For publication in: Jeanrenaud, S., Gosling, J. & Jeanrenaud, J.P. (eds.). Sustainable Business: A One Planet Approach, Chichester, UK: Wiley, Chapter 13

What does sustainability for business really mean? And when is a business truly sustainable?

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Quote

"Imagine a world where business is celebrated for its contribution to society." (Nick Main, Deloitte)

Learning Objectives

1. Understand that despite the fact that more and more companies are integrating sustainability into their management the state of the planet is not improving
2. Understand how this "big disconnect" is related to the way business sustainability has been framed and developed in theory and in practice
3. Becoming familiar with different ways of defining sustainability in business and appreciating the evolution of thinking
4. Get to know a simple framework for the analysis of existing and emerging models for business sustainability
5. Learn about a new typology for business sustainability, ranging from Business-as-Usual to Business Sustainability 1.0 (Refined Shareholder Value Management), Business Sustainability 2.0 (Managing for the Triple Bottom Line) to Business Sustainability 3.0 (Truly Sustainable Business)
6. Learn what it means for a business to be not just sustainable, but "truly sustainable" and what are some of the related challenges in putting this into practice

Context

While sustainability management is becoming more widespread among major companies, the impact of their activities do not reflect in studies monitoring the state of the planet. What results from this is a "big disconnect" between sustainable business on an organizational level and sustainable development on a global level. In this chapter we address two main questions: "How can business make an effective contribution to addressing the sustainability challenges we are facing?" And: "When is business truly sustainable?" In a time, when more and more corporations claim to manage sustainably, we need to distinguish between those companies that contribute effectively to sustainability and those that don't. We do this by clarifying the meaning of business sustainability and link it to the global sustainability challenges. We review established approaches to business sustainability in the literature and develop a typology of business sustainability with a focus on effective contributions for sustainable development.

Introduction

This chapter builds on an earlier paper published as Dyllick & Muff (2015). We address two main questions: "How can business make an effective contribution to resolving the sustainability challenges we are collectively facing?" And: "When is business truly sustainable?" In a time, when more and more corporations claim to manage sustainably, we need to distinguish between those companies that do and those that don't make effective contributions to sustainable development. In order to do so, we will clarify the meaning of business sustainability (BST) by reviewing established approaches and by developing a typology that focusses on effective contributions for sustainable development (SD). This should help to assess companies on their journey towards integrating BST into their strategies and business models. And it provides a framework for scholars and professionals to engage in the transformation of business, moving from Business-as-Usual to "True Business Sustainability". We will not address the required changes in the underlying economic model or in the model of consumer behavior, although effective changes in all these areas are clearly interrelated.

We start out by looking in more detail at this "big disconnect" between sustainable business on an organizational level and sustainable development on a global level. (section 1) We then look at studies monitoring the overall state of the planet (section 2) before we move to the business level. Here we look at how models of business sustainability have been typically framed in theory and practice (section 3). In the main part of the chapter (section 4) we develop a new typology for BST ranging from Business Sustainability 1.0 (Refined Shareholder Value Management) to Business Sustainability 2.0 (Managing for the Triple Bottom Line) and to Business Sustainability 3.0 (True Sustainability). In section 5 we briefly addresses some of the challenges in managing and organizing for Business Sustainability. In the final section 6 we present our conclusions and a discussion.

1. Sustainable business and sustainable development: The big disconnect

The role of business in making our world a more sustainable place is at the center of the study of sustainability management. If we follow the studies monitoring the acceptance and integration of sustainability by big companies, there is a strong consensus emerging that sustainability is having and will continue to have a significant material impact on company strategies and operations. More and more business executives agree that sustainability-related strategies are necessary to be competitive today and even more so in the future. More and more executives report that their organizations' commitment to sustainability has increased in the past and will develop further in the future. They report that benefits of addressing sustainability accrue not only to the environment and to society, but also to the companies themselves, through tangible benefits in the form of reduced costs and risks of doing business, as well as through intangible benefits in the form of increased brand reputation, increased attractiveness to talent and increased competiveness. (Bové & Bonini, 2014; Kron, Kruschwitz, Haanaes, Reeves & Goh, 2013; UN Global Compact & Accenture, 2013 & 2010; Haanaes, Reeves, von Strengvelken, Audretsch, Kron, & Kruschwitz, 2012; Haanaes, Arthur, Balagopal, Teck Kock, Reeves, Velken, Hopkins & Kruschwitz, 2011) But somehow this good news is not reflected in studies monitoring the state of our planet. Here we learn that poverty has not been eradicated, inequity is growing, hunger and malnutrition still kills a child every 6 seconds, 1.8 billion people don't have access to clean drinking water and sanitation, 2.3 billion people don't have access to electricity and a 4 degree warming scenario is now being accepted by international organizations like the World Bank and the IEA, while the international climate negotiations have failed to produce any consensus on effective global strategies to keep global warming at least below 2 degrees (Bakker, 2012; UNEP, 2012; WWF, 2012; Gilding, 2011).

What results from this discrepancy between micro level progress and macro level deterioration is a big disconnect between company activities and the global state of the environment and society. Although there are different reasons to explain this disconnect – after all corporations are not the only relevant actors in the global sustainability arena – the current situation should be considered as a wake-up call for business people and management scholars alike that their good intentions and actions have not been leading to significant sustainability improvements on a global level. In response to this disconnect, we critically look at how the concept of BST has been used in the academic literature and in the world of practice. In clarifying the meaning of BST, we do not assume this alone will solve the problem, but we believe that a better understanding of the impact of business on global sustainability will set the discussion at least on the right track.

Bansal & Gao (2006) analyzed the "organization and environment" research published in leading general management journals and found that a majority of the articles explained environmental outcomes, yet only a small fraction of these offered radically new insights about balancing economic and environmental needs. Sharma concluded that research on business sustainability has become increasingly incremental and is mostly failing to ask bold and important questions that address fundamental sustainability issues the world is facing. And although "rigor increases every year, the questions asked become increasingly uninspiring, uninteresting, and insignificant." (Sharma cited by Starik, 2006: 433).

Kollio & Nordberg (2006: 447) conclude rather skeptically in their analysis of the literature with regard to the environmental side of business sustainability: "What we do know is that eco-efficiency of companies usually increases because of environmental management. But we also know that the ecological footprint of humanity has shown no signs of getting smaller, and neither has that of the industrialized world – in fact rather to the contrary (e.g. WWF). We simply do not know to what extent corporate greening actually contributes to ecological sustainability or whether it does at all". They link their analysis to the skewed perspective and values of business sustainability scholars. It seems that when these authors analyze win-win strategies and solutions in their research, the debate is really about whether and how business is profiting from it, ignoring society and the environment. It is not really societal or environmental issues that are under scrutiny, but organizational issues and consequences.

Banerjee (2011) arrives at the same conclusion with regard to corporate social responsibility and links it to the primary focus in the literature, which has been on the financial impact and on the company not on the outcomes for society. Margolis & Walsh (2003: 289) conclude more broadly from their appraisal of 30 years of studies on corporate social performance: "Although the financial effects of corporate social performance have been extensively studied, little is known about any consequences of corporate social initiatives. Most notable, as calls for corporate involvement increase, there is a vital need to understand how corporate efforts to redress social misery actually affect their intended beneficiaries."

In looking at some of the underlying reasons Banerjee (2011: 720) suggests there are deeply rooted ideological barriers that come into play when business sustainability is approached from the dominant economic-centered paradigm. These barriers include the perspective of looking first and foremost for benefits that serve the organization (by increasing brand value, reducing risk and cost factors or embracing new revenue growth potential) rather than embracing a more balanced approach to value creation. As such, the dominant view is that business can profit from sustainability while solving the social and environmental problems of the world through new growth opportunities (Hart 2007), through opportunities for innovation (Nidumolo et al. 2009) or for profit (Prahalad & Hammond 2002; Prahalad 2004). The underlying assumption embedded in this win-win perspective is that business will not pursue environmental and social initiatives if these do not provide economic advantages to the business. A purely economic perspective and an ideological bias in favor of business success are therefore constraining relevant contributions of business sustainability to bring about real and noticeable improvements to the state of the planet.

Considering this brief overview of the state of the sustainability literature, we can but notice the paradoxical absence of nature and society from sustainability research and the deplorable lack of bold steps into addressing environmental and social outcomes. It appears that these are connected to some fundamental shortcomings and blind-spots of how the management discipline has developed:

1. Educational shortcomings: The knowledge and understanding of the great majority of management scholars in the environmental and sustainability fields is simply too weak to bring a similar understanding and depth to the debate as compared to the organization side (Whiteman et al. 2013).
2. A missing interdisciplinary perspective: Issues of ecological and social sustainability are typically much more complex than organizational issues and may include ecological, economic, political, social and cultural relationships which demand cross-enterprise, cross-level, cross-theoretical and interdisciplinary approaches which are rarely taught and difficult to apply.
3. A very limited perspective on skills: Sustainability issues include cognitive, emotional and ethical elements that typically are very challenging for the researcher and the skills required.
4. Missing incentives for researchers: Theoretical research is mainly concerned with methodological rigor and contributions to established theory, the societal relevance of the questions is often of little concern for the researcher. And as normative research enjoys significantly less credibility than explanatory research, bold and exploratory research that addresses the big issues society is facing is very rare and holds few benefits to academic researchers.
5. Ideological prejudices: The dominance of win-win strategies in the sustainability literature reflects the economic interests of business, but fails to take into account the public interest which was seen to be paramount for the Academy of Management at the time of its foundation more than 55 years ago (Walsh et al. 2003).

2. Understanding our global sustainability challenges

Humanity is living far beyond the planet’s means, consuming the Earth’s renewable resources as if we had more than one planet to draw upon. According to the estimation of humanity’s global footprint, we are using the resources of one and a half planets (WWF, 2014). At the same time, there are significant disparities between regions and their footprints. If we all consumed at the level of the European consumers, we would need the resources of three planets; at the level of the US consumers, we would need more than four planets. An absurd thought that becomes scary when we consider the projections for the global middle class tripling to reach 4.9 billion by 2030 with an additional 2.7 billion middle class consumers in Asia alone (WEF & Accenture, 2012). These will increase our global footprint to reach a bio-capacity need of 2 planets by 2030. Having only one planet available, obviously this is not at all a sustainable path (Gilding, 2011). In order to assess the overall state of the planet a number of major scientific analyses have been presented, all with equally disturbing results.

The Millennium Ecosystem Assessment (MEA, 2005) is the largest assessment of the health of ecosystems ever undertaken. It was commissioned by the UN and prepared by 1360 experts from 95 countries. It represents a consensus of the world's scientists on the rate and scale of ecosystem changes and consequences for 24 ecosystem services. Ecosystem services are services provided by nature in the form of provisioning services (wood, crops, water or genetic resources), regulating services (water purification, climate or erosion regulation) and cultural services (educational or recreational values of nature). The findings demonstrate that humans have radically altered these ecosystems in the last 50 years. While such ecosystems changes have brought economic gains, these gains were achieved at growing ecological costs that threaten the achievement of the U.N. Millennium Development goals. The overall result is sobering: 15 out of 24 (60%) ecosystem services analyzed have been degraded during the past 50 years, 5 show mixed results while only 4 have improved. Most of the services provided by nature for free have become not only costly, but increasingly scarce (e.g. capture fisheries, wild foods, genetic resources, erosion regulation).

A group of renowned earth-system and environmental scientists led by Johan Rockstrom of the Stockholm Resilience Centre analyzed the environmental threats of the planet and developed a "planetary boundaries approach", defining thresholds for nine critical Earth-system processes. The boundaries were defined based on best available scientific knowledge. Together they create what Rockstrom & Collegues (2009) call a "safe operating space for humanity". Crossing the boundaries could lead to irreversible and, in some cases, abrupt environmental change. Such change could move the Earth out of the stable state, which has allowed humankind to develop safely and beneficially during the past 10'000 years. The nine processes that define the planetary boundaries include climate change, rate of biodiversity loss, nitrogen and phosphorous cycles, ozone depletion, ocean acidification, global freshwater use, change in land-use, atmospheric aerosol loading and chemical pollution. When comparing the current status of these processes with the proposed safe boundaries, Rockstrom & Collegues conclude that the first three of them - climate change, rate of biodiversity loss, nitrogen cycle - have already crossed their critical thresholds while four more are rapidly approaching their thresholds - global freshwater use, change in land-use, ocean acidification and the phosphorus cycle.

Any vision of sustainable development recognizes of course the importance of societal well-being as an integral part of our planetary well-being. Eradicating poverty and achieving social justice is inextricably linked to ensuring ecological stability and renewal. While planetary boundaries provide an environmental ceiling defined by critical natural thresholds, there are also social boundaries defined by critical human deprivations. They represent a kind of lower limits and provide a minimal social foundation for sustainable development. Raworth (2012) presents a "doughnut model" or "life-safer model" to define a safe and just space for humanity with an outer environmental boundary and an inner social boundary. Between a minimal social foundation that protects against critical human deprivations and an environmental ceiling that avoids critical planetary thresholds lies a "safe and just space for humanity" to thrive in.

The minimal social foundations presented are based on international human rights as laid down in the UN's Universal Declaration of Human Rights (1948), the Millennium Development Goals (2000) or the UN General Secretary's High-level Panel on Global Sustainability (2012). They include eleven social priorities enabling people to be well, productive and empowered:

- Being well: food security, adequate income, improved water and sanitation, health care;
- Being productive: through education, decent work, energy services, resilience to shocks;
- Being empowered: through gender equality, social equity, having a political voice.

Figure 1: A safe and just space for humanity to thrive in (Source: Raworth, 2012)

Clearly, achieving sustainable development, or even just making significant steps into the right direction, presents a secular challenge. It will need major transformations in many different areas and on different levels. Society, the economy and business are challenged to help ensure this urgent transition. The World Business Council for Sustainable Development (WBCSD) recognizes in its Vision 2050 – "nine billion people living well and within the limits of the planet" - that the demands of a growing and more demanding population have to be met within the capacity of the existing planet. In order to achieve this goal, it will need both a significant reduction of the ecological footprint and an improved bio-capacity (WBCSD, 2010). In other words, it will not suffice to radically lower the level of resource consumption, but we will have to come up with ingenious solutions to (re)generate bio-capacity, e.g. solutions that don't just reduce emissions but take emissions out of the atmosphere. The WBCSD outlines a number of significant changes required to ensure a world on-track towards sustainability by 2050. Some of them demand better solutions and technological innovation that can be viewed as important business opportunities, others relate to behavioral change and social innovation (WBCSD, 2010):

- Developing radically more eco-efficient lifestyles and solutions to enable education and economic empowerment for billions of peoples, women in particular
- Incorporating the cost of externalities, including carbon, water and ecosystem services
- Doubling the agricultural output without increasing the amount of land or water used
- Halting deforestation and increasing yields from planted forests
- Halving carbon emissions world-wide and providing access to low-carbon mobility
- Delivering a four to tenfold improvement in the use of resources and materials.

Vision 2050 sets the standard of the challenge for business and society. To move from today's business as usual to a sustainable world in 2050 it will be necessary to rebuild the economy with new rules, to decouple economic growth from resource consumption and ecosystem degradation, to move markets toward true-value pricing and long-term value creation, and for business to make sustainability an easier choice for consumers and companies themselves (WBCSD, 2010).

The challenges of sustainable development for the future of the economy are as daunting as for the future of business. Beyond the belief that we have to somehow move from a "brown" to a "green economy", which according to UNEP (2011) can be thought of as one which is low carbon, resource efficient and socially inclusive, there are no signs yet as to what such an economy and the necessary transition could possibly look like. "The sheer scale of this task is rarely acknowledged. In a world of 9 billion people all aspiring to Western lifestyles, the carbon intensity of every dollar of output must be at least 130 times lower in 2050 than it is today. And by the end of the century, economic activity will need to take carbon out of the atmosphere rather than adding to it" (Jackson, 2011, p. 187).

What society and the planet need in the next two decades is nothing short of an economic miracle whereby business with its capacity for innovation is uniquely well placed to generate such a miracle.

3. Different approaches to framing business sustainability

The basic business process can be understood as a transformation of various inputs into different kinds of outputs. We will use this simple "input – process - output" model in order to look more deeply at existing approaches for integrating sustainability into business. On the input side we identify different *concerns* (or issues) business chooses to consider and address. On the process side we focus on different *organizational perspectives*. And on the output side we find different *values* business creates or preserves. A focus on inputs defines business sustainability with regard to the relevant concerns considered by business (what?). A focus on perspectives defines business sustainability with regard to the perspectives taken by business (how?). And a focus on values defines business sustainability with regard to the values created by business (what for?).

INPUT	PROCESS	OUTPUT
Concerns *What?*	Organizational perspectives *How?*	Values created *What for?*

Table 1: A framework for analyzing different approaches to business sustainability

Focusing on Concerns

Some of the early concepts of BST were focusing on concerns like "integrating short-term and long-term aspects" and "consuming the income not the capital". Another concern relates to "being accountable for the impacts of business decisions and activities". Let us look at these approaches in more detail.

While the relevant planning horizons for companies have become shorter and shorter, mainly driven by pressures from the financial markets, developments in the sustainability field typically require a much longer time horizon. Demographic processes, urbanization, resource depletion and renewal rates, time lags in climate change and ozone depletion are only some examples of this. If sustainability concerns are to be taken into consideration by companies, *long-term aspects need to be given at least equal weight as short-term aspects.* This logic is well exemplified in the decision by Paul Polman (2012) after he had come in as new CEO of Unilever. As one of his first decisions, he got rid of quarterly reporting and told hedge-funds and short-term investors "you don't belong in this company" as they are not aligned with Unilever's longer-term strategy to double revenue by 2020 while halving the company's sustainability impact.

The second consideration requires business to *live off the income and preserve the capital base* (Dyllick & Hockerts, 2002). Companies have considered this as good financial management, yet the same holds true for natural and social capital which would also deserve to be preserved, although it is not equally accepted or institutionalized. In times when environmental and social capitals have become scarce or strained, sustainable business has to take all three areas into consideration. Balancing economic, environmental and social capital is thus a foundation of a good sustainable business practice.

"*Being accountable for the impacts of business decisions and activities*", a third concern, is captured well in how the ISO 26000 standard (2011) on social responsibility (which can be interpreted here as an alternative term for sustainability) defines this approach:

> *"The essential characteristic of social responsibility is the willingness of an organization to incorporate social and environmental considerations in its decision-making and be accountable for the impacts of its decisions and activities on society and the environment. This implies both transparent and ethical behavior that contributes to sustainable development, is in compliance with applicable law and is consistent with international norms of behavior. It also implies that social responsibility is integrated throughout the organization, is practiced in its relationships and takes into account the interests of stakeholders".*

Without any doubt, accountability is an important aspect of BST, just like the other two concerns, integrating short-term and long-term aspects and consuming the income not the capital. They all address an important aspect of BST that promises to contribute to sustainable development, but there are other approaches with a focus on organizational perspectives and values created that we need to look at also.

Focusing on Organizational Perspectives

Other approaches for integrating sustainability into business are focusing not on the concerns to be considered, but on the organizational perspectives used by business. These include "managing risks and opportunities" and "embedding sustainability throughout the organization".

Some authors base their BST strategies on the dual need of *managing risks and opportunities* which can be located on an operational or a strategic level (Steger, 2004 and 2006; Schaltegger, 2006). Others focus on managing the downside by reducing costs (e.g. resource efficiencies, regulatory burden) or risks (e.g. business risks, supply chain risks) and building the upside by increasing revenues, market share or reputation (Esty & Winston, 2009; Nidumolu, Prahalad & Rangaswami., 2009).

"*Embedding sustainability throughout the organization*" has been another prominent perspective considered to be of key importance for integrating sustainability into business. Such authors argue that simple bolt-on sustainability will not suffice to effectively manage the sustainability risks and opportunities for business. Business will need to embed sustainability throughout the organization into its strategies and operations, into its governance and management processes, organizational structures and culture, its auditing and reporting systems (Eccles, Miller & Serafeim, 2012; Laszlo & Zhexembayeva, 2011; Miller Perkins, 2011; Belz & Peattie, 2012; Smith & Lensen, 2009; Esty & Winston, 2009; Epstein, 2008).

The ISO 26000 guidelines (2011) further clarify that the regular activities constitute the most important behavior to be addressed, not special activities or projects. They should be an integral part of the core organizational strategy, with assigned responsibilities and accountability at all appropriate levels of the organization and they should be reflected not only in decision making, but also in implementation activities. Finally, corporate responsibility should be based on an understanding of the broader expectations of society and an identification of and engagement with relevant stakeholders. These are considered to be fundamental conditions for business to move beyond isolated or partial strategies and to be able to make significant contributions to sustainable development on a broader level.

Focusing on Values Created

A third type of approach focuses neither on concerns nor on organizational perspectives, but on the particular values created or preserved by a business. They look at the output of the business process for defining BST, not on the input or the process. The different outputs discussed in the literature are "integrating economic, ecological and social value creation", "creating shared value" and the "reemergence of social purpose".

In many approaches BST has been associated with the need to contribute to *economic, ecological and social value creation*, or at least prevent their destruction. Elkington (1997) introduced the concept of the "triple bottom-line" as a new business objective, which measures more adequately the multi-dimensional business contributions to sustainability. Although very suggestive at first sight, it has remained to a large degree unclear how the trade-offs between economic, ecological and social values are to be measured and compared.

Emerson (2003) introduced the concept of "*blended value*" that combines a company's creation of revenue with the generation of social value. Porter and Kramer (2011) suggest that we need to redefine capitalism around "*creating shared value*", not just profit, thereby elevating the discussion to a fundamental level of the purpose of business and the economic system as a whole. Shared value creation is defined as creating economic value in a way that also creates value for society by addressing its needs and challenges. Ideally, the starting point for business planning thereby is society and its problems, rather than business itself, to unlock business opportunities in society.

Shared value creation may be a useful first step to put to rest the stalemate created by the opposing views of shareholder value management (Friedman, 1970; Rappaport, 1986) and stakeholder value management (Freeman, 1984). By reconnecting business to society, it would help to overcome the Friedmanian fallacy of business seeing itself and being disconnected from society (Muff et al., 2013). However, shared value creation is unlikely to be a sufficient approach for solving societal problems, as it is limited to those issues and concerns that promise economic value for business. (Crane, Palazzo, Spence & Matten, 2014; Financial Times, 2014) Dyllick & Hockerts (2002) asked for business to look "beyond the business case" and go beyond eco-efficiency or socio-efficiency to become eco-effective or socio-effective, while developing effective solutions in addressing the real sustainability issues their societies are facing. Recent developments related to social business, social entrepreneurship, impact investment, benefit (B-) Corporations (Rae, 2012), Corporation 2020 (Sukhdev, 2012), public value creation (Meynhardt, 2009) or the Economy for the Common Good movement in Europe (Felber, 2010) point to alternative organizational models that share "*goal alignment with society*" and a "*reemergence of social purpose*" as distinguishing features.

Over the past decade *social business* (or social enterprises) and *social entrepreneurship* have assumed a prominent role in society and in academia. Social businesses use business methods and practices to generate direct social and/or environmental benefits. Fulfillment of their social mission is of primary importance, while achieving financial benefits is only of secondary importance. Sabeti (2009) speaks of an emerging "fourth sector" of organizations oriented towards social benefits, like government agencies and NGOs, but earning their income themselves, unlike government agencies and many NGOs. The income of social businesses is mostly earned, but they may also receive contributions from private or public donors. There is a great variety of organizations and sources of income. A comprehensive support infrastructure for social businesses has been developing, including educational programs, social business clubs and centers at business schools, incubators (e.g. the Hub), coaches, supporting foundations (Ashoka, Schwab, Skoll), government programs (EU Social Business Initiative 2011), a special legal status for privately owned organizations that prioritize their social mission (i.e. B-Corporation or community-interest companies) and a specialized financial services industry specializing in social and impact investment. Social businesses promise a higher effectiveness in addressing sustainability challenges than commercial businesses by making social issues their primary objective.

Changing the business purpose to the common good may be too radical for existing commercial businesses, but the emergence of B-Corporations and a broad support for social businesses and social entrepreneurship demonstrate that there is a need for new organizational forms with a clear social purpose. Their further development offers new perspectives for "true business sustainability" through new or hybrid business organizations with a purpose that reaches beyond shared value creation.

In concluding our overview of existing approaches to BST, we realize there have been many different attempts to frame business sustainability in the broader context of SD. They mostly have fallen short of reaching this ambitious goal. They include approaches based on partial or incremental improvements of an existing strategy instead of an approach that looks at all kinds of concerns, organizational perspectives and values created. They include attempts that are oriented primarily towards increasing shareholder value by reducing the business footprint rather than creating sustainable value in its broader meaning. Often, such approaches are based on an inside-out perspective demonstrating how business is contributing through its activities to improving some sustainability issue. What is rarely done, however, is to look at the relationship of business and society the other way around, by asking how business can contribute effectively to solving sustainability challenges. Such an outside-in perspective may be the crucial step needed for business to move to full-fledged or true sustainability.

4. Introducing a typology for business sustainability

Sustainability demands an integration of social and environmental issues with economic issues. What this exactly means and what the consequences are for business is far from being clear. While many companies have started to also consider longer-term, social and environmental aspects in their business, they rarely ask themselves what their contribution to resolving sustainability issues on a regional or global scale could be and should be. Such a positive contribution to society and the planet, however, lies at the heart of a truly sustainable business.

We now develop a typology of business sustainability based on the above systematic analysis of different approaches in the literature. In deriving the different types we will use the three previously introduced elements of the business process model the relevant concerns considered (inputs), the values created (outputs) and the organizational perspectives applied (processes) – thereby switching the second and third element. Based on these three elements we develop a typology of business sustainability, using the current economic paradigm as a starting point. Starting out with "Business-as-Usual" we add three increasingly relevant types of business sustainability, which we call *Business Sustainability 1.0, 2.0 and 3.0*. As we move up from Business Sustainability 1.0 to 2.0 and 3.0 the contribution to resolve sustainability issues increases, with Business Sustainability 3.0 representing what we consider as "true BST".

Business-as-Usual: The Current Economic Paradigm

The current economic paradigm or "Business-as-Usual" is based on a purely economic view of the firm and the business processes. The underlying assumption is that typical economic concerns (e.g. access to cheap resources, efficient processes, striving for a strong market position) are pursued to produce economic value in the form of profit, market value or, more generally, shareholder value. Such an approach typically results in significant externalized costs which are not understood, measured or declared. The perspective is inside-out, with the business and its objectives as the starting point and main reference for all planning and action. The main beneficiaries of the economic values created are shareholders, complemented by management and customers. Economics Nobel Prize winner Milton Friedman (1970) has created the appropriate description for the current economic paradigm by stating bluntly "the business of business is business".

Concerns	**Organizational Perspective**	**Values Created**
Economic	Inside-Out	Shareholder Value

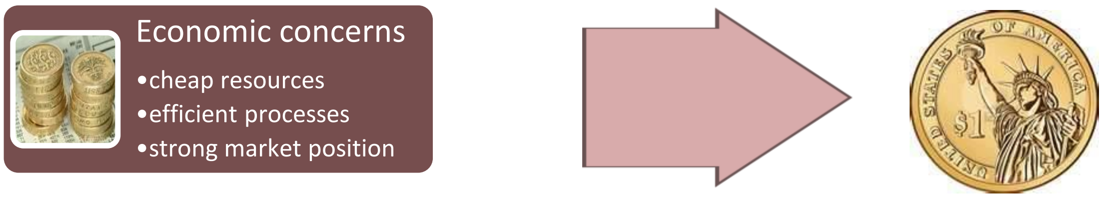

Figure 2: Business-as-Usual - The Current Economic Paradigm

Business Sustainability 1.0 – Refined Shareholder Value Management

A first step in introducing sustainability into the current economic paradigm results from recognizing that there are new business challenges from outside of the traditional market exchanges. Extra-market challenges result from environmental or social concerns which are typically voiced by external stakeholders like NGOs, media, legislation or government. They raise environmental and social concerns which create economic risks and opportunities for business. These new challenges are picked up and integrated into existing processes and practices without changing the basic business premise and outlook. Even if sustainability concerns are considered in decision making and actions, business objectives remain clearly focused on creating shareholder value. The view of BST 1.0 is very well captured by SAM & PWC (2006) in their definition of corporate sustainability:

> "*Corporate sustainability is an approach to business that creates shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments*."

This widely shared view on business sustainability often is considered as representing sustainability management, although it is only a kind of refined version of shareholder value management (Hahn & Figge, 2011). In our view, it is only a first yet insufficient step towards true business sustainability.

What does BST 1.0 look like in practice? We will use two different industries to illustrate the different forms of BST in practice, banking and food, and we will look at three different aspects separately: governance, processes, and products/services.

Business Sustainability 1.0 – The Case of Banking

Taking banking and looking at governance issues first, BST 1.0 means introducing new rules for compliance in areas like corruption or money laundering, in dealing with politically exposed persons or regimes, ethical codes, compensation schemes for management in the long-term or pursuing stakeholder dialogues. New or integrated banking processes may be introduced for energy and climate management, sustainable purchasing, green IT, building and infrastructure, diversity, old age employment or home office solutions. In the area of banking products and services sustainability concerns may be integrated into project finance, asset and credit management, into increasing fee transparency or introducing new products in areas like microfinance or student loans.

Business Sustainability 1.0 – The Case of Food

Or, taking the food industry as another example, BST 1.0 means introducing sustainability into its governance structures by responding systematically to stakeholder concerns, by developing policies and codes covering major issues in sustainable sourcing, product development and safety, marketing and communication, but also by creating organizational, management and board structures for effective management, control and auditing. Processes and transparent procedures for energy and water efficiency, for greenhouse gas reduction, sourcing, manufacturing and transport need to be implemented. In particular sustainable and fair sourcing has recently been a major concern, if you think of palm oil, soy, cocoa, coffee, tea, meat or fish, but also procedures for verification and certification. Sustainability 1.0 means for products to reduce the environmental footprint, to improve the social value and their nutritional quality (e.g. reduce sugar, salt, saturated fats, calories), to reduce waste and packaging and to provide transparent and verified information to consumers.

The underlying objective of these activities remains economic. While introducing sustainability into business will generate positive side-effects for different sustainability issues, their main purpose is to reduce costs and business risks, to increase reputation and attractiveness for new or existing talents, to respond to new customer demands and segments, thereby increasing profits, market positions, competitiveness and shareholder value. Business success still is evaluated from a purely economic view and remains focused on serving the business itself and its economic purposes. The values served may be somewhat refined, but still oriented towards the shareholder value.

Concerns	Organizational Perspective	Values Created
Three-dimensional Concerns	Inside-Out	Refined Shareholder Value

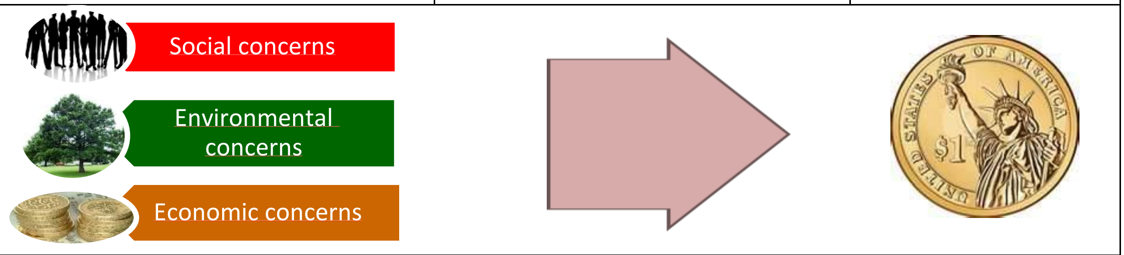

Figure 3: Business Sustainability 1.0 - Refined Shareholder Value Management

Business Sustainability 2.0 – Managing for the Triple Bottom Line

A further step in introducing sustainability into business acknowledges that sustainability is more than just recognizing the relevance and need to respond to social and environmental concerns, in addition to economic concerns. BST 2.0 means broadening the stakeholder perspective and pursuing a triple bottom line approach. Value creation goes beyond shareholder value and includes social and environmental values. Companies create value not just as a side-effect of their business activities, but as the result of deliberately defined goals and programs addressed at specific sustainability issues or stakeholders. These values are not only addressed through particular programs, but they are also measured and reported about. This view of BST 2.0 is well captured by the definition of business sustainability used by the Network for Business Sustainability (2012):

> "*Business sustainability is often defined as managing the triple bottom line – a process by which firms manage their financial, social and environmental risks, obligations and opportunities. These three impacts are sometimes referred to as people, planet and profits*."

BST 2.0 clearly is more ambitious than BST 1.0 and represents a big step forward in making sustainability a respected and integrated business issue. It allows business to align the concerns it addresses with the values it seeks to create, by relating economic, environmental and social concerns to the triple bottom line values of sustainability. While this shift is a quantum leap in the value created from refined shareholder value to creating social, economic and environmental values, it is not yet, what we understand as "true sustainability".

Business Sustainability 2.0 – The Case of Banking

Applied to banking BST 2.0 means contributing sustainability values through programs and actions taken in the areas of governance, processes, and products/services. Instead of positive side-effects resulting from actions addressed at specific concerns in these fields, results are the outcomes of purposeful action. Fighting corruption, money laundering, or tax evasion, but also stakeholder dialogues are pursued deliberately with the goal of making measurable contributions in these areas. Objectives are defined and their achievements are managed, measured and reported. Programs and activities with regard to banking processes are pursued with the goal to make measurable contributions for example to reduce the CO2-footprint or to improve the diversity across all levels of employees as well as voluntarily limiting top management compensation and limit the variable part of the compensation of hedge fund managers. The activities typically are embedded into the organizational and management structures. Banking products and services are created and offered around specific objectives in areas such as financing sustainable construction and living, healthy living, regional and urban development or financing business projects for markets and entrepreneurs where new forms of collaborations and financing (e.g. microfinance) are needed. Also, responsible investment products are not only developed, but also actively marketed and promoted by trained customer service representatives to achieve defined market objectives.

Business Sustainability 2.0 – The Case of Food

Taking the food industry BST 2.0 means introducing sustainability into its governance structures. This requires that sustainability objectives are integrated into the planning and reporting cycles to define specific objectives for projects and brands, and ensuring that goals are achieved through adequate forms of incentives and accountability. Also reporting about the achievements in a transparent and externally verified way is an important element. Processes and transparent procedures for reducing greenhouse gases, energy, water and waste from manufacturing, transport and offices need to be not only implemented but also measured and reported about. Objectives and achievements with regard to sustainable sourcing need to be measured and communicated. In other words, BST 2.0 means not merely that the environmental and social footprint is minimized but that a positive footprint is achieved and measured over the whole product life-cycle and per consumer use, to improve the social value and the nutritional quality, to limit waste and packaging in a clearly defined and controlled way. Objectives and achievements need to be reported.

The underlying objective for BST 2.0 firms is to invent, produce and report measurable results in well-defined sustainable development areas, while doing this in an economically sound and profitable way. The value proposition of business is broadened to include all three dimensions of the “triple bottom line” (people, planet, profit). The perspective applied is still inside-out, however.

Concerns	Organizational Perspective	Values Created
Three-dimensional Concerns	Inside-Out	Triple Bottom Line

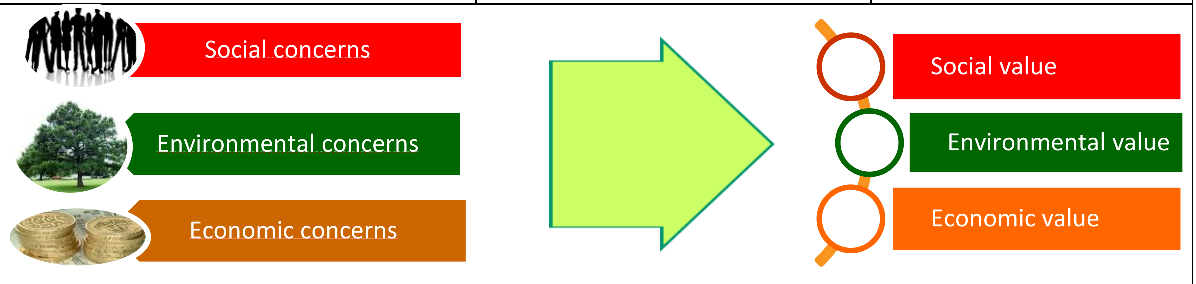

Figure 4: Business Sustainability 2.0 – Managing for the Triple Bottom Line

Business Sustainability 3.0 – Truly Sustainable Business

A truly sustainable business reflects on questions that go beyond those so far considered. It reflects on questions such as "How can business contribute with its products and services to resolve pressing sustainability issues in their societies?" Or: "How can business use its resources, competencies and experiences in such way to make them useful for contributing to solve some of the big economic, social or environmental challenges societies are confronted with, e.g. climate, migration, corruption, water, poverty, pandemics, youth unemployment, sovereign debt overload, or financial instability?"

Our view of Business Sustainability 3.0 may be defined as follows:

> *Truly sustainable business shifts its perspective from seeking to minimize its negative impacts to understanding how it can create a significant positive impact in critical and relevant areas for society and the planet. A Business Sustainability 3.0 firm looks first at the external environment within which it operates and it then asks itself what it can do to help resolve critical challenges that demand the resources and competencies it has at its disposal.*

As a result, a BST 3.0 firm translates sustainability challenges into business opportunities making "business sense" of societal and environmental issues. This follows the line of thinking suggested by Peter Drucker, who commented on the business challenge of sustainability: "Every single social and global issue of our day is a business opportunity in disguise" (cited in Cooperrider, 2008).

Having figured out how to improve their operational effectiveness by introducing energy savings and social benefits to their supply chains or improve their products and services, truly sustainable organizations ask themselves more challenging questions such as:

1. Which of the burning environmental, societal or economic issues could be resolved by dedicating our wealth of resources, competencies, talents and experiences?
2. What are the benefits and contributions of our products and services to society and the environment?
3. How can we transform our operations to provide solutions (products or services) in a direct and measurable way to the burning issues in nature and society?
4. How can we open up and develop our governance structures to respond more effectively to society's concerns?
5. What can we do individually? And where do we need to engage in sector-wide or cross-sectorial strategies?
6. And where do we need to engage in activities to change the rules of the game to bring together the divergent demands of the current economic system and the demands of sustainable development?

The business typically starts out by reviewing pressing sustainability challenges society is facing and subsequently engages in developing new strategies and business models that resolve these challenges (although this sequence may also sometimes be reversed). The potential for contributing positively will vary largely between companies, their resources, strategies and purposes. And it will vary between different industry sectors and societal contexts. Making a positive contribution to solve sustainability issues and thus serving the common good becomes the main purpose of a truly sustainable business. In this perspective, the values created change from the triple bottom line to creating value for the common good, defined as that which benefits society and the planet as a whole, in contrast to the private good of individuals and sections of society. When this is done by commercial businesses, ways have to be found to do this in an economical way. When it is done by social or hybrid businesses, financial constraints are less stringent and the economic equation may look different.

