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Conceptualizing a “Sustainability Business Model”

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According to one perspective, organizations will only be sustainable if the dominant neoclassical model of the firm is transformed, rather than supplemented, by social and environmental priorities. This article seeks to develop a “sustainability business model” (SBM)—a model where sustainability concepts shape the driving force of the firm and its decision making. The SBM is drawn from two case studies of organizations considered to be leaders in operationalizing sustainability and is informed by the ecological modernization perspective of sustainability. The analysis reveals that organizations adopting a SBM must develop internal structural and cultural capabilities to achieve firm-level sustainability and collaborate with key stakeholders to achieve sustainability for the system that an organization is part of.

Keywords: *Bendigo Bank; corporate sustainability; firm-level sustainability; Interface Inc.; system sustainability; sustainable business model*

The dominant model of the firm draws on neoclassical economic theory (Brenner & Cochrane, 1991; Key, 1999; Stormer, 2003), according to which the primary obligation of corporations is to maximize profits for shareholders. Typically, social and environmental goals are subordinate to the primary goal of creating economic value (Freeman & Gilbert Jr., 1992). This paradigm is inherently limited in its ability to effectively address social and ecological degradation (Shrivastava, 1995), and, accordingly, some scholars have called for new business models and management paradigms to move beyond the “organization as an economic entity” (see, e.g., Doppelt, 2003; Dunphy, Griffiths, & Benn, 2003; Griffiths & Petrick, 2001; Shrivastava, 1995). Extant research has focused on classifying types of environmental strategies, understanding why organizations “go green,” and understanding the correlation between financial performance and environmental performance (Sharma, 2002). Although there is a substantial body of literature on different frameworks and models of sustainability at a societal level (Robinson, 2004), understanding of sustainable *business* models and how sustainable development is operationalized in firms is weak (Bansal, 2005; Sharma, 2002). Sharma (2002) argues that it is important for scholars “to theoretically visualize . . . organizational forms, structures, strategies and outcomes as

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firms travel on the path to sustainability” (p. 2). Some work has been done in this area. A consortium led by Erasmus University developed the European Corporate Sustainability Framework (ECSF)—a set of models, tools, and theories—to help organizations address complex social and environmental sustainability issues (Hardjono & Klein, 2004). Benn, Dunphy, and Griffiths (2006) developed an integrated phase model for understanding how organizations make the change toward social and ecological sustainability—how they move from a compliance phase of sustainability to the “ideal” sustaining corporation.

One perspective suggests that for organizations to be sustainable, the neoclassical model must be transformed, rather than supplemented, by social and environmental priorities (such as environmental stewardship, respect for persons and nature, and social equity).

In concert with this perspective, this article conceptualizes a new model of the firm where sustainability concepts “play an integral role in shaping the mission or driving force of the firm and its decision making” (Wicks, 1996, p. 104). A sustainability business model (SBM) could be conceptualized in various ways such as a narrative of sustainability practices; a description of features, attributes, and/or characteristics; a list of necessary and sufficient conditions; a representation of business processes; a firm-level description; a systems-level description; or some combinations of these. The SBM presented in this article is an “ideal type” (Blaikie, 1993; Weber, Shils, & Finch, 1949) derived from two case studies of organizations that are implementing sustainability-embedded business models that move beyond the dominant neoclassical economic model—Interface Inc. and Bendigo Bank. The SBM is shaped from themes arising from the data as well as concepts in the sustainability literature. In particular, the SBM is informed by an ecological modernization (EM) perspective of sustainability. The SBM reflects cultural, structural, firm-level, and systems-level attributes arising from the case study data.

In the next section, we outline central aspects of the theory that underpin the SBM. This is followed by an explanation of the methods used to analyse the case study data. An overview of each case study is provided and the main findings of the research study are then discussed. In the final section, the implications of an SBM for organizations and their wider socioeconomic context are discussed.

Sustainability Perspectives

This research employed a multidisciplinary approach (Bansal & Roth, 2000; Gladwin, Kennelly, & Krause, 1995), drawing on theory from business management and the natural sciences to conceptualize an SBM. The SBM is informed, primarily, by an EM perspective of sustainability (Hajer, 1995; Jänicke, 1990; Mol, 2006; Weale, 1992). Sustainability itself is a contested concept. The literature is rife with attempts to define sustainability (Robinson, 2004) and there are many terms used in the literature such as sustainable development, human sustainability, social sustainability, ecological sustainability, environmental sustainability, and corporate sustainability as well as aligned concepts of corporate social responsibility and corporate citizenship. The most cited definition of sustainability comes from the World Commission on Environment and Development (WCED) report (1987), which touches on environmental, social, and economic aspects of sustainable development such as the notion of resource limits (energy, materials, waste, and land); equitable access to constrained resources; intergenerational and intragenerational equity; and a

progressive transformation of economy and society. However, there is no consensus on this definition and a variety of sustainability worldviews are presented in the literature (see, e.g., Cotgrove, 1982; Gladwin et al., 1995; O'Riordan, 1991).

The neoclassical economic worldview is the dominant paradigm today (Cotgrove, 1982; Egri & Pinfield, 1996) in which free markets and private property reign (Egri & Pinfield, 1996). The primary goal of organizations is to maximize shareholder value. Typically, environmental reforms are pursued only if it is in the organization's self-interest (Purser, Park, & Montuori, 1995), or if legislation dictates, or due to pressure from stakeholders, and/or to gain or retain organizational legitimacy (Bansal & Roth, 2000). Pollution and waste are externalized and high discount rates are used, which favours harvesting of resources over preservation for future generations (Shrivastava, 1995). Organizations must be highly competitive to gain the best resources (human and natural) and increase their profitability. The production cycle reflects a linear take-make-waste approach, which is typically energy and resource intensive (McDonough & Braungart, 2002).

EM is one alternative worldview to the neoclassical economic perspective. A core belief of EM is that economic growth can be uncoupled from environmental degradation and EM is achieved through environmental policies, innovation, and new technologies (Baker, 2007). However, like sustainability, EM is a contested concept and there are many interpretations (Mol, 2006). EM theorists point to the distinction Hajer (1995) makes between a techno-corporatist EM that features technological and institutional fixes for the current environmental problems and a reflexive EM that features democratic processes of social learning, cultural politics, and new institutional arrangements (Milanez & Buhrs, 2007; Mol & Spaargaren, 2000). Christoff's (1996) distinction between "strong" (institutional-democratic, systemic, and broad) and "weak" (economic-technological and narrow) EM is also widely cited in the literature. Milanez and Buhrs (2007) argue that there are four schools of thought or "strands" that contribute to understanding EM. Each strand approaches it from different perspectives and each illuminate only some aspects or factors of EM theory: technological, policy, social, and economic streams.

Although EM is considered a young theory (Mol, 2006), there is now a substantial body of literature (Baker, 2007) and a number of criticisms of EM have emerged over the years. EM is accused of legitimizing and sustaining the very structures and systems that have been responsible for the environmental destruction (Christoff, 1996; Gouldson & Murphy, 1997); for encouraging growth as a solution to the planet's ecological crisis, rather than promoting sustainable development (Baker, 2007); for presenting oversimplified assumptions about the role of government in ecological transformation (Baker, 2007); for being silent on crucial questions of social change such as social justice, the distribution of wealth and power, and society-nature relations (Baker, 2007; Gouldson & Murphy, 1997); and for an uncritical commitment to continued modernization as the way out of environmental crisis (York & Rosa, 2003).

