


Chapter 6

Steering Sustainable Logistics Performance in the Large-Scale Retail Sector: Towards an Integrated Approach Via the Balanced Scorecard

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ABSTRACT

This chapter explores the use of Balanced Scorecards to manage sustainable logistics performance in the retail sector. It aims to integrate the issues of sustainability, digital transformation and crisis management. A literature review identifies four key dimensions (economic, social, environmental, governance) and mechanisms (digital technologies, circular economy, carbon footprint reduction, sustainable governance). The Logistics Balanced Scorecard (LBS) is proposed as a strategic tool for balancing priorities and fostering sustainable value creation. The results of the literature review highlight four main dimensions for steering sustainable logistics

DOI: 10.4018/979-8-3373-2434-0.ch006

performance: economic, social, environmental and governance. Key mechanisms include the integration of digital technologies, the adoption of circular business models, the reduction of the carbon footprint, and the implementation of sustainable governance policies. The corresponding KPIs measure cost efficiency, stakeholder satisfaction, reduction of CO₂ emissions, and transparency in sustainability reporting.

INTRODUCTION

The Large-Scale Retail Sector- also known as “Mass Retail”, “Large-scale Retail”, “Supermarket”, “Superstores”, “Large Retail Stores” or even “Mini-marts”- a pillar of the modern economy, is today facing logistical challenges of an unprecedented magnitude. The increasing complexity of supply chains, increased consumer demands for speed and personalization, and most importantly, the sustainability imperative are putting considerable pressure on businesses (Christopher, 2016). In this context, the management of overall supply chain performance (SCM) has become a major strategic issue, requiring an integrated and multidimensional approach (Mentzer et al., 2001), and particularly in the Large-Scale Retail Sector (Jaouad, 2017; SABIR, 2020).

The interest of this research lies in its timeliness and relevance to contemporary issues. Large-Scale Retail Sector companies are increasingly aware of the need to optimize their logistics performance economically, socially, and environmentally (Elkington, 1997). Digital transformation, with the rise of e-commerce and the use of technologies such as artificial intelligence and the Internet of Things, offers new opportunities to improve the efficiency and sustainability of supply chains, in particular in the Large-Scale Retail Sector. At the same time, crisis management, whether it is a pandemic, natural disaster or geopolitical disruption, has become an essential skill for ensuring the resilience of supply chains. Recent studies (Henrich et al., 2023) show that companies that invest in a sustainable and agile MGS perform better in the long term, both financially and in terms of reputation.

Despite the importance of the topic, several scientific gaps persist in the existing literature. On a theoretical level, traditional SCM models do not always take into account the complexity of large-scale retail supply chains, nor the specificities of sustainability and digital transformation issues (Heckmann et al., 2015). Methodological approaches are often limited to the financial aspects of performance, neglecting social and environmental dimensions (Hofmann, 2010). Empirically, the studies are often sectoral and do not allow to generalize the results to the whole of Large-Scale Retail Sector (Boyer & Verma, 2010).

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