Proposing a sustainable business models typology

Rodrigo Lozano, PhD
email: rodrigo.lozano@hig.se & rolozano@org-sustainability.com

Associate Professor

University of Gävle

March, 2018
Oslo, Norway
Introduction

• A number of alternative, or sustainable, business models have been proposed to reduce the environmental burdens, with a particular focus toward switching from product sales to a service approach (Dunphy et al., 2014; Mont et al., 2006; Stubbs & Cocklin, 2008)

• Lay et al. (2009) proposed three alternative business models: (1) leasing; (2) renting; (3) ‘product pooling’

• Three examples of sustainability oriented business models are: selling the function that baby prams provide (Mont et al., 2006); chemical leasing (Lozano, Carpenter, & Satric, 2013); and ridesharing business models for sustainability (Cohen & Kietzmann, 2014)
• A SBM uses a **Triple Bottom Line Approach** in measuring performance; a SBM considers the needs of all stakeholders rather than giving priority to **shareholders’ expectations**; a SBM treats nature as a stakeholder and promotes environmental stewardship; Sustainability leaders, or champions, drive the **cultural and structural changes** necessary to implement sustainability; and an SBM encompasses the **systems perspective**, as well as the **firm-level** perspective
Boons and Lüdeke-Freund (2013)

• Four elements of a SBM:
  • **Value proposition** - providing measurable ecological and/or social value in concert with economic value;
  • **Supply chain** - involving suppliers who take responsibility for their own as well as the focal company’s stakeholders;
  • **Customer interface** - motivating customers to take responsibility for their consumption as well as for the focal company’s stakeholders
  • **Financial model** - reflecting an appropriate distribution of economic costs and benefits among actors involved in the business model and accounting for the company’s ecological and social impacts.
Bocken, et al. (2014)

• Eight SBM archetypes, grouping them into:
  • **Technological** (maximise material and energy efficiency, create value from ‘waste’, and substitute products and processes with renewable and natural ones)
  • **Social** (deliver functionality, instead of having ownership; adopt a stewardship role; and encourage sufficiency)
  • **Organisational** (re-purpose the business for society and the environment, and develop scale-up solutions)
Abdelkafi & Tauscher’s (2015)

- Four partial models:
  - The firm
  - The environment
  - The decision maker
  - The customer
- The BMfS is built on the firm’s value creation capacity, value to the customers, value to the natural environment, and the value that the firm captures
- The environment is conceptualized by means of three main stocks:
  - Renewable resources
  - Non-renewable resources
  - Pollution and waste
Roome & Louche (2016)

• New business models for sustainability are developed through interactions between individuals and groups inside and outside companies, which are based on three elements:
  • Building networks and collaborative practices for learning and action around a new vision
  • Deploying new concepts drawn from outside the company
  • Elaborating and implementing structure within a reconfigured network
Schaltegger, Hansen, & Lüdeke-Freund (2016)

• “A business model for sustainability helps describing, analysing, managing, and communicating (i) a company’s sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries”
Upward and Jones (2016)

• Sustainable business models are based on: 1) stakeholders considering human and non-human; 2) governance; 3) tools and framework to embed sustainability; 4) biomimicry frameworks; and 5) industrial ecology principles.

• The authors explicitly mention the time perspective in their arguments.

• The authors propose the following components: actor; stakeholder; target customer; channel; value proposition; decision (governance); relationship; value configuration; partnership; capability; process measure (non-financial); profit; cost; revenue; and assets.
Lozano (forthcoming)

• “A more sustainable business model is a holistic and systemic reflection of how a company operationalises its strategy and adds value, based on resource efficiency (through technical, management and governance, and organisational processes), to the inputs of the company, so that the outputs have more value and contribute more to sustainability that the inputs (in regards to material and resources that are transformed into products and services, economic value, human resources, and environmental value). The business model is affected by the company’s resources (tangible and intangible), and by the company’s stakeholders, including the environment (inside and outside the company)”. 
Analysis of Sustainable Business Models definitions against the four dimensions of sustainability

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sustainability dimensions</th>
<th>Sustainable model type</th>
<th>business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stubbs and Cocklin (2008)</td>
<td>Yes</td>
<td>Yes</td>
<td>Somehow</td>
</tr>
<tr>
<td>Boons and Lüdeke-Freund (2013)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Bocken, et al. (2014)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Abdelkafi &amp; Tauscher (2015)</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Upward and Jones (2016)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Roome &amp; Louche (2016)</td>
<td></td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Schaltegger et al. (2016)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Lozano (forthcoming)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Conclusions

• The Business Models typology provides a visual representation on how a business model can better address economic, environmental, and social dimensions of sustainability.

• It should be noted that to become more holistic, sustainable business model must have benefits in the short and long terms.
Thank you!

Rodrigo Lozano, PhD

emails: rodrigo.lozano@hig.se & rodlozano@org-sustainability.com