Call for Papers for Special Volume of the Journal of Cleaner Production on Business Experimentation for Sustainability

Nancy Bocken a,b, Ilka Weissbrod c and Maria Antikainend

- ^a The International Institute for Industrial Environmental Economics (IIIEE), Lund University, P O Box 196, SE-221 00 Lund, Sweden
- ^bTU Delft Faculty of Industrial Design Engineering, Landbergstraat 15, 2628 CE Delft, Netherlands
- ^c Centre for Sustainability Management, Leuphana University Lüneburg, Universitätsallee 1, 21335 Lüneburg, Germany
- ^d VTT Technical Research Centre of Finland Ltd Tampere, P.O. Box 1300, 33101 Tampere, Finland

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1. Introduction

This Virtual Special Issue (VSI) explores 'business experimentation for sustainability' as an approach to accelerate sustainability transitions in business. It aims to create understanding on the concepts; methods, strategies and approaches; and ways of implementing business experimentation for sustainability. Natural resource and climate challenges are becoming increasingly urgent and businesses need to adapt their way of generating social, environmental and economic value (Epstein, 2018). Experiments can produce learning about pressing sustainability challenges and aim to generate evidence-based actionable knowledge (Caniglia et al., 2018). The purpose of business experimentation for sustainability (BES) is to learn about aspects of novel products, services and ways of sustainable value generation with limited risks and resources (Antikainen et al., 2017; Bocken et al., 2018; Weissbrod and Bocken, 2017).

Applied during the corporate innovation process, BES is an essential corporate capability to quickly test new value offerings (Weissbrod and Bocken, 2017). Coupled with continuous and collective learning with stakeholders, BES has been positioned as a potential way for large business to accelerate business model innovation for sustainability (Antikainen et al., 2018; Bocken et al., 2018). Business model experimentation may also be a way to operationalize principles of the Circular Economy in businesses (Antikainen et al., 2017). Common to all these recent BES research strands is that, compared to large scale pilots, experiments are smaller in scale and resource use (Osterwalder et al., 2014) and experimental learning is iterative (Ries, 2011; Tuulenmäki and Välikangas, 2011).

In the natural sciences, experiments typically happen in a controlled environment. In contrast, in established businesses factors and activities such as responding to immediate financial pressures and the need to attend to the current customer base hinders the potential to control experiments (Weissbrod and Bocken, 2017). Challenges to control experiments in the sustainability context lead to uncertainty of outcomes (Caniglia et al., 2017). At the same time, the governance of experiments becomes more important as controllability of experiments decreases (Hildén, 2017).

A deeper understanding of BES is necessary to gain comprehension on how evidence-based actionable knowledge can be created, in order to solve urgent sustainability challenges. Research is needed to understand the BES concept; ways in which BES can be implemented; and how it can help accelerate sustainability transitions in business. The purpose of this

Journal of Cleaner Production VSI 'Business Experimentation for Sustainability' is to start addressing this important gap in the sustainable business research.

Following the overall aim of sustainable development this VSI will focus on experimentation as a business practice and capability to advance sustainable development. These problems may be approached with quantitative and qualitative approaches and methods originating from areas such as Entrepreneurship and Business Studies, Transitions research, Behavioural Economics and Design Studies. Also, transdisciplinary approaches are highly welcomed. Exchanges between the aforementioned fields, joint and cross-cutting works is encouraged. The VSI will address the following thematic fields, not exclusively:

Theme 1: Tools, approaches and impact assessment

Business experimentation for sustainability may be effectual or structured in approach (Chesbrough, 2010; Bocken and Antikainen, 2018; Sarasvathy, 2001). Large business is starting to learn from techniques common in the start-up world such as Lean startup thinking (Ries, 2011; 2017) and effectuation (Sarasvathy, 2008). Tools and methods are needed that simultaneously allow business to experiment with new business models while advancing understanding of the sustainability impacts achieved and building organizational capabilities for experimentation (Bocken et al., 2018; Weissbrod and Bocken, 2017). Also, a deeper understanding is needed of the actual impact of the new business models resulting from business experimentation.

Ouestions addressed within this theme include, but are not limited to:

- How can BES simultaneously test business, customer and sustainability (people, profit, planet) viability?
- How can BES lead to solutions that create 'strong' as opposed to weak sustainability (e.g. absolute reductions in resource use and climate emissions)?
- How can the factor of time be embedded in methods and theory of BES (i.e., urgency of sustainability challenges coupled with fast learning loops)?
- What evaluation methods of BES may be appropriate to ensure sustainable business transformation or at least ensure no delay to the fundamental business changes needed?
- How to design and manage the learning cycles enabled by BES?

