

## Chapter 32

# Enhancing the Formation and Implementation of Sustainability Strategies Using the Balanced Scorecard: Evidence from the Chemical Industry

**Gyula Fülöp**

*University of Miskolc, Hungary*

**Marjan S. Jalali**

*University Institute of Lisbon, Portugal*

**Bettina H. Hernádi**

*University of Miskolc, Hungary*

**Ieva Meidutė-Kavaliauskienė**

*Vilnius Gediminas Technical University,  
Lithuania & University Institute of Lisbon,  
Portugal*

**Fernando A. F. Ferreira**

*University Institute of Lisbon, Portugal & University of Memphis, USA*

### ABSTRACT

*Given the strategic challenges of the 21st century, it becomes fundamental to determine strategic alternatives for sustainability. This chapter aims to contribute to the successful formation and implementation of corporate strategies for sustainability and business excellence, through the development and application of an extended Balanced Scorecard (BSC), which includes the social and environmental perspectives. We outline the structure for a Sustainability Balanced Scorecard (SBSC) as well as the steps required for its development. Elements for each of the different sustainability strategies of the SBSC are proposed and, finally, a case study of the formation and introduction of a “credible” sustainability strategy in the chemical industry is presented. The results demonstrate the usefulness of the SBSC in pursuing sustainability strategies, and provide evidence that the introduction of such a system is likely to lead to fundamental changes in the way a company is managed. Practical implications and managerial guidelines are also presented.*

DOI: 10.4018/978-1-4666-8348-8.ch032

## INTRODUCTION

Companies in the 21st century not only face the same strategic considerations and choices which firms have had to deal with for decades, they are also forced to grapple with a series of demanding new trends of ever growing significance. Today, coming out of a global financial crisis, issues such as rapid industry transformations, sustainability, labor force diversity, ethical competences, shifting economic power centers, climate change and the sophistication of customer demands, constitute central concerns for most companies, and a significant influence on their chosen strategies (Eben-Chaïme, 2013; Garvare & Johansson, 2010; Peters, Heng, & Vet, 2002; Rialp-Criado, Galván-Sánchez, & Suárez-Ortega, 2010). As these issues combine to interact, increasing the turbulence of the external environment, strategy-making becomes ever more important, not only to help companies stay afloat, but to contribute to their successful operations (*cf.* Asif, Searcy, Garvare, & Ahmad, 2011; Cherp, Watt, & Vinichenko, 2007; Kardos, 2012; Sminia, 2005). Within this strategy making, innovation and sustainability are increasingly important requirements; which for the majority of companies will be soon the most important factors of their competitiveness (Fink, Marr, Siebe, & Kuhle, 2005; Ghazinoory & Soofi, 2012; Hubbard, 2009; Liming, Haque, & Barg, 2008; Volkery, Swanson, Jacob, Bregha, & Pintér, 2006; Wynder, 2010).

In this new context of greater complexity, volatility and interconnectedness, the “old rules of the game” are unlikely to be sufficient. Indeed, the rules themselves are often changing and/or being reinvented in the search for competitiveness (Kim & Mauborgne, 2004). Producing a standardized product using established processes and procedures will seldom lead to competitiveness. Rather, firms need to be constantly innovating, creating new products and re-inventing themselves or even the industry, in search of a sustainable competitive advantage. Compounding this challenge is

having to do so while having not only economic concerns, but social and environmental preoccupations as well – *i.e.* a sustainability perspective (Gopalakrishnan, Yusuf, Musa, Abubakar, & Ambursa, 2012).

According to Kerekes and Kindler (1997), and Wynder (2010) sustainability strategies are those which focus on corporate activities that regard the issue of sustainability as a chance for development and growth in the company, and so are strengthened in all the company’s fields of activity. Despite much debate around it, “*the concept of sustainable development [...] has had a significant and lasting impact on the development agenda in the last decades, from global to local*” (Kardos, 2012, p. 1167). Notwithstanding, in many circles there is still a belief that the more environmentally friendly a company becomes, the more it loses in overall competitiveness. This rests on the (mis) conception that securing sustainability can only be achieved through extra costs and without any immediate financial benefits. In reality, however, sustainability can be an abundant source of organizational, product and technological development, with positive effects on a company’s revenues and profitability (Kardos, 2012). In potential, the search for sustainability can lead to innovation; and innovation can lead to greater sustainability.

What is needed, then, is the ability to creatively combine innovation with sustainability, so that firms may fully exploit the opportunities presented to them and achieve sustainable competitive advantages. This, in turn, requires a strategic framework that will allow such efforts to be planned, directed, implemented and measured. This paper builds on previous work of Bieker (2003), and Fülöp and Hernádi (2012) to develop and apply a modified version of the Balanced Scorecard (BSC), which includes the social and environmental perspectives, and can help firms achieve this.

The remainder of this paper explains the theoretical grounding for the proposed framework; uses that theory to develop the proposed extension to the BSC; and finally describes the adoption and

25 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:  
[www.igi-global.com/chapter/enhancing-the-formation-and-implementation-of-sustainability-strategies-using-the-balanced-scorecard/130542](http://www.igi-global.com/chapter/enhancing-the-formation-and-implementation-of-sustainability-strategies-using-the-balanced-scorecard/130542)

## Related Content

---

### The Impact of Frugal Innovation on Social Sustainability and the Guiding Role of the Sustainable Development Goals (SDGs) in the Digital Era

Syed Haider Ali Shah, Muhammad Jaffer, Eman Zameer Rahman and Arslan Asif (2023). *Frugal Innovation and Social Transitions in the Digital Era* (pp. 1-8).

[www.irma-international.org/chapter/the-impact-of-frugal-innovation-on-social-sustainability-and-the-guiding-role-of-the-sustainable-development-goals-sdgs-in-the-digital-era/315140](http://www.irma-international.org/chapter/the-impact-of-frugal-innovation-on-social-sustainability-and-the-guiding-role-of-the-sustainable-development-goals-sdgs-in-the-digital-era/315140)

### Microfinance and Entrepreneurship in Nigeria: A Macro Analysis

Babajide Abiola Ayopo, Lawal Adedoyin Isola, Taiwo Joseph Niyan and Akinjare Victoria Bosede (2018). *Microfinance and Its Impact on Entrepreneurial Development, Sustainability, and Inclusive Growth* (pp. 65-84).

[www.irma-international.org/chapter/microfinance-and-entrepreneurship-in-nigeria/206371](http://www.irma-international.org/chapter/microfinance-and-entrepreneurship-in-nigeria/206371)

### Towards Digital Economy: The Impact of Electronic Banking on Customer Satisfaction among the Pakistan Banking Industry

Muhammad Zahid, Muhammad Jehangir and Naveed Shahzad (2012). *International Journal of E-Entrepreneurship and Innovation* (pp. 34-46).

[www.irma-international.org/article/towards-digital-economy/75439](http://www.irma-international.org/article/towards-digital-economy/75439)

### Collaborative Social Networks: Effect of User Motivation, Cognition, and Behavior on User Participation

Yulin Chen (2019). *Journal of Media Management and Entrepreneurship* (pp. 57-72).

[www.irma-international.org/article/collaborative-social-networks/220050](http://www.irma-international.org/article/collaborative-social-networks/220050)

### The Diffusion of Innovative Practices Among Meat Retailers in Northern Greece: "Think Meal Not Meat"

Philippos Papadopoulos (2011). *International Journal of E-Entrepreneurship and Innovation* (pp. 35-45).

[www.irma-international.org/article/diffusion-innovative-practices-among-meat/58355](http://www.irma-international.org/article/diffusion-innovative-practices-among-meat/58355)