Acknowledging these criticisms, this article takes a broad view of EM, in line with Mol's (2006, p. 33) interpretation. He defines it as the

Centripetal movement of ecological interests, ideas and considerations within the social practices and institutional developments of modern societies. This results in ecology-inspired and environment-induced processes of transformation and reform of those same core practices and central institutions, a process that began in earnest from the 1980s onwards.

When applying EM to the organizational level, this article takes a strong stance. Defining EM narrowly to describe technological developments with environmentally beneficial outcomes may not contribute to lasting environmental improvements (Christoff, 1996). A strong stance promotes “enduring ecologically sustainable transformations and outcomes across a range of issues and institutions” (Christoff, 1996, p. 490).

Following is a summary of how a strong EM stance is interpreted at the organizational level, drawing from the corporate sustainability literature.

Organizations subscribing to an EM perspective of sustainability focus on being profitable as well as on improving the welfare of their stakeholders and minimizing environmental impact (reducing the ecological footprint). Gladwin et al. (1995) refer to this as moving from “greening,” where an organization focuses on instrumental or process objectives (such as pollution reduction), to “sustaining,” a focus on outcomes such as assuring ecosystem and socio-system health and integrity. Organizations aim to “do no harm” to the environment and stakeholders—such as introducing closed-loop processing—allowing for the prospect that they may need to make amends if harm is done (Hawken, 1993). This means offsetting harmful activity in one area with compensating activities in another area (e.g., offsetting harmful emissions by purchasing carbon credits or planting trees).

The EM perspective reflects a longer-term view than the neoclassical perspective. Low discount rates are employed to slow the depletion of natural resources, ensuring a more equitable distribution of resources across generations. Organizations take a stakeholder view of the firm rather than a shareholder view and acknowledge that nature and future generations are stakeholders. Firms design low-impact products that reduce the ecological footprint (minimize pollution, waste, resource usage, and energy) and/or move towards solutions or service-based businesses (Gouldson & Murphy, 1997; Hart, 1997; Jacobs, 1997). In a service-based model, value is delivered as a flow of services; for example, providing illumination rather than light bulbs (Lovins, Lovins, & Hawken, 1999). Organizations take a collaborative or “coopetitive” (competing and cooperating in the marketplace) approach to addressing issues of sustainability (Brandenburger & Nalebuff, 1996).

The EM concepts of sustainability described above underpin the SBM. Although the SBM subscribes to the EM perspective of sustainability, it is grounded in data from the Interface and Bendigo Bank case studies and it is not expected that organizations hold to all of the assumptions within any one paradigm. Indeed, they may draw assumptions from the neoclassical and EM paradigms in a variety of ways (Gladwin et al., 1995).

Method

The study employed an abductive research strategy combined with case study and grounded-theory methods. Abduction (Blaikie, 2000) and case studies (Eisenhardt, 1989) are both useful for theory building when little is known about the phenomenon under investigation. Grounded theory, according to Blaikie (1993), is an explicit exposition of an abductive research strategy. The abductive approach involves constructing theory that is grounded in everyday activities and/or in the language and meanings of “social actors” (employees of sustainable organizations). Categories and concepts are derived from the activities and meanings and these form the basis of an understanding or an explanation of

the problem at hand (Blaikie, 1993). "Ideal types" are developed from the categories and concepts to produce theoretical propositions. Ideal types can be regarded as models of social situations or social processes. The SBM is an ideal type. It is a representation of the "idea" of a sustainable organization to the extent that "it has really taken certain traits . . . from the empirical reality of our culture and brought them together into a unified ideal-construct" (Weber et al., 1949, p. 91). Ideal types represent organizational forms that might exist rather than actual organizations and can be used as design guidelines for new or existing organizations (Doty & Glick, 1994).

The Web sites, annual reports, and other public documents of organizations recognized for their sustainability initiatives were reviewed to select organizations that are developing their business models, culture, and practices around sustainability concepts, rather than treating sustainability as an "add-on" to their businesses.¹ Interface and Bendigo Bank were chosen for the research study because they are implementing sustainability-based business models that reflect some aspects of the EM perspective. Interface, a global carpet manufacturer, is considered to be a leader in restructuring its business model around environmental sustainability (Doppel, 2003; Elkington, 2001; Griffiths, 2000; Rowledge, Barton, & Brady, 1999). Interface is implementing a model based around EM concepts such as closed-loop processing and a services-based model (see Table 1).

Bendigo Bank, Australia's sixth largest bank, is implementing a community development business model that focuses on building "successful" communities. Its business model primarily addresses issues of social sustainability—the EM concept of improving the welfare of a company's stakeholders (see Table 1). Bendigo Bank was recognized as the "Most Sustainable Company" in Australia in 2001 and 2002 by Ethical Investor Magazine, and received a merit award in 2003 for "Outstanding Achievement in Social Development."

The organizations are of theoretical interest not because they are typical but, on the contrary, precisely because they are not (Lawrence, 2002, p. 72). Organizations from different industries, which focus on different aspects of sustainability, were chosen to gather insight into as many attributes of an SBM as possible (as far as the data will allow). Future research could develop variants of this ideal type as well as additional ideal types to form a typology (Mintzberg, 1979, 1983) of sustainable organizations.

In-depth, semi-structured interviews were the primary source of data. Fourteen people were interviewed for the Bendigo Bank case study (eleven Bendigo Bank staff and chairmen from three community banks) and ten interviews were conducted with Interface staff (seven Australian staff and three staff from head office in the USA). The interview participants were selected from all major functional areas within each organization. Secondary data were collected from publicly available reports, internal company documents, Web sites, and newspaper and journal articles.

An interview schedule was developed to guide the interview questions. As per the abductive research strategy, the aim of the schedule was to get the interview participants (social actors) to discuss the motives for implementing sustainability-based business models, describe the sustainability initiatives and explain why or why not have they been successful, and discuss the challenges of implementing their business models ("everyday accounts" of sustainability situations, activities, and/or processes within organizations).

The interviews lasted between one and two hours. They were recorded, transcribed, and then coded using grounded theory methods. Codes were derived from the data based on the

