

Accepted Manuscript

Sustainability assessments and their implementation possibilities within the business models of companies

Habil. Ani Melkonyan, Dennis Gottschalk, Vasanth Kamath V.P

PII: S2352-5509(17)30013-1

DOI: <http://dx.doi.org/10.1016/j.spc.2017.04.001>

Reference: SPC 89

To appear in: *Sustainable Production and Consumption*

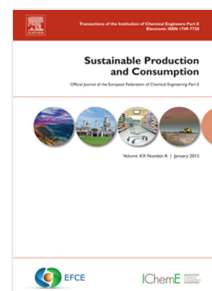
Received date: 10 January 2017

Revised date: 13 April 2017

Accepted date: 24 April 2017

Please cite this article as: Ani Melkonyan, H., Gottschalk, D., Kamath V.P, V., Sustainability assessments and their implementation possibilities within the business models of companies. *Sustainable Production and Consumption* (2017), <http://dx.doi.org/10.1016/j.spc.2017.04.001>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Sustainability assessments and their implementation possibilities within the business models of companies

PD. Dr. habil. Ani Melkonyan (Corresponding Author)¹

Dennis Gottschalk²

Vasanth Kamath V.P³

¹Associate Professor at the University of Duisburg-Essen, Centre for Logistics and Traffic, Address: Oststraße 99, 47057 Duisburg, Germany, Mob.: +49 162 93 26 391, E-mail: ani.melkonyan@uni-due.de

²innogy Consulting, Address: Lysegang 11 ,45139 Essen, Germany, Mob.: +49 162 2532508, E-mail: dennis.gottschalk@innogy.com

³Assistant Professor - Operations, TA Pai Management Institute in Manipal, Address: PB. NO. 8, Manipal, 576104, Karnataka State, India, Phone: +91 948 142 5812, E-mail: vasanth@tapmi.edu.in

Abstract

The companies having implemented sustainability concepts ensure that the sustainability issues are well understood and are acted on. But many of these issues are very complex and firstly they have to be identified. Further, the interrelations among these factors should be clearly defined. So, the main aim of the given study is to identify the factors influencing the sustainability of corporate businesses and to analyse the probable mechanisms to react upon changing boundaries making the businesses resilient towards both political and social pressures, as well as to the environmental changes.

For this analysis, (a) literature review on sustainability and resilience within the business models of the companies has been carried out, studying various indicator catalogues and sustainability indices; (b) trends and developments of sustainability practices in companies have been reviewed presenting various organizational sustainability models; (c) business models have been checked for their sustainability and innovation potentials.

In order to combine the analysis on business models and their innovation dependent on sustainability parameters, their interlinkages and dynamical changes, System Dynamics Model has been applied to capture the major feedback mechanisms within the system of business models, firstly building a mental Causal Loop Diagrams (CLD), afterwards transforming them into a Stock and Flow Diagram (SFD), which is then the basis for simulation. For simulation purposes an Energy Utility has been used as a case study.

The simulation results, showing that a sustainability transition delay has to be modelled with adjustment delay, refer to the fact that the lower adjustment delay time is, the more pressure is exerted on the system to adapt to the change, causing a turbulence within the implementation

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات