Sustainability in action: Identifying and measuring the key performance drivers. *Long Range Planning*, 34, 585-604. doi:10.1016/S0024-6301(01)00084-X
- Epstein, M. J., & Wisner, P. S. (2001). Using a balanced scorecard to implement sustainability. *Environmental Quality Management*, 11(2), 1-10. doi:10.1002/tgem.1300
- Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002). The sustainability balanced scorecard: Linking sustainability management to business strategy.

  Business Strategy and the Environment, 11, 269-284. doi:10.1002/bse.339
- Harmon, J., Fairfield, K. D., & Wirtenberg, J. (2010). Missing an opportunity: HR leadership and sustainability. *People and strategy*, 33, 16-21.
- Hudson, M., Lean, J., & Smart, P. A. (2001). Improving control through effective performance measurement in SMEs. Production Planning & Control, 12, 804-813. doi:10.1080/09537280110061557
- Kaplan, R. S., & Norton, D. P. (1996). *The balanced scorecard: Translating strategy into action*. Retrieved from https://books.google.nl/books?id=mRHC5kHXczEC &printsec=frontcover&source=gbs\_ge\_summary\_r&c ad=0#v=onepage&q&f=false
- Keeble, J. J., Topiol, S., & Berkeley, S. (2003). Using indicators to measure sustainability performance at a corporate and project level. *Journal of Business Ethics*, 44, 149-158. doi:10.1023/A:1023343614973
- MVO Nederland. (2015). *Nationale MVO monitor 2015*. Retrieved from http://www.mvonederland.nl/publicatie/mvo-monitor-2015

- Masurel, E. (2007). Why SMEs invest in environmental measures: Sustainability evidence from small and medium-sized printing firms. *Business Strategy and the Environment*, 16, 190-201. doi:10.1002/bse.478
- Moore, S. B., & Manring, S. L. (2009). Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production*, 17, 276-282. doi:10.1016/j.jclepro.2008.06.00
- Moratis, L., & Cochius, T. (2010). *ISO 26000: Handleiding voor MVO*. Assen, The Netherlands: Van Gorcum.
- Murphy, G. B., Trailer, J. W., & Hill, R. C. (1996). Measuring research performance in entrepreneurship. *Journal of Business Research*, *36*, 15-23. doi:10.1016/0148-2963(95)00159-X
- Rampersad, H. (2006). Self-examination as the road to sustaining employee engagement and personal happiness. Performance Improvement, 45, 18-25. doi:10.1002/pfi.005
- Rampersad, H. K. (2008). The way to a highly engaged and happy workforce based on the personal balanced scorecard. *Total Quality Management & Business Excellence*, 19, 11-27. doi:10.1080/14783360701602155
- Senge, P. M., Scharmer, C. O., Jaworski, J., & Flowers, B. S. (2008). *Presence: Human purpose and the field of the future*. New York, NY: Broadway Business.
- Sublime. (n.d.). Collins English Dictionary Complete & Unabridged 10th Edition. Retrieved June 11, 2015, from Dictionary.com website: http://dictionary.reference.com/browse/sublime
- Winkler, P. (2009). Praktijkboek maatschappelijk verantwoord ondernemen: Naar een succesvol MVO-beleid. Bussum, The Netherlands: Coutinho.