Table 1
Profile of Interface Inc. and Bendigo Bank

	<i>Interface Inc.</i>	<i>Bendigo Bank</i>
Description	Interface is the world's leading manufacturer of modular carpet with 35% market share. It has 75 sales locations and 23 manufacturing facilities in over 30 countries	Bendigo Bank is based in the central Victorian city of Bendigo, 150 km north-west of Melbourne. Its retail banking and wealth management products and services are available through more than 500 outlets Australia-wide. It has about 3% market share in the financial services industry and 7% share in the areas that it operates in
Products and services	Interface's main lines of business are modular carpet, fabrics, installation and maintenance services, and broadloom carpet, primarily focusing on the corporate market	The bank and its subsidiaries offer a wide range of financial services, including commercial mortgages and unsecured loans, investment products, insurance, superannuation, trustee services, and foreign exchange services
2004 revenue*	US\$882 million	AU\$938 million (approximately US\$700 million)
Vision	To be the first company that, by its deeds, shows the entire industrial world what sustainability is in all its dimensions: "People, process, product, place and profits-by 2020-and in doing so we will become restorative through the power of influence" (Interface, 2003b).	"Our vision was to build a world-class banking organization for all stakeholders-a bank focused on contribution (feeding into prosperity) and with a clear point of difference. We wanted to be more valuable than the banking products provided-capable of making a difference and capable of creating value for all stakeholders. So we set about leading the necessary changes in behaviour and attitude-internally (at the beginning, and this is ongoing) and externally (with our communities, partners, governments and other businesses). We set about building our success through influencing, activating and partnering others-and by being relevant" (Hunt, 2005).
Strategy	Interface is pursuing a three-pronged strategy: offsets, sustainable, and restorative. Under the offsets approach Interface compensates for the environmental damage that occurs throughout its whole manufacturing and distribution process, including its supply chain. The sustainable strategy aims to fix the problems at the source rather than offsetting the harm done by the supply chain, by developing new products and processes, and sourcing renewable raw materials. Interface aims to be restorative, or put back more than it takes, by influencing others to become sustainable-"restorative through the power of influence" (Interface, 2003b)	Bendigo Bank's strategy is to improve the prospects of its customers and communities first, which leads to a strong business-"doing the right thing by customers and communities results in strong community support for our Bank, and therefore sustainable growth in shareholder value." It is a long-term strategy that "requires us to focus on the needs of our customers, rather than the requirements of the Bank" (Bendigo Bank, 2003, p. 4).
Description of model	The model of the prototypical company of the twenty-first century is "strongly service-oriented, resource-efficient, wasting nothing, solar-driven, cyclical (no longer take-make-waste linear), strongly connected to our constituencies . . . and to one another".	The Community Engagement Model (CEM) is a demand-side model in contrast to the neoclassical supply-side model. The model aggregates demand of the community members for essential services and with this combined buying-power, enables the communities to negotiate better terms and conditions with the suppliers

(continued)

Table 1 (continued)

	<i>Interface Inc.</i>	<i>Bendigo Bank</i>
Components of model	<p>(Anderson, 1998, p. 126). The twenty-first century company is ahead of the regulatory process, takes nothing from the Earth’s lithosphere that is not renewable and does not harm the biosphere</p> <p>Seven fronts of sustainability:</p> <ul style="list-style-type: none"> • eliminate waste • benign emissions • renewable energy • closing the loop • resource-efficient transportation • sensitizing stakeholders • redesign commerce <p>Practices leading toward sustainability (PLETSUS):</p> <ul style="list-style-type: none"> • people (customers, employees, suppliers, community, and management) • product (design, packaging, manufacturing, marketing, and purchasing) • place (facility design and operations, maintenance, landscape, and transportation) • process • profits 	<p>CEM adopts the shareholder ownership structure of the neoclassical model but the primary differences are as follows:</p> <ul style="list-style-type: none"> • CEM shareholders are local community members, not absentee shareholders; • Community enterprises and Bendigo Bank share revenues (e.g., a community bank typically gets 50% of the revenues from consumer products but less on business products); and • Eighty percent of the community enterprises’ profits are reinvested back into community development initiatives (20% can be distributed as dividends).

actual words or terms used by the interviewees (“in vivo” codes) or by summarizing the concepts discussed by the interviewees into themes (constructed codes; Strauss & Corbin, 1998). When no new information emerged and no new codes were created, it was assumed that saturation had been achieved.

A case study database was maintained to assist data collection and ordering of field notes. The Nvivo software package was used to code the data and to record memos about the data and themes. The case database and the Nvivo database maintained a chain of evidence to allow the derivation of evidence from initial research objectives to ultimate case study conclusions (Yin, 1994). The transcript of the interview and a draft of the case study report were emailed to each participant. This approach was employed to increase the reliability and validity of the study.

One limitation of using a small number of case studies is that it will not allow for generalization to a population (Blaikie, 2000; Eisenhardt, 1989). However, this was not the intention of the research study. The aim was to generate a theoretical understanding that was used to propose an “ideal-type” SBM. Ideal types are developed to produce theoretical propositions, which in turn may be tested by the further use of the abductive strategy or, possibly, within the deductive strategy (Blaikie, 2000).

Sustainability at Interface Inc. and Bendigo Bank

Interface and Bendigo Bank have taken very different approaches to implementing sustainability. This is due partly to their histories and the nature of their businesses. Table 1 provides background information on the two companies and their business models. These data were sourced from publicly available information (primarily company Web sites and annual reports). For a more detailed discussion of these two case studies, see Stubbs and Cocklin (2007, in press).

Interface is a global carpet manufacturer listed on the NASDAQ exchange. In acknowledging its large environmental footprint, it first approached sustainability from an environmental perspective in 1994 and then added social sustainability to its mission in 2000. The key pillar of its sustainability approach is the “seven fronts.” The first of the seven fronts aims to eliminate the concept of waste, not just to incrementally reduce it. The second front is about eliminating waste emissions—waste streams that have negative or toxic effects on natural systems. The third front concentrates on reducing the energy demands of processes and substituting non-renewable sources with sustainable ones. The aim of the fourth front is to close the loop by redesigning processes and products into a cyclical flow of materials. This involves reducing the amount of petroleum-based materials used and increasing the use of natural and recovered/recycled materials. The fifth front explores methods to reduce the transportation of products and people in favour of moving information. It entails implementing innovative packaging technologies and offsetting emissions from business travel, and minimizing emissions from in-bound and out-bound freight. It also addresses plant location, logistics, and the use of information technology, video conferencing, e-mail, and telecommuting. The sixth front engages stakeholders (customers, suppliers, staff, and local communities) to create a community within and around the organization that understands the functioning of natural systems and its impact on them. The aim is to improve lives and raise awareness of stakeholders through work safety programs, community involvement, and investment. The seventh front aims to redesign commerce to focus on the delivery of service and value instead of commodities so that Interface can recover used materials for recycling. Interface encourages external organizations to create policies and market incentives that promote sustainable practices.

Interface has instigated over 400 sustainability initiatives across all of its facilities worldwide, with many specific to the particular facility’s circumstances. Table 2 summarizes the initiatives mentioned during the interviews.

Bendigo Bank, established in 1858, is a regional Australian bank listed on the Australian Stock Exchange. According to its managing director, “We, as an organization, grew up out of community.” Although the well-being of local communities has always been a driver for Bendigo Bank since its inception, the community-focused approach was formalized into a community engagement business model (CEM) only in the mid-1990s. The CEM is one of many initiatives to fulfil the bank’s commitment to “feeding into” the prosperity of communities (see Table 3 for a summary of initiatives that were discussed in the interviews). The community bank enterprise was the first element of the CEM launched. At the time, the major banks were closing bank branches across Australia to cut costs (Maine, 2000).