Theme 2: Business Experimentation for Sustainability across Organizational contexts

To date, business experimentation has largely been described as a process for start-ups in conventional businesses, and less so with a focus on sustainability or radical innovation. Exceptions include cases described in Weissbrod and Bocken (2017); Antikainen et al. (2018) and Bocken et al. (2018). This theme explores BES across organizational context (incumbent, startup, hybrid business), collaborations and linkages between different organizations. Questions addressed within this theme include, but are not limited to:

- What are the links or differences between BES in large businesses and small startups?
- How may sustainable business model experimentation take place jointly with stakeholders; with resulting value distributed across stakeholders?
- How can businesses and research organizations collaborate in the BES process?

Theme 3: Best practices and case studies of Business Experimentation for Sustainability

The number of cases and best practices for BES to date are limited (e.g. Weissbrod and Bocken, 2017; Antikainen et al., 2018; Bocken et al. 2018). More research is needed on the best practices, challenges and opportunities of using BES as well as detailed case studies of the process and practice of BES. This will enable a deeper understanding on the organizational manifestations and sustainability management dimensions (people, profit, planet) of BES. Furthermore, the role of the consumer and transformation of consumer behaviors through new business approaches and trialing this through BES needs further exploration. This theme includes cases, best practices and theorizing of BES approaches across different types of organisations (from startups to incumbents and hybrid businesses).

Questions addressed within this theme include, but are not limited to:

- How do companies approach new customer proposition testing for sustainability using experimentation?
- What evidence exists on consumer behavior transformations resulting from conducting trials with new business models?
- What barriers and opportunities to BES exist in a multinational environment?
- What collaborative success cases for BES can be identified? What novel collaborations have emerged in the BES process?

Theme 4: Policy implications for Business Experimentation for Sustainability With recent sustainability advancements such as the rising popularity of the Circular Economy concept, and the uptake of the Sustainable Development Goals (SDGs), there is a need to advance sustainability government and industry policies along with such trends. The Circular Economy concept has seemed to have led to a renewed interest in product obsolescence policy, but this has not yet led to coordinated policy approaches that could stimulate profound industry changes to dominant practices and business models (Maitre-Ekern and Dalhammer, 2016). The same is true for challenging sustainability management areas such as stimulating sustainable consumption as a business approach (Mont and Dalhammer, 2005; Bocken and Short, 2016). BES has been described as explorative corporate value creation capability, with economic value creation as barrier for implementing new practices and resulting business models (Weissbrod and Bocken, 2017). The final theme of this VSI is looking to explore, what role government and industry policy might play in incorporating and using BES to accelerate sustainability transitions in business. Questions addressed within this theme include, but are not limited to:

- What are the policy implications for BES? What policies are needed to advance sustainable development across various industries and institutional contexts?
- What policies are needed to stimulate BES in large incumbents?
- What policies may encourage collaboration across different firms and industries?
- What might be the links or connections between business climate and resource governance experiments and BES at the level of the individual business?
- The CfP is open to theoretical papers, case studies, and reviews.

2. Tentative Schedule

Publication of the CfPs for this VSI by the end of September, 2018;

First submission date: October 1, 2018 Submission deadline: March 31, 2019

Peer review, paper revision and final decision notification: August 31, 2019

Final Publication of this VSI: September 30, 2019

3. Paper Submission

By submitting a manuscript, author(s) certify that the contribution is original and has not been published or is not under consideration for publication elsewhere and that no part of the material breaches the rights of others.

The editors will first evaluate every article to assure that it is within the scope of both the VSI and the JCLP. After this first screening, suitable papers will be submitted to a single-blind peer review process according to the standards of the JCLP.

Papers must be written in good English. Authors with limitations in command of written English are recommended to send their papers to a native English science editor before the first submission because poorly written documents can compromise the decisions during the review process.

All authors must follow the author's guidelines provided in the Instructions for Authors for the Journal of Cleaner Production, which can be accessed via the following link: https://www.elsevier.com/journals/journal-ofcleaner-production/0959-6526/guide-for-authors. Authors should submit their manuscripts via the Elsevier Editorial System (EES) site for the Journal. The submission website for this journal is located at http://ees.elsevier.com/jclepro/default.asp. To ensure that all manuscripts are correctly

identified for inclusion into the special issue you are editing, it is important that authors select "VSI: Business Experiment" when they reach the "Article Type" step in the submission process.

4. Guest Editors

Prof. Dr. Nancy Bocken

The International Institute for Industrial Environmental Economics (IIIEE) Lund University
P O Box 196
SE-221 00 Lund, Sweden
Nancy.bocken@iiiee.lu.se

Dr. Ilka Weissbrod

Centre for Sustainability Management (CSM) Leuphana University Lüneburg Universitätsallee 1, C11.420 21335 Lüneburg, Germany Ilka.weissbrod@leuphana.de

Dr. Maria Antikainen

VTT Technical Research Centre of Finland Ltd Tampere, P.O. Box 1300, 33101 Tampere, Finland Maria.Antikainen@vtt.fi

Authors may also confer with the 'Co-Editor-in-Chief' of the Journal of Cleaner Production, Prof. Yutao Wang, Email: yutaowang@fudan.edu.cn

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