Truly sustainable firms engage on different levels of action to increase their sustainability impact and to ease conflicts between financial demands and societal needs. As long as they act on an individual company level they can innovate their processes and products or improve their systems of governance and their transparency. Impact and reach of their activities, however, will remain limited. Engaging on a *sectorial or cross-sectorial level*, businesses can change the common approaches and practices shared by all members in an industry or along supply-chains. They can do this by creating transparency, sharing best practices or defining common rules and setting standards. These collaborative partnerships will increase the impact and outreach of their sustainability strategies.

In order to create new space for economic and sustainable solutions and to scale-up the impacts, truly sustainable businesses will also have to engage in *changing the rules of the game*. After all, big sustainability issues like climate change, availability of water and loss of biodiversity cannot be solved by business alone. Also, businesses are often punished by financial and consumer markets when they engage in serious sustainability strategies, as many companies in the solar power industry are currently experiencing or soft drink companies evaluating alternatives to address the profound and very real issue of obesity. Such companies will not be able to address the real sustainability issues they are confronted with as long as the rules of the game are not changed. Engagement for changing the collective rules of the game may take many forms and range from changing accounting rules and standards for disclosing and internalizing sustainability risks and impacts, informing and educating customers about unsustainable choices and practices, to lobbying for taxes on resource consumption, emissions or for stricter standards for public health.

Business Sustainability 3.0 – The Case of Banking

Banks need to address the enormous challenges to finance sustainable infrastructures for a world populated of 9 billion people in ever larger mega-cities. They will have to shift funding from unsustainable investments to strategic projects of regional relevance (securing of water, food, etc.). According to the outside-in logic banks start out evaluating relevant sustainability challenges in their societal contexts. They evaluate and decide what issues they can and want to contribute to. The choice will be among such issues as wealth and income inequalities, youth unemployment, old age assurance, climate change, energy efficiency and renewable energies, sustainable construction and living, new models of sustainable tourism, old-age provisions, assisted living, financing public health or education, integration of foreigners and migrant workers. Products and services include packages of information and consultation, new forms of collaboration, public-private partnerships, new forms of financing and collaterals like micro-finance, crowd-financing or people funds (e.g. www.kickstarter.com). Also, banks will have to address the grave issues of systemic risks created by their collective behavior for societal groups (e.g. homeowners, students) and whole countries (e.g. Greece, Spain, Ireland, Iceland, Switzerland, USA). The effectiveness of their strategies is measured by the contributions made and the values thereby created, for the different stakeholders and for the business itself.

Business Sustainability 3.0 – The Case of Food

Food companies will need to evaluate sustainability challenges and define the relevant issues for them, depending on their exposure to issues and competencies to solve them. The choice will be among issues like alleviating poverty, access to clean and affordable water, providing healthy and affordable nutrition or supporting smallholder farmers and distributors in developing countries. In developed countries the issues are more oriented towards fighting overconsumption and obesity, providing healthy products for different ages, contributing to public health and healthy life-styles, sustainable agriculture, production and consumption or fighting food waste. Products and services include healthy and balanced products, but also new forms of health related information and education for consumers, provided collaboratively with scientific and public organizations, but also restraint from misleading and aggressive marketing. In developing countries the issues will be different, related to fighting hunger, securing human rights, supporting smallholder farmers and distributors, securing the availability of water, energy and public health. In order to deliver organic or fair trade products to the markets (e.g. textiles, coffee, tea, cacao, bananas, chicken) whole supply chains will have to be reconstructed and controlled, reaching from third world farmers, to traders, processors and end-user markets. Rule changing strategies can be seen in the creation of new institutions securing sustainable supplies like the Marine Stewardship Council for fish and fisheries and the roundtables on sustainable soy or palm oil. They set new standards for sustainable practices and create transparency through certification. This changes the rules of the game for all or most competitors.

BST 3.0 firms see themselves as responsive citizens of society. Truly sustainable business shifts its perspective from seeking to minimize its negative impacts to understanding how it can create a significant positive impact in critical and relevant areas for society and the planet. BST 3.0 represents a very different strategic approach to business. It turns around the traditional “inside-out” approach used by business and applies an “outside-in” approach instead, much like social businesses do.

Concerns	Organizational perspective	Values created
Three-dimensional Concerns	Outside-In	Creating Value for the Common Good

Figure 5: Business Sustainability 3.0 - Truly Sustainable Business

The key characteristics of our BST typology are summarized in Table 3.

BUSINESS SUSTAINABILITY TYPOLOGY (BST)	Concerns (What?)	Values Created (What for?)	Organizational Perspective (How?)
Business-as-Usual	Economic concerns	Shareholder value	Inside-out
Business Sustainability 1.0	Three-dimensional concerns	Refined shareholder value	Inside-out
Business Sustainability 2.0	Three-dimensional concerns	Triple bottom line	Inside-out
Business Sustainability 3.0	Three-dimensional concerns	Creating value for the common good	Outside-in
The key shifts involved:	1st shift: broadening the business concern	2nd shift: expanding the value created	3rd shift: changing the perspective

Table 3: The Business Sustainability Typology with Key Characteristics and Shifts

As companies move to higher and more effective levels of BST, three important shifts take place:

1. The relevant concerns considered by business shift from economic concerns to three-dimensional concerns (social, environmental and economic) related to the sustainability challenges we are collectively facing.

2. The value created by business shifts from shareholder value to a broadened value proposition that includes all three dimensions of the triple bottom line (people, planet, profit).
3. The shift in fundamental organizational perspectives, from an inside-out perspective with a focus on the business itself to an outside-in perspective with a focus on society and the sustainability challenges it is facing. This moves the value creation perspective from the triple bottom-line to creating value for the common good.

Each of these shifts has different consequences. A shift in concerns broadens the business agenda to include non-business concerns in planning and actions. A shift in values created broadens the output and purpose of business activity to include non-business goals. But only a shift in organizational perspective, from inside-out to outside-in, will allow a company to develop the strategies and the business models needed to make relevant contributions to overcome societal and planetary challenges, thereby contributing to the common good. This last shift is what we consider to be the sign of true BST.