Table 2
Summary of Interface's Sustainability Initiatives (From Interview Data)

<i>Initiative</i>	<i>Description</i>	<i>Type</i>	<i>Front</i>
Cool Carpet™	For a small charge, customers can contribute to the climate neutral programme (offset emissions)	Environmental	Benign emissions
Cool CO ₂ mmute™	Offsets employee commuting emissions	Environmental	Benign emissions
Cool Fuel™	Offsets business auto-travel emissions	Environmental	Benign emissions
Trees for travel	Offsets business air-travel emissions	Environmental	Benign emissions
Green tags	Purchase renewable energy certificates	Environmental	Renewable energy
Entropy carpet	Random carpet design that mimics nature	Environmental	Eliminate waste
Bio-based carpet	Carpet that uses fibre made from renewable resources	Environmental	Eliminate waste Closing the loop
Tufting process	Reduce backstitching so less yarn is underneath the carpet	Environmental	Eliminate waste
Zippered products	Easily detach carpet from its backing for recycling	Environmental	Eliminate waste Closing the loop
Pulverize edge strips	Pulverize solid waste from carpet-manufacture process for recycling	Environmental	Eliminate waste Closing the loop
Carpet renewal/ repurposing	End-of-life carpet is cleaned and reused	Environmental	Eliminate waste
Automated estimating system	System that minimizes waste during carpet installation	Environmental	Eliminate waste
Compost garden	Compost waste from canteen at Picton manufacturing site	Environmental	Eliminate waste
Wind energy	Electricity from wind, small hydro, landfill gas & sewerage gas	Environmental	Renewable energy
Green energy	Biomass (woodchips) and photovoltaic arrays (solar)	Environmental	Renewable energy
Factory energy reduction	Movement lighting switches, painting walls white, dual-flush toilet systems	Environmental	Renewable energy
ISO 9001	Compliance with ISO 9001 quality standards	Social	
ISO 14001	Compliance with ISO 14001 environmental management systems standards	Environmental	
Creek project	Clean up the creek behind the Picton factory	Social Environmental	Sensitivity hook-up Eliminate waste
Schools project	Tree-planting projects with local schools	Social Environmental	Sensitivity hook-up Benign emissions

Between 1993 and 2001, one third of Australian bank branches were closed (Moore, 2002). The first community bank branch opened in June 1998, providing financial services to the small rural towns of Rupanyup and Minyip in the state of Victoria, in response to the closure of all the towns' bank branches by February 1997. As at December 2007, Bendigo Bank had supported the establishment of 200 community bank branches across Australia.

Once a community decides to open a community bank branch, it establishes a public company limited by shares. Funds are raised by issuing shares to the local population to cover the setup costs and initial running costs of a community bank branch (approximately AU\$500,000). Each branch operates as a franchise of Bendigo Bank, using the name, logo, and system of operations of Bendigo Bank. The community company secures the branch premises, purchases fittings and systems, and covers the branch running costs such as

Table 3
Summary of Bendigo Bank's Initiatives

<i>Initiative</i>	<i>Description</i>
Community bank	Through a local, publicly owned company, local communities can own and operate a community bank branch of Bendigo Bank. The community raises the funds to establish the premises and Bendigo Bank provides all the banking infrastructure and support. The community company and Bendigo Bank share the revenue.
Community Telco	Bendigo Bank is the primary shareholder in Community Telco Australia which helps communities to establish locally owned and operated telecommunications enterprises. Bendigo Bank is a shareholder and member of Bendigo Community Telco.
Community Exchanges Australia (CxA; at an early stage of development)	CxA is a joint venture between Bendigo Bank and Mycomport. It is a portal-based model that aggregates demand across participating communities to purchase products and services.
Community enterprise foundation (CEF; at an early stage of development)	CEF provides a gifting structure to communities. It ensures local donations are used locally and will be dealt with in accordance with the priorities set by locals (if this is required).
Bendigo stock exchange (BSX)	Bendigo Bank is a major shareholder in the BSX. BSX aims to promote the flow of capital to small-to-medium businesses that have not been well served by capital markets in the past. BSX recently merged with Newcastle Stock Exchange.
Regional development fund (at an early stage of development)	The Fund provides a structure that facilitates investment in growing and regionally focused businesses that require additional equity to reach full potential.
Lead on	A program designed to provide young people life-shaping experiences with business and organizations in their own community. Bendigo Bank is the major sponsor of this government-assisted program. Overall, 600 Lead On projects have been launched with more than 3,000 participants.
Affordable home loan scheme (at an early stage of development)	In conjunction with the Tasmanian State Government, KPMG, and Tassie Home Loans, Bendigo Bank provides a loans scheme to help Tasmania's public-housing tenants buy their own homes.
Community sector banking (CSB)	In 2002, Bendigo Bank launched CSB to help improve the prospects of Australia's not-for-profit sector. CSB provides specialist and general banking services to Australia's not-for-profit sector. It is a JV between Bendigo Bank and Community 21 Ltd, a company representing nineteen community sector organizations who share in banking revenue.
Tasmanian Banking Services (TBS)	A JV between Bendigo Bank and Tasmanian Perpetual Trustees, TBS provides local ownership participation in the Tasmanian banking market.
Elders Rural Bank (ERB)	In the late 1990s, Bendigo Bank formed an alliance with Elders Australia to form a joint venture company to provide banking services to the rural sector. ERB reinvests deposits back into rural Australia.
Ethical Investment Fund	In May 2000, Bendigo Bank launched Australia's first bank-deposit account directly linked to ethical investment structures. Ethical Investment Fund pays its beneficiary, Community Aid Abroad (Oxfam in Australia) a significant amount in commissions and interest donated by depositors.
Green loans	Home loans and personal loans offer customers financial incentives for energy efficient housing.
Greenhouse gas emissions offsets	Agreement with Greenhouse Balanced to offset the total greenhouse gas emissions of vehicle fleet (reforestation and carbon sequestration).
Recycling	Head office and branch office recycling programs (paper and cardboard).
Construction of environmentally sound head office in Bendigo	Energy efficient; rainwater used to flush toilets.

wages, power, and telecommunications. Bendigo Bank provides the banking licence, the bank brand, training of staff, a core range of products and services, systems, marketing support, and administrative support. The community bank branch and Bendigo Bank share the revenue from the products and services sold through the community bank and eighty per cent of the community bank’s profits are reinvested in community development initiatives. The CEM model has been applied to the provision of telecommunications services, and Bendigo Bank is looking at using it for other essential services such as power, water, and transportation.

