

Social innovation and workplace development for social entrepreneurship

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Abstract. The purpose of this paper was to explore how social LCA (S-LCA) & social organizational LCA (SO-LCA), can be used to shape the business model of companies that want to be social sustainable both related to one's own daily operation and the value proposition. It is especially concerned with companies at an early stage when a value chain and the internal and external business network has not yet been established. Current SLCA studies do not assess the social performance of products, because most of the indicators refer to the organizational level. Starting from the extensive list of indicators presented by Martínez-Blanco et al. these indicators have been filtered down to the most relevant for early-stage businesses based on social entrepreneurship. Further, these indicators have been used to extend business modelling guidance using The Business Model Canvas (BMC) methodology, also known as the Osterwalder model, as a framework. The findings have been tested through dialogues and workshops with a newly established centre for social entrepreneurship with a focus on workplace development for young people, refugees, and immigrants who are out of work in a Norwegian municipality.

1 Introduction

Current social LCA studies do not really assess the social performance of products, because most of the indicators refer to the organizational level [1]. This paper's intention is to increase the understanding of the practical use of S-LCA (Social Life Cycle Assessment) & SO-LCA (Social Organizational Life Cycle Assessment). Moreover, which factors that can measure social sustainability are defined, and it is suggested how start-up companies can use this methodology in their business modelling when the aim is to be socially sustainable. It also provides an indication of how collaboration between public and private actors can contribute to and facilitate the development of more inclusive workplaces. We want to provide a theoretical framework to measure the impact of social entrepreneurship. This paper tries to answer three research questions:

- a. How can we implement a new approach as SO-LCA in a newly established company?
- b. Is there a way to move forward?

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- c. From a social point of view, what are the most important indicators to implement in a new business?

2 Scope of the study & material and method

SO-LCA is defined as “a compilation and evaluation of the social and socio-economic aspects and the positive and negative impacts of the activities associated with the organization as a whole or a portion thereof adopting a life cycle perspective” [2]. SO-LCA and S-LCA are conceptually based on the same framework considering the stakeholder categories, social subcategories etc. and based on the structure of ISO 14040. Substantially the main difference is that S-LCA focuses on the product while SO-LCA focuses on the organization. In this study, we define the life cycle assessment step using the conceptual methodological framework for SO-LCA. The goal was to assess social impacts of organizations involved in establishing a new center named *Eventyrlige folk* which is based on social entrepreneurship. The center focuses on workplace development for young people, refugees, and immigrants who are out of work in a Norwegian municipality. The scope was to explore the social dimension in organizations such as start-up companies. No real data were available since the center is at an early stage of business development and many aspects have not yet been defined.

The starting point of the exploratory work was an extensive list of indicators published in the Supplementary Materials by Martínez-Blanco et al. [1]. The list presents the indicators based on the recommendations from the methodological sheet of UNEP/SETAC guidelines [3] and their suitability to assess product, organization, country/sector performance and overlapping areas (i.e., the indicator can be allocated to more than one category).

In this study, we focus only on the indicators allocated to the organization level. We organized two brainstorming sessions (two half days, four people) with the innovation company behind the centre. This was done at the beginning and at the end of the project. The main goal of the brainstorming was to generate ideas, increase knowledge and thinking creatively to solve the challenges of including the social aspects at an early-stage phase of business development. The objective of the first brainstorming was to discuss with the innovation company which are the social indicators most adapted to the new center. After the first brainstorming, a revised version of the social indicators was proposed by the researchers and discussed in a second brainstorming session. Furthermore, we extended the business modelling guidance using The Business Model Canvas (BMC) methodology [4] to include social revenues and costs. Including the social dimension at an early phase in the business modelling can be an eye-opener for entrepreneurs to plan for more than the economic dimension of the proposed business model.

3 Results

The list of social indicators proposed to the Eventyrlige folk center is illustrated in Table 1. The indicators are shown in correspondence to the respective social subcategories and stakeholder groups. Furthermore, the data source (generic or specific) and the unit of measurement (quantitative, qualitative, and semi-quantitative) are shown.

