



# Applying a Sustainability Lens to the Business Model

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## Abstract

This paper demonstrates how a business model framework based on object-oriented principles can be used to identify and articulate the social and environmental initiatives that are embedded in business models. A mini case study of a small landscaping firm is presented to validate the framework.

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## Introduction

This paper addresses the problem of directors and CEOs identifying and communicating to others the sustainability characteristics that exist in the firm and whether existing sustainability policies have been implemented. By incorporating business model object attributes of environmental and social sustainability into a hierarchical business model framework, information on corporate sustainability can be extracted. This effectively applies a sustainability lens to the existing

business model representation. The structured, visual approach assists managers to consider all aspects of the organization in the analysis.

An authentic case study is used to demonstrate how a hierarchical business model framework that is modelled on object-oriented principles, can be used to identify, extract and communicate the social and environmental contributions of the firm.

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Keywords: business model framework, sustainability lens, case study

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## Approach

A hierarchically structured business model schematic is proffered as a means of capturing and communicating in a visual form, the social and environmental benefits embedded in the organisation. The business is firstly depicted at a highly abstract level but, because of its hierarchical format (Lambert 2012), it can be fleshed out to a very granular level whilst maintaining the integrity of the model. Sustainability factors are incorporated into business model representations thereby providing a coherent, understandable picture of sustainability in the business and how this relates to the business model of the enterprise. The sustainability characteristics of the business can be articulated using the same structure used to depict operating and profitability focused aspects of the business – its strength therefore is in the use of common structures and language irrespective of circumstances.

The Hierarchical Business Model Framework (HBMF) that is used in this paper was developed purposefully to accommodate multiple levels and units of analysis, and multiple conceptual foci and can extend traditional business model representations to reflect sustainability factors that are present in the existing business models of an entity. It does so by utilising object-oriented modelling principles that allow complexity to be abstracted and distilled into an understandable form (Lambert 2012).

A small to medium sized landscape construction company (LCC) is the subject of the mini case study. In this small business, the HBMF was originally used as a tool

to assist the director to decide on the best strategy to grow his business. The business model representation was then modified to identify, record and communicate how the business incorporates environmental and social sustainability factors into its business decisions. The hierarchical nature of the business model representation permits interrogation at a whole-of-business level as well as at a very granular level for selected aspects of the business.

Figure 1 shows the four value propositions that LCC offers to its two customer types, residential customers and commercial customers. The revenue model is fee for service but there are differences in the timing of the revenue streams from each of the customer types. Because of the nature of the services LCC uses a purely physical channel of delivery. LCC must be accredited by the Builders' Licencing Board and the Government Certification Board (for commercial customers).

For each of the four value propositions there is a complex value adding process that is modelled at lower levels of abstraction.

The activities that make up the Maintenance Value Adding Process, along with the Resources and the Capabilities of the semi-skilled workers are mapped and modelled in Figure 2.

LCC originally collected monetary data about their business model objects along with operational details that explain how the business operated. As part of a tendering process the owner was required to include