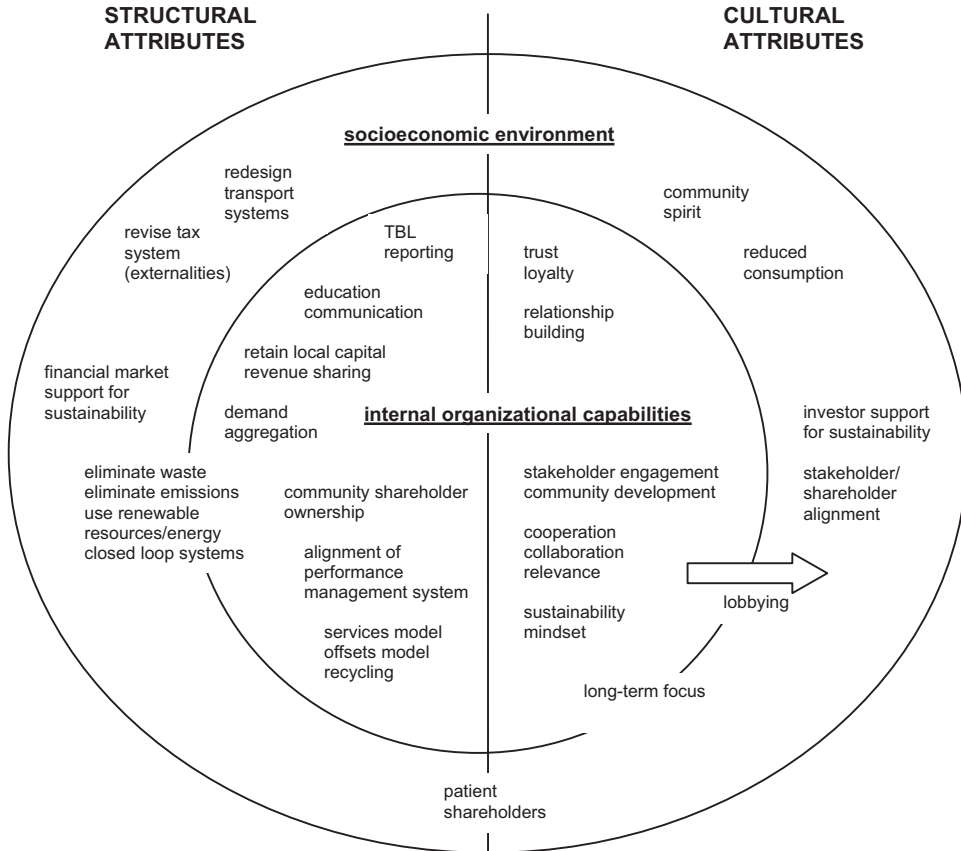
Conceptualizing a SBM

What does a SBM, anchored by the assumptions of the EM worldview, look like? Although it is not possible to provide a comprehensive prescription of an SBM based on two case studies, the following discussion draws out salient features from Interface’s and Bendigo Bank’s business models that contribute to an SBM. Figure 1 summarizes and blends the characteristics of Interface’s and Bendigo Bank’s models that contribute to achieving their sustainability objectives. It shows the internal organizational capabilities and socioeconomic characteristics identified in the case studies and groups the characteristics into “structural” and “cultural.” Structural characteristics are those that relate to processes, organizational forms and structures, and business practices. Cultural characteristics refer to norms, values, behaviours, and attitudes. The distinction between structural and cultural and between internal and socioeconomic are not absolute. There is an overlap in these domains. For example, some characteristics can be partially achieved through internal capabilities, but that also require changes in the socioeconomic environment, such as eliminating waste and emissions, and implementing closed-loop systems. A long-term focus is required at both the organizational and socioeconomic levels. “Patient shareholders” is classified as both a structural (the ownership structure includes patient shareholders) and cultural (“patient” is a cultural attribute of shareholders) characteristic.

Redefining the Purpose of Business

Both Interface and Bendigo Bank defined the purpose of their businesses in wider terms than financial (profitability and shareholder returns). Interface’s purpose emphasized environmental aspects (cherishing nature and restoring the environment) and social aspects (maximizing all stakeholders’ satisfaction) of sustainability, whereas Bendigo Bank focused on the social aspects (improving the prospects of customers and communities). Both acknowledged that profits are an outcome, and a facilitator, of environmentally and socially sustainable activities. In pursuing this approach, they face challenges in changing cultures and attitudes, both internally and externally; to get the buy-in and proactive support from their stakeholders, such as staff, the board of directors, the shareholders, business partners, customers, communities, and financial market analysts. An SBM requires that organizations treat sustainability as a business strategy in itself, rather than as an add-on. Both organizations pursue sustainability for ethical reasons and economic reasons (Bansal & Roth, 2000)—it is the “right” thing to do and the “smart” thing to do. Both Interface and Bendigo Bank draw attention to the importance of aligning shareholder, board, and staff

Figure 1
A Blended View of the Characteristics of Interface's
and Bendigo Bank's Business Models



expectations; shifting the focus from short-term financial returns to long-term value creation through sustainability initiatives.

Reporting Financial, Environmental, and Social Outcomes

Interface produces a sustainability report that measures environmental and social performance in addition to the financial reporting in its annual report. Bendigo Bank does not produce a separate triple bottom line (TBL; Elkington, 1997) report as it believes that TBL reporting is a natural outcome of its business rather than an imposed structure. Its annual report details the progress, and outcomes, of the community engagement initiatives. Nevertheless, it has now stated that it will produce a separate social report to give “an honest account of the Company’s contribution to Australian society and the environment” (Bendigo Bank, 2005, p. 7). The use, or not, of TBL reporting is not particularly significant

in itself; adopting TBL reporting does not necessarily mean that companies are sustainable. For example, companies may report their progress on recycling, levels of emissions, and community engagement initiatives, but may not be change their underlying business practices that cause environmental and social degradation. Similarly, companies may not use a TBL reporting format but may be making significant progress towards sustainability. This implies that TBL reporting, by itself, is not a good indicator of sustainability; it is neither a necessary nor a sufficient condition for companies to achieve sustainability. Reporting progress on sustainability influences stakeholders' perceptions and is therefore an important tactic, but on its own it does not appear to be a significant driver of sustainability. Nevertheless, both firms stated that market analysts typically place little value or importance on sustainability and only track financial performance. This prospectively inhibits organizations from adopting TBL reporting. An SBM necessitates that market analysts support TBL reporting and track organizations' sustainability performance.

Both cases reinforced that social and environmental indicators must also be integrated into the internal measurement systems. Interface tracks "ecosense" points attributed to employee's sustainability initiatives (such as riding a bike to work or volunteering for community projects). Bendigo Bank uses a "balanced scorecard" which tracks staff performance on five dimensions, including "community engagement."

Stakeholder View of the Firm

Both organizations identified stakeholder engagement (identifying, balancing, and responding to stakeholder needs) as an important factor in implementing their sustainability visions, although it was more strongly emphasized in the Bendigo Bank case. This entails "relentless" communication to all stakeholders as well as extensive stakeholder education on sustainability issues. Both structural (organization structure, policies, and processes) and cultural (norms, values, and attitudes) factors influence the success of stakeholder engagement. Of course, stakeholders must be willing to engage with organizations. The data revealed that effective stakeholder engagement entails building relationships based around trust, being "relevant," two-way loyalty (stakeholders are loyal to the organization and the organization is loyal to stakeholders), honesty, integrity, fairness, and equity. Although Bendigo Bank shares revenues with its stakeholders, this is not a prerequisite for an SBM; however, organizations must be willing to share resources (people, profit, time, or natural resources) among stakeholders to achieve sustainable outcomes for all stakeholders.

Absentee shareholders typically focus on economic outcomes, not social and environmental outcomes. Shareholders in the community enterprises are all local and their priorities reflect social concerns in addition to economic—eighty percent of community-bank branch profits are invested in community initiatives whereas only twenty percent are available for dividends to shareholders. Both organizations stated that their shareholders are supportive of their sustainability initiatives and invest in the company for reasons other than financial. A more typical scenario for an SBM is that shareholders, and the financial investment community, recognize that sustainability initiatives build long-term value for all stakeholders. This may mean accepting a lower return on investment (dividends) in the short term (which Bendigo Bank shareholders have done) so that organizations can direct profits to structural and cultural change programs to support social and environmental

initiatives that build long-term value. Under the neoclassical model, shareholders' and organizations' values are aligned around maximizing financial outcomes (Sundaram & Inkpen, 2004). An SBM requires that shareholders', stakeholders', and organizations' values are aligned around sustainability outcomes, which may only occur when sustainability is institutionalized in society (Jennings & Zandbergen, 1995). According to Bansal (2002), for a practice to be institutionalized in society, the norms must be well defined, which is currently not the case for sustainability.