Table 1. Proposed stakeholder category, subcategory and social indicators as given in the UNEP guidelines

Stakeholder	Subcategory	Data source [†]	Indicators	Measurement	Eventyrige folk
Local community	Community engagement	S	Diversity of community stakeholder groups that engage with the organization	quali/semi	Elderly/retired people used as mentors; relationship between older and younger generations
		S	Organizational support (volunteer-hours or financial) for community initiatives	quan	
	Local employment	S	Percentage of workforce hired locally	quan	Use of local resources in the Norwegian municipality
		S	Strength of policies on local hiring preferences	quali/semi	
		S	Percentage of spending on suppliers	quan	
	Access to immaterial resources	S	Presence/strength of community education initiatives	quali/semi	Local competences in local municipality; no more young people that drop out from schools, need for motivating young people to work
	Access to material resources	G	Levels of industrial water use	quan	Environmental indicators related to the center development for green industrial processes
		G	Extraction of material resources	quan	
		S	Has the organization developed project-related infrastructure with mutual community access and benefit	quali/semi	
		S	Strength of organization risk assessment with regard to potential for material resource conflict	quali/semi	
		S	Does the organization have a certified environmental management system	semi	

[†] generic G/specific S

Society		S	Presence of mechanisms to follow-up the realization of promises	quali/semi	
	Public commitment to sustainability issues	S	The organization has pledged to comply with the global compact principles and has engaged itself to present yearly communication on progress	semi	Open communication to the society of progress
		S	Implementation/signing of principles or other codes of conduct (Sullivan Principles, Caux Round Table, UN principles, etc)	quali/semi	Presence of code of conduct
	Contribution to economic development	S	Contribution of the product/service/organization to economic progress (revenue, gain, paid wages, R+D costs in relation to revenue, etc.)	quan/quali	Often young people with parents without jobs will also be without job ("heritage"), if these young people will get a job opportunity poverty will be reduced
	Promoting social responsibility	S	Support to suppliers in terms of consciousness-raising and counselling concerning the social responsibility issues	quali	Value to actors that work in social entrepreneurship, local footprint, high competence
Value chain actor	Respect of intellectual property rights	S	Use of local intellectual property	quan/quali/semi	Use of local competence e.g. (high skilled for workers specialized in high tech. and low educated workers)

The results from the first brainstorming highlighted the importance to adapt the social indicators presented in Table 1 to the context of the municipality. The innovation company suggested to develop additional indicators related to quality of life, social inclusion, social environment, and worker motivation since these indicators seem more relevant to the value proposition of the innovation centre. Furthermore, the social indicators proposed in SO-LCA were not evaluated as appropriate for start-up companies. In the second brainstorming

session, we discussed the concept of quality of life, social inclusion etc. since there is no consensus on the definition of the meaning and ways of measuring these indicators. For example, the meaning of quality of life is linked to a good state of mind achieved through “the prosperity, to the states of personal satisfaction, satisfaction coming from the consumption, the use of the natural environment, the social position etc.” [5]. This indicator is difficult to measure in a life cycle thinking perspective. However, the most quantifiable indicators such as the number of established jobs due to the introduction of the innovation center are linked to the social subcategories proposed by the UNEP guidelines. To include the social aspects early on in the business modelling, it was proposed by the researcher to include this in the Business Model Canvas, BMC [4]. This is a tool often used by newly established companies. The BMC divides the generation of a business model into the following nine building blocks: ① Customer Segments; ② Value Propositions; ③ Channels; ④ Customer Relationships; ⑤ Revenue Streams; ⑥ Key Resources; ⑦ Key Activities; ⑧ Key Partners; ⑨ Cost Structure. As a start, a company can demonstrate that they have assessed the ecological and social incomes (⑤ Revenue Streams in BMC) and costs (⑨ Cost Structure) associated with the business model. A way of doing this is sketched out in Figure 1, inspired by the work of Vastbinder, Kroesen, Blom and Ortt (2012) [6], where additional sections are included in the bottom of the canvas. The company can use table 1 as inspiration for filling in the sections for social revenues and costs in the canvas. This could be part of a team-session in the company, making all employees socially involved in mapping up the sustainable business model.