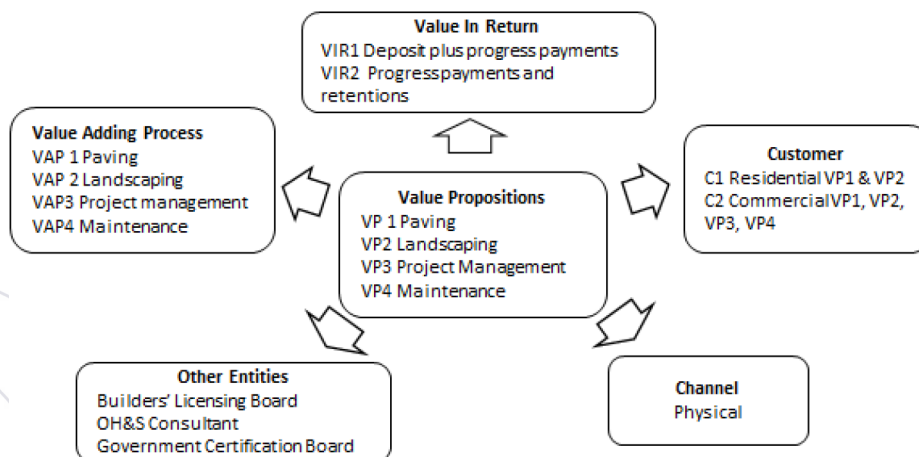
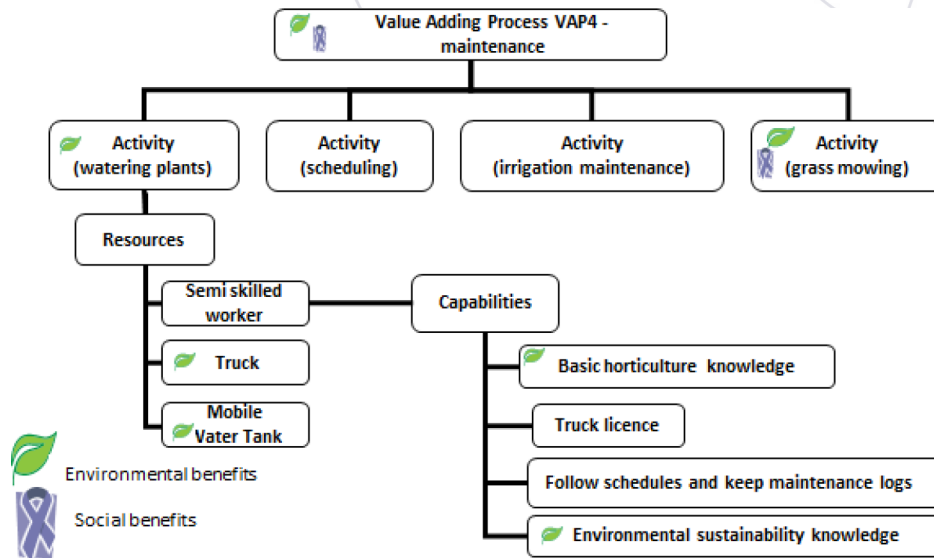


Figure 1: Landscape Construction Company Business Model



**Figure 2: Maintenance Value Adding Process**

information about the company's commitment to social and environmental sustainability. Using the HBMF model it had already developed and adding data of a social and environmental sustainability nature, the company was able to quickly identify, document and communicate the social and environmental sustainability aspects of the business and show how the commitment to sustainability was evident throughout the business model of the firm.

Figure 2 shows the Maintenance Value Adding Process with symbols for environmental and social benefits or measures taken. The company did not try to measure the impact of the decisions, it simply identified and described its commitment to social and environmental sustainability through its business model. More details, including impact measures can be included in the individual business model objects using existing tools such as the Sustainability Balanced Scorecard and the Environmental Management Accounting Framework both of which measure and compare sustainability factors to benchmarks for external reporting. The benefit of using the business model representation to demonstrate the firm's commitment to sustainability is that the pervasiveness of the commitment is illustrated. An organisation can show social and environmental

initiatives that are embedded into the business model through different value propositions, relationships with third parties, resource and activity choices rather than through a narrative.

## Key insights

The HBMF enables the depiction of a business and its sustainability factors using a common language and structure. The use of a visual communication device, the schematic depiction of the business model, capitalises on the increased memory retention and understanding associated with communicating complex concepts through images (Agrawala et al. 2011). It is not designed to make an assessment of a business's performance or categorise and outline the information needs of a business in way that the Sustainability Balanced Scorecard (Dias-Sardinha et al. 2002; Figge et al. 2002; Möller & Schaltegger 2005) or Environmental Management Accounting Framework (Burritt et al., 2002) do. However, the modelling capability can combine with other sustainability management tools to increase internal accountability and ensure those charged with corporate governance have a means to assess implementation of sustainability policies in all aspects of the business.

## Discussion and conclusion

This paper introduces a modelling tool which is flexible, adaptive to context, and offers a degree of detail appropriate for managers to understand how sustainability policies and initiatives are incorporated into the very fabric of a business as well as the failure of or dysfunction of such implementation efforts.

The social and environmental benefits that are associated with the value propositions themselves, the benefits arising from value adding process choices and the benefits arising from decisions to deal with particular third parties can be identified and categorised. Equally importantly from a governance perspective the negative social and environmental impacts of decisions can also be recognised.

The mini case study demonstrates the power of the business model to collect and communicate information about social and environmental sustainability characteristics of organisations. However, the implications of this are more far reaching since there is no limit to the number and diversity of lenses that can be applied to the business model representation. The limitation is how much and the type of detail that can be economically collected, stored and retrieved.

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