The Role of Leadership

In both companies, it was the personal concerns of the respective CEOs that initially drove the change process to shape the organizational agenda around sustainability (Bansal, 2003). Both CEOs successfully "sold" sustainability to stakeholders (the board, management, staff, shareholders, and customers) and the organizational values are now more aligned with the CEOs' sustainability values (in Bendigo Bank's case, the CEO stated that "community values" were always central to the bank's strategy but the CEM was only formalized in the last eight years). Sustainability leaders embed sustainability in the culture and work towards institutionalizing it in the minds of key stakeholders (Bansal, 2002). However, once sustainability is "in the culture," there is little reliance on leaders to drive the sustainability agenda.

Nature and Environmental Sustainability

Interface acknowledges nature as a stakeholder (Driscoll & Starik, 2004; Starik, 1995)—it is "a corporation that cherishes nature and restores the environment" (Interface, 2003a). Interface's experience suggests that structural changes, which require capital investment (for recycling plants, new manufacturing technology and processes, renewable energy facilities, and redesigned transportation systems) as well as behavioural changes (less consumption) are required to achieve environmental sustainability. The dilemma for organizations that have large ecological footprints is that they may not have the scale of operations (and revenue) to meet the costs of new infrastructure such as building recycling and renewable energy facilities, designing environmentally friendly transportation systems, and introducing new technology and processes to develop low environmental impact products and service-based offerings. It is more effective economically if the cost of these facilities can be shared by stakeholders, including competitors, and the users pay per use. Interface acknowledges that it may be necessary to cooperate with competitors to develop the recycling process as the collection and return (the reverse logistics) is challenging. This implies a collaborative approach where stakeholders develop sustainability solutions for the whole system, rather than for individual components (organizations) within the system. This could entail, for example, cooperative development of a sustainability strategy and plan for a supply chain system—which is consistent with elements of Hart's (1995) "product stewardship" (bringing stakeholders into the strategic process) and sustainable development (shared vision of the future) approaches—rather than each organization formulating a strategy and plan to address sustainability within its own organizational boundaries.

Modifying the Taxation System

Interface stated that the structure of the tax system is a barrier to sustainability. To fully realize an SBM, modifications to the taxation systems are required to shift the tax burden from "goods," like income and labour, to "bads," like ecological damage and consumption of non-renewable resources (Costanza, Cumberland, Daly, Goodland, & Norgaard, 1997). According to Interface, this would encourage organizations to redesign their products and practices to eliminate negative environmental impacts and create a "level-playing field." A pro-sustainability taxation system would encourage organizations to invest in infrastructure to support recycling, "clean" energy, "clean" transportation, and closed-loop systems (to avoid the environmental taxes). This transformation is likely to occur in stages, during a period of many decades (von Weizsäcker & Jesinghaus, 1992). In the short term, organizations could adopt Interface's "offset, sustainable and restorative" approach. Although acknowledging that in the long term, sustainability can only be achieved when the complete supply chain is sustainable, Interface has, under its offset program, implemented a number of climate-neutral programs aimed at offsetting all the greenhouse gas emissions emitted during the complete lifecycle of the product (see Table 2). Its sustainable strategy entails designing new products and processes, and its restorative strategy seeks to "put back more than it takes" by influencing others to be sustainable.

The need for a pro-sustainability taxation system suggests that organizations must proactively lobby for changes to the socioeconomic system to give substance to their sustainability policies. Interface believes that its size limits its influence, and it chooses to work through coalitions such as the World Resources Institute to lobby for changes to government policies. Lobbying for socioeconomic reform will assist in institutionalizing sustainability in the mindsets of key stakeholders (Bansal, 2002), such as governments and industry bodies.

Retaining and Reinvesting Local Capital

One perspective in the sustainability literature is that "keeping capital local" is a necessary condition for a sustainable society (see, e.g., Daly & Cobb, 1994; Douthwaite, 1999). A key driver of Bendigo Bank's community engagement strategy is to retain capital in communities and a number of structures aim to do this, such as the CEM (revenue sharing, local shareholder ownership, and reinvestment of profits), the regional development fund, the community enterprise foundation (gifting structure), and the Bendigo stock exchange (see Table 3). Is it the structural characteristics of retaining capital that are important to an SBM or are there cultural aspects that are equally, or more, important such as a willingness to focus on the wellbeing of stakeholders? Drawing on the Bendigo Bank case, the key factors of "retaining local capital" that inform an SBM are:

- Organizations work for the "common good" (Daly & Cobb, 1994)—for the benefit of multiple stakeholders not just shareholders (which leads to a profitable organization);
- Organizations work cooperatively with stakeholders to achieve economic, social, and environmental outcomes; and
- Organizations temper short-term financial outcomes so that social and environmental outcomes can be achieved.

Table 4 provides samples of the data from the case studies that support these key themes.

Table 4
Sample Data From Interviews

<i>Theme</i>	<i>Interview Quotes</i>
Redefining the purpose of business	<p>The whole ethos of what we're doing as a business is to move it beyond just a straight business bottom line to integrally involve with communities. (BB)</p> <p>The ultimate purpose of a corporation surely is something more than just making money. It has to make a profit to exist but it doesn't exist just to make a profit . . . What we are learning at Interface is that higher purpose for bringing people together. (I)</p>
Reporting financial, environmental and social outcomes	<p>I guess we've had enough commitment from those within the organisation to not need to document strict KPIs [Key Performance Indicators] in the early days to say "this is how we're going." Our growth has been substantial—if that doesn't tell you a story, then nothing else does. So I guess we have a fairly strong belief in this organisation, that we are on the right path and it is evident by the value we are creating . . . I'm not sure we need to put it in a little box and put six KPIs around it. (BB)</p> <p>I think that short-termism is probably a real challenge for sustainability. Sustainability is a long-term focus yet in some ways and some senses, business is still being driven by this short-term financial reporting and I see quite a conflict there. Yes we talk about triple bottom line (TBL) measures but there are still funds managers driving this short-termism and that seems to be in conflict with the long term sustainability focus. (I)</p>
Stakeholder view of the firm	<p>You will have heard by now "successful customers, successful communities creates a successful bank" in that order. It's a really important distinction. It isn't chasing a shareholder objective at the expense of customers or communities. It's actually understanding that if we help and improve the financial prospects of the communities within which we work by default it will enhance our business at the backend because without them we don't have a business. (BB)</p> <p>We are relatively young in this area [social sustainability] but we believe that our commitment can make a substantial difference to our stakeholders, while providing a positive restorative impact on the global community. (I)</p>
The role of leadership	<p>I don't think a strategy is solely dependent on one person. Particularly because he spends so much effort building a structure around this organisation, it's actually allowing the strategy to, I suppose, cascade down through his management team. So I think five years ago it [CEO leaving] would have been a real crisis because we were starting on a path—the path has so much momentum now, we could do just what we've got in the pipeline with community engagement and it would keep us going for the next ten years. So I think we have this great momentum built up and I think we have enough experience within the people we have working with this stuff to actually keep on taking the strategy forward. (BB)</p> <p>I think one of the most positive signs of improvement is the extent to which sustainability has become enmeshed in the business. We probably don't talk about this stuff as much as we used to because it's simply ingrained . . . [we're not] challenged every step of the way. I think you will hear that it is in the DNA of the company. It's who we are and what we are. (I)</p>
Nature and environmental sustainability	<p>Well, we may in fact have to do some of that [cooperation]. The recycling process—the collection and return, the reverse logistics—is a hugely challenging operation. That may take cooperation among competitors—that will get the sort of scale necessary. (I)</p>

(continued)

Table 4 (continued)

