Chapter 15 Sustainability: A Comprehensive Literature

Aroop Mukherjee Universiti Putra Malaysia, Malaysia **Gowri Vijayan** Universiti Putra Malaysia, Malaysia

Nitty Hirawaty Kamarulzaman Universiti Putra Malaysia, Malaysia Selvakkumar K. N. Vaiappuri Universiti Putra Malaysia, Malaysia

ABSTRACT

Sustainability has become vital aspects for today's world and the future to come. Various definition of sustainability have added to the confusion with respect to sustainability in people's mind and in the organizations. A collection of different sustainability frameworks, indicators and tools have provided important insights about the outcomes of the sustainability process and in providing analytical and logical designs for sustainability. However, implementing sustainable practices has been overlooked by the majority of the organizations. Identifying the challenges and integrating with the tools in the form of indicators, assessment, and strategies will be a good start for an organization to be sustainable. The organizations that develop and implement sustainable practices are recognized as a success in sustainability. This chapter aims to provide an outline for sustainability with strategies, assessment, indicators, and application for better products and create and maintain business and customer value.

INTRODUCTION

Well-being has always been correlated with real asset value. The important aspects that must be emphasized are to articulate the concerns about sustainability or sustainable development. With the Brundtland Report (1987), there was little doubt about the relevance of the term "sustainable development" within the contemporary debates on development policy and more specifically the environment and resources policy (Atkinson, 2008). However, the term sustainability and sustainable development have conveyed different meanings to a different sector of people about current decision that affect the well-being of the people of the future (Atkinson, 2008). Still, many scholars still cite the famous definition from the Brundtland Report for sustainable development as:

DOI: 10.4018/978-1-4666-9639-6.ch015

Sustainability

Development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. (WCED, 1987, p. 43)

The predominant approach is to bring the concept of sustainability and sustainable development from the literature to practical aspects and redefine within a particular context. Many factors make the implementation of sustainability difficult and draw conclusions from current literature. Rather, many concepts of sustainability have being proposed to reflect the major issues. Different approaches have different implications for the way in which the issues are handled and draw some conclusions. The triple bottom line approach is well known in terms of identifying the different indicators of economic, social, and environmental concerns presented as heterogeneous units. This will provide a link for empirical and policy framework on the basis of the principles of accounting and sustainability concepts as the Global Reporting Initiative (GRI) in 1999.

Companies, governments, and non-government organizations (NGOs) usually use the triple bottom line model for sustainability issues. The three pillars, namely social, economic, and environmental are the backbone of the triple bottom line used for sustainability aspects. Sustainability will influence with, related to context, innovation by itself, process and capacity to sustain (Wiltsey Stirman *et al.*, 2012). Sustainability should be adopted as a goal for the organization. The comprehensive activities of the organization must be sustainable. It is the governing body that plays different characters in creating sustainability, instead than in adopting sustainability as a societal goal (Jennings & Zandbergen, 1995). According to the US National Academy of Science, people are related to the social system, profit with economic systems and finally planet in the environmental system.

Thus, the three pillars are known as triple bottom line (TBL) or 3Ps (People, Planet, and Profit) and its solution can be achieved by balancing the 3Ps. Priorities must be set to achieve the 3Ps so that one P can gain profit with the expenses of another in which each P is important and crucial. It shows that the sustainability has multi-actor characteristics in nature. Thus, according to Achman (2011), sustainability is not a top down solution to balance the 3Ps, but rather it is a consensus solution where stakeholders are involved in the decision-making process. Mulder (2006) defines the 3Ps as follows:

- **Planet:** Reaching a balance between the environmental burden and the capacity of the earth to carry environmental burdens.
- **People:** Deals with the communities and workers who have a stake in organization activities.
- **Profit:** All economic activities must create prosperity for the organization as well as well-being for the employers. It is necessary to distinguish between short-term and long-term perspectives.

Gradually, sustainability or sustainable development has evolved further and influenced many activities from policy, technology, and the economy on a daily basis. This has created an environment and involvement of different stakeholders in developing and managing the 3Ps, which became important and played a crucial role in the successful planning and implementation of sustainability activities in the organization. Mulder (2006) states the basic principles that describe sustainable activity areas as:

- 1. Consumption of resources should be optimum
- 2. Consumption of non-renewable materials should be closed
- 3. Renewable materials and energy sources should be given preferences

19 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/sustainability/141147

Related Content

Information Transmission with Quality of Service

Manjunath Ramachandra (2010). Web-Based Supply Chain Management and Digital Signal Processing: Methods for Effective Information Administration and Transmission (pp. 262-275). www.irma-international.org/chapter/information-transmission-quality-service/37619

QTDFS-ALOHA: A Hybrid Collision Resolution Protocol for Dense RFID Tag Environment Xinqing Yanand Zhouping Yin (2010). *International Journal of Applied Logistics (pp. 67-82).* www.irma-international.org/article/qtdfs-aloha-hybrid-collision-resolution/38929

Integrated Production, Inventory, and Location-Allocation Decisions in Designing Supply Chain Networks

Sepideh Alavi, Nader Azad, Mojtaba Heydarand Hamid Davoudpour (2016). *International Journal of Information Systems and Supply Chain Management (pp. 22-42).*

www.irma-international.org/article/integrated-production-inventory-and-location-allocation-decisions-in-designing-supply-chain-networks/165507

Representing, Modeling and Engineering a Collaborative Supply Chain Management Platform Yves Wautelet (2012). *International Journal of Information Systems and Supply Chain Management (pp. 1-23).*

www.irma-international.org/article/representing-modeling-engineering-collaborative-supply/68420

Evaluation of Influence of Principles Involved in Industry 4.0 Over Coal Industries Using TISM Bathrinath Sankaranarayanan, Rahul K., Pradeep J., S. G. Ponnambalamand Saravanasankar S. (2019). Industry 4.0 and Hyper-Customized Smart Manufacturing Supply Chains (pp. 244-262).

www.irma-international.org/chapter/evaluation-of-influence-of-principles-involved-in-industry-40-over-coal-industries-using-tism/230669