

# Business Sustainability Indices

**B**

**Arunasalam Sambhanthan**  
*Curtin University, Australia*

## INTRODUCTION

Sustainability indices are integral part of measuring the process level variables in an organism (i.e. county, region, city, industry, organization, business unit). The documented literature has less evidence for targeted indices developed for measuring specific industry clusters / organizational units. In fact, there are indices which are developed by researchers to measure the sustainability in a country or regional level (Böhringer & Jochem, 2007). These indices are meant to assess the sustainability at policy level applicable for countries and organizations in general. However, there is a considerable research gap in terms of indices which are developed for measuring the ICT Business Sustainability. This paper aims at reviewing the existing sustainability indices in the body of literature.

## BACKGROUND

Business Sustainability research has been tremendously progressed. However, it is still a question as to how well the concept of business sustainability has been theorized. Theorizing business sustainability has a number of challenges to be tackled in terms of which aspects are critical for sustainability and which are not. Therefore, it is essential to have a theoretical model as the basis for theorizing business sustainability elements. This paper reviews the two types of theoretical models available in the business sustainability research namely the sustainability hierarchy and business sustainability typology. The relevance of the concept of sustainability to business domain is paramount.

DOI: 10.4018/978-1-5225-2255-3.ch053

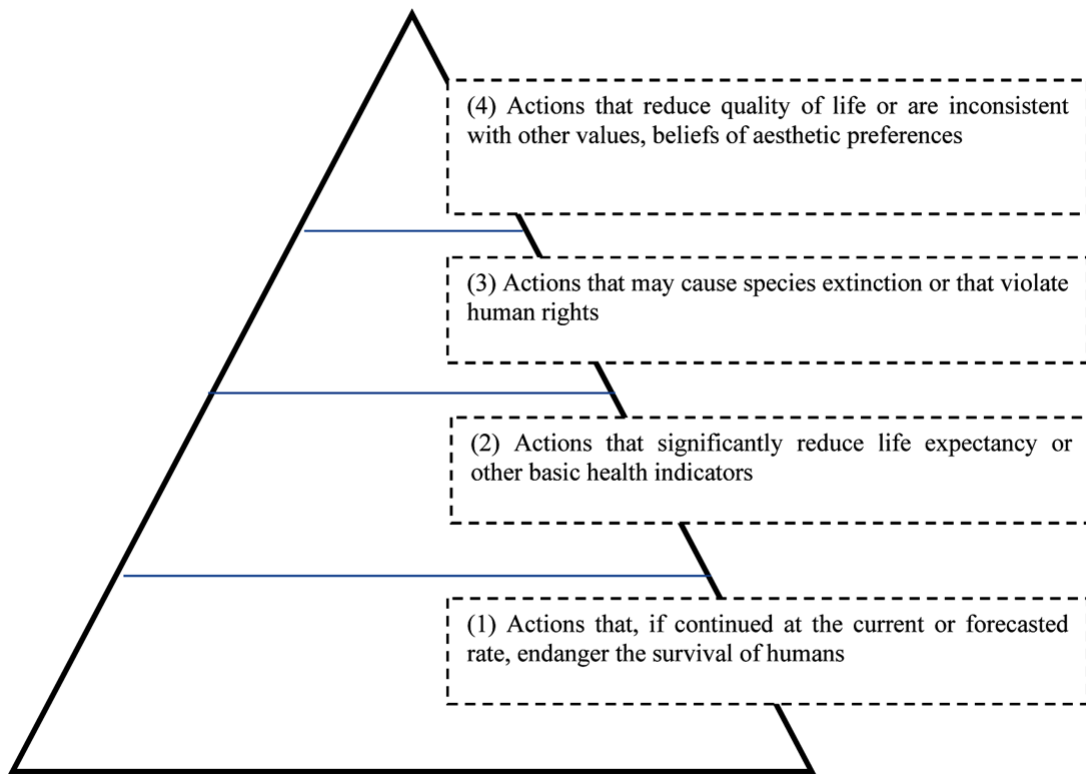
## THE SUSTAINABILITY HIERARCHY

Four sustainability frameworks have been identified as ‘ambiguous with regard to what is being sustained’. The label ‘unsustainable’ has been categorized into four levels of actions which prevent sustainability of any kind. This led towards the development of a Sustainability hierarchy (Marshall & Toffel, 2005) which was constructed using several distinct but related concepts (refer to Figure 1).