<i>Theme</i>	<i>Interview Quotes</i>
	So we try to create more happiness with less stuff. And the stuff we do consume, we consume with the right kind of technology . . . How do you get more happiness with less stuff? That’s the ultimate. (I)
	The biggest challenges are on the technology front. When we started this journey the technology didn’t exist. We are a product of the first industrial revolution and we are trying to create the next industrial revolution with the cyclical processes, driven by solar energy and so forth. Linear being replaced with cyclical processes—take nothing, do no harm. (I)
Modifying the taxation system	The economic system is upside down, backwards. An enlightened taxation policy could change it very quickly. Quickly, I think, means in twenty years or something like that—phase in carbon taxes, pollution taxes and phase out income taxes. Shift taxes from good things to bad things. . . . You are not going to get business to internalize the externalities voluntarily. (I)
Retaining and reinvesting local capital	I think from a capital perspective, one of the great things about this model is that it’s provided pluses for both parties—for the community and for the bank. For Bendigo Bank, we access new markets . . . The community get local enterprise, certainty, control—they sit in the driver’s seat. They have the opportunity to create jobs etc. They have a structure that can generate profits that can flow back into other community benefits. So we both win. (BB)
An SBM encompasses a systems perspective	Ultimately, yes, the whole of the supply chain has to be sustainable or we’re not sustainable. We are our supply chain. Not many companies think of it that way but we do. (I)

Note: I = Interface; BB = Bendigo Bank.

In summarizing the preceding themes, Table 5 identifies the “candidate” characteristics of an SBM. On one dimension, the table groups the characteristics under the headings “economic,” “environmental,” “social,” and “multidimensional or holistic.” The “multidimensional or holistic” column captures those characteristics that have a combination of economic, environmental, and social facets, or reflect a more holistic approach to sustainability. The second dimension categorizes the characteristics as structural or cultural. Ultimately, sustainability is about getting all three pillars (economic, environmental, and social) into balance rather than treating them as self-contained components because they are “inextricably connected and internally interdependent” (Bansal, 2002, p. 123). As a summary, Table 5 does not adequately capture this integration. There is also a danger in reducing the themes from the data to a table entry; the richness and intricacies of the various perspectives in the interview data are lost.

The SBM described in this article reflects the proven sustainability aspects of Interface’s and Bendigo Bank’s business models. There were a number of issues that did arise in the interviews that show that there are “cracks” in their models—the models are a work-in-progress. Although Interface is pursuing a “higher purpose,” there is no consensus within the organisation. A view expressed was that the bottom-line priority is still financial—“it all comes back to dollars and cents.” Interface takes a systemic view of sustainability, but it wasn’t clear from the interviews that Interface has a strategy and plan for bringing about systemic changes such as lobbying key external stakeholders. To date, Interface has had little success

Table 5
Characteristics of a Sustainability Business Model

	<i>Economic Characteristics</i>	<i>Environmental Characteristics</i>	<i>Social Characteristics</i>	<i>Multidimensional or Holistic Characteristics</i>
Structural attributes	External bodies that track performance of companies use a triple bottom line (TBL) approach.	Threefold strategy: offsets (do no harm but make amends if you do), sustainable (do no harm), restorative (leave the world better than you found it).	Stakeholder engagement skills: understanding stakeholders' needs and expectations (being relevant to stakeholders).	Systems approach: <ul style="list-style-type: none"> • cooperative business strategy and planning. • collaborative model including supply chain, competitors, government agencies, communities.
	Lobby industry and government for changes to taxation system and legislation to support sustainability.	Closed-loop systems: responsible for product throughout its lifecycle.	Educate stakeholders; "relentless" communication.	TBL approach to measure organizational performance.
	Keep capital local: local shareholders and investment in local sustainability initiatives.	Implement a services model.	Implement stakeholder consultation program.	Institutionalise sustainability in the business: "relentless" communication, stakeholder education, leadership, champions, and align internal performance measures.
		Industrial ecosystems and stakeholder networks.	Get "buy-in" from internal and external stakeholders.	Demand-driven model, not supply-driven model (driven by what people need, not driven by companies trying to get people to buy more).
Cultural attributes	Profit is a means not an ends. Business makes a profit to do something more. "Higher purpose" to business than making money.	Treat nature as a stakeholder.	Stakeholder approach (managing the organization for the benefit of all stakeholders and not prioritizing shareholders' expectations above other stakeholders).	Medium to long-term focus.
	Shareholders invest for social & environmental impact reasons as well as for financial reasons.		Alignment of stakeholder expectations.	Reduction in consumption.

(continued)

Table 5 (continued)

<i>Economic Characteristics</i>	<i>Environmental Characteristics</i>	<i>Social Characteristics</i>	<i>Multidimensional or Holistic Characteristics</i>
Shareholders temper expectations for short-term financial returns.		Sharing of resources (people, profits, and time) among stakeholders to achieve sustainable outcomes. Relationship building (trust, two-way loyalty, honesty, integrity, and fairness, equity).	

in convincing customers to take up its leasing service (Evergreen Lease). It is unclear how Interface will achieve its seventh front—redesign commerce to focus on the delivery of service and value instead of material.

Interviews with community bank branches highlighted some tensions with the CEM: a view that Bendigo Bank has all the power in its relationship with the community bank branches and this seen as a risk; the emergence of rivalry between community banks for customers potentially leading to unethical behaviour; and, observation of “us-and-them” thinking between Bendigo Bank and the community banks, rather than “all being in this together” (pursuit of self-interest). Bendigo Bank acknowledges that this type of model is not for everyone and states that “We and they have to continue to build the competencies to take on the challenges of the future. We have to continue to adapt.”

Conclusion

Drawing theoretical conclusions from the particulars of only two case studies is inherently risky (Lawrence, 2002). Nevertheless, we will offer some conclusions about what Interface’s and Bendigo Bank’s business models reveal about sustainable organizations and an SBM. Future research can test the propositions set out below and expand upon the ingredients of the SBM described in this article, in line with the abductive research approach.

A SBM Draws on Economic, Environmental and Social Aspects of Sustainability in Defining an Organization’s Purpose

A sustainable organization expresses its purpose, vision and/or mission in terms of social, environmental, and economic outcomes. Profits are a “means” to achieve sustainable outcomes—sustainable organizations must make a profit to exist but they don’t just exist to make a profit. They pursue sustainability because it is “the right thing to do” as well as the “smart thing to do.” As aspects of Interface’s and Bendigo Bank’s practices illustrate, cherishing nature and putting the success of stakeholders first, leads to a strong, profitable business.

A SBM Uses a TBL Approach in Measuring Performance

This may be manifest as a sustainability report, a social impact report, an environmental report or as social and environmental indicators reported alongside the financial indicators in an annual report. These measures are integrated into internal performance measurement systems to ensure that a “sustainability mindset” is embedded throughout the organization.

A SBM Considers the Needs of all Stakeholders Rather Than Giving Priority to Shareholders’ Expectations

Sustainable organizations adopt a stakeholder view of the firm, rather than a shareholder view, and understand that the organization’s success is inextricably linked to the success of its stakeholders, including local communities, suppliers, partners, employees, and customers. Stakeholder engagement and collaboration is a necessary condition of an SBM.

