

Chapter 5

Benchmarking Sustainability Performance of Organizations Using a Multicriteria Approach With Application to Canadian Market

Abbas Tavassoli

Concordia University, Canada

ABSTRACT

In this chapter, the authors propose a multi-criteria framework for benchmarking sustainability performance of organizations. The indicators for evaluation are obtained using sustainalytics database. Multicriteria decision making technique called TOPSIS (Technique for Ordered Preference by Similarity to Ideal Solution) is used to generate organization rankings. The proposed technique is applied to evaluate performance of 24 companies in two major sectors: manufacturing and service. The selected companies come from the Canadian market. The results of TOPSIS study show manufacturing sector to be doing better than the service sector with average relative closeness (C_i) of 0.5 and 0.36, respectively. Future work can involve integration of financial KPIs, cross-sector investigation and involvement of MCDM techniques such as AHP for weighting in the proposed study.

INTRODUCTION

Sustainability is about improving our standard of living by protecting human health, conserving the environment, using resources efficiently and advancing long-term economic competitiveness (Sustainable Development, 2017).

There is no doubt extra costs occur when organizations start the transformation towards implementing green strategies. Regardless of the ultimate propose of the green initiatives companies are undertaking, adoption of green/sustainable practices may initially result in reduction of financial benefits, increasing

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the processing costs and slowing down the market growth. However, once the environmental management system is well developed, long term benefits along with several business advantages may compensate the initial cost.

As Pryce (2002) puts it, five major elements exert pressure on organizations to engage them in more socially and environmentally conscious operations. These factors are: customer pressure, changes in business procurement, government legislation and pressure, the rise of socially responsible investment, and the changing expectations of employees.

Depending upon the organizational culture, the process of incorporating the aforementioned drivers into strategic sustainability behavior encounters different responses including: resistant, reactive, anticipatory, and innovation-based to sustainability-rooted (Klewitz & Hansen, 2014). Unless it is truly part of the fundamentals of a corporate strategy, corporate social responsibility has no real meaning for an organization. Many initiatives have been put forth by organizations in this regard. For example, green design, green procurement, green production, green distribution and warehousing, and reverse logistics etc. These initiatives have not only helped achieve environmental goals but also assisted in business performance improvement and gaining competitive edge in the market.

Therefore, organizations are more and more interested in developing their sustainability performance. Sustainability performance measurement meets this need by providing corporations with information needed to help in the short and long-term management, controlling, planning, and performance of the economic, environmental, and social activities carried out by the corporation (Medel-González et al., 2016). A critical element of this activity is identification of measurement metrics that synchronizes the organizational effort towards sustainable development. GRI (Global Reporting Initiative), DJ (Dow Jones), CK (Corporate Knights) and Sustainalytics are examples of few initiatives who provide a comprehensive set of Key Performance Indicators for corporate sustainability measurement.

The goal of the authors in this research paper is to develop a framework for benchmarking sustainability performance of organizations. This involves:

- Identification of KPIs, criteria or indicators for measuring sustainability performance of organizations.
- Development of a benchmarking model based on a multi-criteria framework and the selected KPIs to rank the sustainability performance of organizations.
- Execution of the benchmarking model using real data for manufacturing and service sector companies based on Canadian market and generate recommendations. (Awasthi, et al., 2010); (Awasthi, et al., 2016); (Awasthi, et al., 2018); (Gold & Awasthi, 2015).

The rest of the paper is organized as follows. Section 2 presents the literature review. The solution approach is presented in section 3 followed by numerical application in section 4. Finally, the conclusions and future works complete the paper in section 5.

LITERATURE REVIEW

As first outlined by Kaplan and Norton in 1992, the Balanced Scorecard (BSC), is a strategic management tool to both operationalize and measure strategies of a company or its units (usually strategic business units), but may also be used as a comprehensive management system which cascades down

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