The above hierarchy is an action centered hierarchy which looks at the sustainability from a hierarchical model as depicted above. The model is based on the hierarchy of needs theory propounded by Abraham Maslow. The needs theory indicates that the satisfaction of lower level needs leads towards the higher level need in the hierarchy. The same metaphor is applied here for environmental sustainability in this context. The achievement of a lower level environmental metric leads to the achievement of the higher level one in the hierarchy.

The main shortcoming of this model in terms of applying to business sustainability is its lack of specialization to business domain. The model is named as sustainability hierarchy which could be applied to anything which has the ability to be applied to the sustainability research. Therefore, the above model is argued to be not contextually relevant for assessing and benchmarking sustainability in organizations. A definition of business sustainability goes as “adapting business strategies and activities that meet the needs of the enterprise and its stakeholders today while protecting, sustaining and enhancing the human and natural resources that will be needed in the future” (International Institute of Business

*Figure 1. Business sustainability hierarchy*



Sustainability). Therefore, the following section focuses on reviewing the business sustainability typologies out there in the literature.

## **THE SYSTEM BASED SUSTAINABILITY BUSINESS MODELS**

Models to assess business sustainability have been less documented in the literature. Besides industry specific frameworks there are a number of common frameworks out there in the literature such as the European Corporate Sustainability Framework (ECSF) (Costanza & Patten, 1995), there have been less documented models out there in the published literature to assess and benchmark business sustainability. The industry specific frameworks and the ECSF all could be classified as frameworks than of models. The System Based

Sustainability Business Model documented by (Dyllick & Muff, 2013) has four characteristics such as economic characteristics, environmental characteristics, social characteristics and multidimensional or social characteristics – each of which is attributed into two attributes namely structural attributes and cultural attributes.

There are a number of structural attributes that have been found within the economic characteristics. For example, bodies external to the organisation that keep track of performance of the companies that uses a triple bottom line approach and the government that keep track of changes to taxation system and legislation to support sustainability and local shareholders and investment in local sustainability initiatives. The environmental characteristics consists of structural attributes such as a threefold strategy which offsets (do no harm but make amends if you do), sustainable (do no harm), restorative (leave the world better than you

9 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/business-sustainability-indices/183775](http://www.igi-global.com/chapter/business-sustainability-indices/183775)

## Related Content

---

### The Importance of Systems Methodologies for Industrial and Scientific National Wealthy and Development

Mirosljub Kljajic (2010). *International Journal of Information Technologies and Systems Approach* (pp. 32-45).

[www.irma-international.org/article/importance-systems-methodologies-industrial-scientific/45159](http://www.irma-international.org/article/importance-systems-methodologies-industrial-scientific/45159)

### Supporting the Module Sequencing Decision in ITIL Solution Implementation: An Application of the Fuzzy TOPSIS Approach

Ahad Zare Ravasan, Taha Mansouri, Mohammad Mehrabioun Mohammadiand Saeed Rouhani (2014). *International Journal of Information Technologies and Systems Approach* (pp. 41-60).

[www.irma-international.org/article/supporting-the-module-sequencing-decision-in-til-solution-implementation/117867](http://www.irma-international.org/article/supporting-the-module-sequencing-decision-in-til-solution-implementation/117867)

### Learning From Imbalanced Data

Lincy Mathewsand Seetha Hari (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 1825-1834).

[www.irma-international.org/chapter/learning-from-imbalanced-data/183898](http://www.irma-international.org/chapter/learning-from-imbalanced-data/183898)

### Random Search Based Efficient Chaotic Substitution Box Design for Image Encryption

Musheer Ahmadand Zishan Ahmad (2018). *International Journal of Rough Sets and Data Analysis* (pp. 131-147).

[www.irma-international.org/article/random-search-based-efficient-chaotic-substitution-box-design-for-image-encryption/197384](http://www.irma-international.org/article/random-search-based-efficient-chaotic-substitution-box-design-for-image-encryption/197384)

### Prominent Causal Paths in a Simple Self-Organizing System

Nicholas C. Georgantzasand Evangelos Katsamakas (2012). *International Journal of Information Technologies and Systems Approach* (pp. 25-40).

[www.irma-international.org/article/prominent-causal-paths-simple-self/69779](http://www.irma-international.org/article/prominent-causal-paths-simple-self/69779)