A SBM Treats Nature as a Stakeholder and Promotes Environmental Stewardship

Sustainable organizations, implicitly or explicitly, acknowledge nature as a stakeholder. Renewable or human-made resources are used instead of non-renewable resources (natural capital). Technological innovation minimizes, and eventually eliminates, non-recyclable waste and pollution. Reduced consumption is a feature of an SBM, to reduce the “ecological footprint” of people and organizations. Environmental damage caused by organizational activity is repaired. An offsets strategy is employed to address unsustainable practices in the supply chain, but in the long-term a collaborative approach makes the whole supply chain sustainable—to “do no harm” (Hawken, 1993) to the environment.

Sustainability Leaders, or Champions, Drive the Cultural and Structural Changes Necessary to Implement Sustainability

Until sustainability is institutionalized in organizations and within the mindsets of stakeholders, “visionary CEOs” will push the sustainability agenda throughout organizations and stakeholder networks. As sustainability becomes more embedded in the organizational structure and culture, the role of the CEO in “converting” the organization to sustainability diminishes.

An SBM Encompasses the Systems Perspective As Well As the Firm-Level Perspective

Organizations can make significant progress towards achieving sustainability through their own internal capabilities, but ultimately organizations can only be sustainable when the whole system of which they are part is sustainable (Jennings & Zandbergen, 1995). Changes to the socioeconomic system, both structural (such as redesigning transportation systems and taxation systems) and cultural (such as attitudes to consumption and, economic growth and wellbeing), are required to facilitate firm-level and system-level sustainability.

An organization adopting an SBM develops internal structural and cultural capabilities to achieve firm-level sustainability and collaborates with key stakeholders to achieve sustainability for the system that the organization is part of. At the systems level, an SBM is characterized by ubiquitous sustainable infrastructure such as recycling facilities, sustainable transportation systems, renewable energy facilities, and ecological tax-reform systems. This requires changes in legislation and regulation, a “sustainability mindset” in society, new ways of tracking performance of “systems” and firms, and collaborative partnerships among stakeholders (such as organizations, competitors, industry bodies, governments, communities, NGOs, the media, and financial markets) to promote and develop sustainable infrastructure at a local and global level.

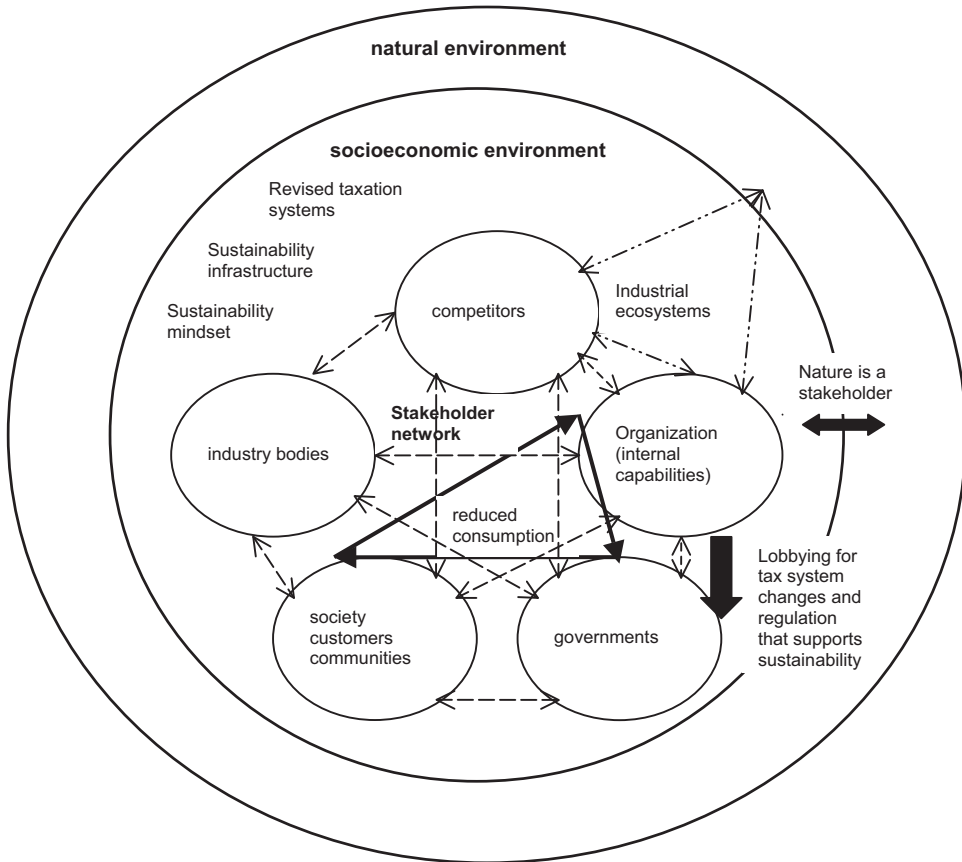
Planning for, and implementing, a systems-based SBM requires participation from all stakeholders. A stakeholder network (Rowley, 1997; Sama, Welcomer, & Gerde, 2004; Windsor, 2004)—which relies on collaborative relationships between stakeholders who have objectives of ecological and social improvements in addition to conventional value creation (Windsor, 2004)—may be an appropriate structure to facilitate the development and implementation of a system-wide vision, mission, strategy, plans, and tactics for achieving systems sustainability. However, as Windsor (2004) points out, further research is required to develop integration structures within and across systems, and system governance guidelines and processes.

Industrial ecosystems (Frosch & Gallopoulos, 1989; Graedel & Allenby, 2003; Shrivastava, 1995; Tibbs, 1993), although only few in number and operating in small regional areas (Korhonen, von Malmborg, Strachan, & Ehrenfeld, 2004), may also provide a blueprint for a systems-based SBM. In industrial ecosystems, companies in close proximity coordinate their use of raw materials, energy, water, and their waste management practices. The interdependent material and energy flows of the constituents are analysed to reduce the environmental burden of the whole system (Korhonen & Snakin, 2005).

A systems-based SBM may emerge along the lines of Figure 2. In keeping with a stakeholder network approach, Figure 2 does not place the organization at the centre of a network through which multiple stakeholder relationships must work (Windsor, 2004). There is no central node in the network and organizations are just one of the stakeholders in the network. Within the SBM, a number of entities interact to achieve sustainability for the system. The SBM operates within, and interacts with, the wider socioeconomic system and natural environment. Figure 2 shows only a selection of stakeholders and additional stakeholders, and their interactions need to be added to this model; for example, non-government organizations (NGOs), the media, upstream and downstream supply chain players, financial markets, and investors.

In this article, we examined two cases of sustainable organizations to conceptualize a business model that is informed by an EM worldview. The SBM is one ideal of a sustainable organization. The SBM is not absolute or prescriptive. It will continually be enhanced as we gain further understanding of how firms operationalize sustainability. Future research may also concentrate on developing additional ideal types of sustainable organizations within different contexts, such as developing countries (Boutilier, 2005; Sharma & Starik, 2004). The research project focused on *what* an SBM looks like—the characteristics and components of a sustainable business model. We didn’t delve into the historical process of change; *how* Interface

Figure 2
An Illustration of a Systems-Based SBM



and Bendigo Bank developed the skills to achieve their level of sustainability. Research into the process of how these organizations transformed their business models and cultures would be helpful for other organizations wishing to pursue sustainability.

Note

1. Initial sources: Australian Corporate Responsibility Index, the global Dow Jones Sustainability Index, the global FTSE4Good index, and discussions with Monash Sustainability Enterprises who undertake research into sustainability aspects of listed companies for the investment industry to support socially responsible investment products.

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