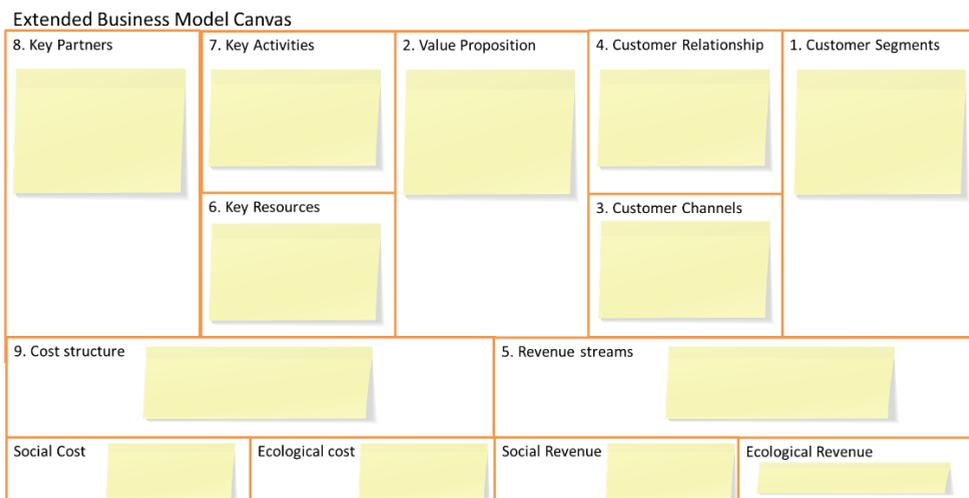


Figure 1. Including social and ecological aspects in the BMC (figure made by NORSUS)

4 Conclusions

To have a single methodology or a standard set of indicators for assessing the social impact of companies at an early stage is challenging due to the diversity in the organization, the workforce, and the geographical context. The Norwegian case-company learned through the project that the indicators for measuring social impacts are numerous and many of them were not applicable to their local context. For implementing a new approach as SO-LCA, it is

important to identify which are the most relevant social subcategories in the development of new business models with a focus on social entrepreneurship such as increased commitment to sustainability issues, increased focus on social responsibility, utilization of unused resources in society and increased community engagement. Even if to use the SO-LCA approach is challenging, the way to move forward is to implement and include social indicators early in the business modelling, so that it becomes part of the management and follow-up routines in the company. Implementation of the social element in a business model is not very widespread in the Norwegian context. It is a new way of developing a business model, where social inclusion and development of jobs dedicated to those who are outside working life is emphasized. There is no consensus on the definition of other social aspects such as quality of life, social inclusion, social environment, and worker motivation, hence the SO-LCA approach as presented by UNEP guidelines are in principle still valid. The sociological and psychological dimensions are a very important aspect to consider when assessing for instance quality of life, but they are not a part of conventional LCA competences. The innovation company concluded that the most important indicator to implement in a new business is the number of new jobs established by a new business since it is a concrete indicator (quantifiable and easy to communicate) to start performing a SO-LCA analysis. Implementation of social aspects in business development can contribute to increase the motivation to realize business opportunities, but indicators should be adapted to the resources and the time availability of the social enterprise.

5 References

1. J. Martínez Blanco, A. Lehmann, Y. J. Chang, M. Finkbeiner. Social organizational LCA a new approach for implementing social LCA. *Int. J. Life Cycle Assess.* **20**, 11(2015)
2. UNEP/SETAC. The Methodological Sheets for Subcategories in Social Life Cycle Assessment (SLCA), Life Cycle Initiative (2013)
3. UNEP. Guidelines for Social Life Cycle Assessment of Products and Organizations. C. Benoit Norris, Traverso, M. Neugebauer, S. Ekener E. T. Schaubroeck Russo Garrido, S. Berger, M. Valdivia, S., Lehmann, A., Finkbeiner M. Arcese, G. Eds. United Nation Environment Programme (2020)
4. A. Osterwalder, A. Pigneur, Y., T. Clark. Business model generation a handbook for visionaries, game changers, and challengers, Hoboken, NJ: Wiley (2010)
5. E. Jankowska. Social indicators and the measure of the quality of life. **1**, 7 (2015)
6. B. Vastbinder, O. Kroesen, E. Blom, E., R. Ort. Business, but not as usual. Entrepreneurship and sustainable development in low-income economies. In Wagner, M. Entrepreneurship, Innovation and Sustainability (p. 32-57). Sheffield: Greenleaf Publishing Limited (2012)