5. Managing business sustainability: Organizational characteristics

In starting out from this typology, further questions will be raised on how to organize for and manage BST 3.0? Many of the organizational changes to develop higher forms of BST run deep and span many different areas. We can only mention very briefly how we see these changes to play out as organizations move from BST 1.0 to BST 2.0 and on to BST 3.0. A deeper development and discussion of the organizational consequences of different forms of BST is being published separately. (Muff & Dyllick, 2016)

1. **Engagement**: From reacting to social pressures to actively engaging with stakeholders to ultimately embracing a voluntary and pro-active engagement with a variety of players in search of new solutions to burning societal challenges.
2. **Primary focus**: From shareholders to stakeholders and to a focus on society and the planet.
3. **Market definition and positioning**: From reacting to outside pressures in existing markets to exploring new market opportunities and emerging segments inside or outside existing markets to ultimately transforming existing markets or defining new markets allowing for significant re-positioning. (Dyllick, 2003; Nidumolu, Prahalad & Rangaswami, 2009; Adams, Jeanrenaud, Bessart, Overy & Denyer, 2012)
4. **Products and services**: From selective improvements of existing products and services in response to pressures and changing demands to systematic improvements including all relevant dimensions and the whole life-cycle ("better product") to ultimately a "good product" with a net positive effect on sustainability challenges. (ILFI, 2015; McDonough & Braungart, 2013; Heck, Rogers & Carroll, 2014; Crul, Diehl & Ryan, 2009)
5. **Governance and leadership**: From primarily defensive policies, codes and guidelines to protect against diverse risks to an integration of triple-bottom line objectives into policies, structures, management compensation and board management to ultimately integrating

relevant societal stakeholders into decision-making processes on all levels of the organization. (Eccles, Ioannoui & Serafeim, 2014)

6. **Type of CEO**: From an "opportunity seeker" with an instrumental view on sustainability and the business case to an "integrator" feeling responsible to all legitimate stakeholders affected by the organization to ultimately an "idealist" viewing business in service of society and motivated primarily to create societal value. (Pless, Maak & Waldman, 2012)
7. **Organization**: From initially being centrally managed by specialized functions to increasingly becoming integrated into the various regular functions and divisions to ultimately reorganizing around the societal challenges they address, thereby including outside players into open and dynamic structures.
8. **Sustainability reporting**: From selective reporting as a response to outside demands to full reporting on all material aspects of the triple bottom line, as demanded by the GRI, to ultimately reflecting and reporting on the societal value created by the organization. (Eccles, Ioannoui & Serafeim, 2014)

Criteria	BST 1.0	BST 2.0	BST 3.0
Engagement	Reacting to social pressures to ultimately	Actively engaging with stakeholders	A voluntary and pro-active engagement with a variety of players
Primary focus	Shareholders	Stakeholders	Society and the planet
Market definition and positioning	Reacting to outside pressures in existing markets	Exploring new market opportunities and emerging segments inside or outside existing markets	Transforming existing markets or defining new markets allowing for significant re-positioning
Products & services	Selective improvements of existing products and services ("better product")	Systematic improvements including all relevant dimensions and the whole life-cycle ("better product")	A "good product" with a net positive effect on sustainability challenges
Governance & leadership	Primarily defensive policies, codes and guidelines to protect against risks	Integration of triple-bottom line objectives into policies, structures, management compensation and board management	Integration of relevant societal stakeholders into decision-making processes on all levels of the organization
Type of CEO	Opportunity seeker	Integrator	Idealist

Organization	Centrally managed by specialized functions	Integrated into the various regular functions and divisions	Reorganizing around the societal challenges and including outside players into open and dynamic structures
Sustainability reporting	Selective reporting as a response to outside demands	Full reporting on all material aspects of the triple bottom line	Reflecting and reporting on the societal value created by the organization

Table 4: Organizational Characteristics of BST 1.0, 2.0 and 3.0

6. Conclusions and Discussion

This chapter demonstrates that "business sustainability" can actually be categorized into three different types. We thereby provide an answer to the question what it means for an organization to be "truly sustainable", namely to contribute to solving the sustainability challenges we are collectively facing and thus to create value for the common good. A core element of this answer lies in shifting the perspective from seeking to minimize negative impacts of business actions to creating a positive impact in critical and relevant areas for society and the planet. This implies a change from an "inside-out" to an "outside-in" approach. While we are suggesting and portraying a progression in this typology towards a truly sustainable business, we do not seek to minimize or neglect achievements and contributions made by organizations that are currently operating in the BST 1.0 or 2.0 modes. It may well be a major challenge for large, existing businesses and industries to embrace the fundamental shift required to move on to BST 3.0.

Business sustainability 3.0 raises crucial questions in two different areas: How do we ensure that the business contributions to solving sustainability challenges and thereby creating value for the common good will indeed be done effectively and efficiently? And how realistic is it to expect commercially oriented businesses to refocus on sustainability challenges and value creation for the common good or will this be primarily the domain of social businesses?

Dogmatic positions expressed by liberal economists like Friedman or von Hayek, which are reflected in the normative position of the shareholder value approach, question the legitimacy as well as the competency of business to address and solve social issues. The reality looks very different: businesses today are expected by stakeholders and society to include social issues and they do in fact include them in their decisions. They do this to varying degrees and with highly variable impacts which are rarely evaluated according to clear metrics and remain mostly vague and hard to assess. Furthermore, it is important to note that businesses have the right to exercise their proper judgment in considering social issues, as exemplified by the "business judgment rule". This rule asserts the right of corporate directors to address societal concerns as they relate to their business, as long as their decisions are made in good faith, with the necessary care, and with the reasonable belief that they are acting in the best interests of the corporation. One could claim that corporations indeed have all the necessary insight and knowledge about sustainability issues, maybe even more so than many other societal actors. More importantly, corporations have the resources to effectively address such issues.

The question however remains: How do we ensure that business contributions addressing sustainability challenges will be indeed effective and efficient? Good business judgment is likely to limit business engagements in areas of little expertise. Yet to ensure effectiveness and efficiency we will need to create and develop the conditions in two interdependent areas: transparency and metrics. Transparency is required with regard to decisions and actions taken by companies in order to evaluate, compare, and improve the business contributions to sustainability. But also transparency related to the effects and impacts of the actions taken. Beyond communication and reporting on such contributions, external assurance will be of essence to satisfy the need of transparency. Effective reporting will need to focus more on depth and materiality, possibly at the expense of the breadth of issues. Furthermore, an effective assessment of the business contributions to sustainability issues requires adequate metrics and measures to assess and compare their impact. We will need to come up with issue-specific metrics that reliably indicate improvements. In this area, the Sustainability Accounting Standards Board (SASB), which is developing industry-specific metrics on the materiality of sustainability issues, offers a promising starting point. (www.sasb.org; Eccles & Serafeim, 2013)

Becoming a truly sustainable business clearly is a challenge for companies, particularly for commercial business. Is it indeed realistic to expect commercially-oriented corporations to focus their strategies on solving sustainability challenges and creating value for the Common Good? There are different issues to be considered in answering this question. First, solving sustainability problems the world is facing can be considered a strategic challenge like many other business challenges. For example, there is no reason to believe, that developing renewable energy technologies is more challenging and less rewarding than exploring oil fields in the deep sea or in arctic regions. Another example is nuclear energy, where handling it safely and economically over the whole life-cycle has shown to be a lot more challenging and costly than expected. And industry yet needs to acknowledge and address the substantial new risks involved in large-scale experiments related to the exploitation of gas and tar sands. Business has always explored new opportunities in new fields and has come up with innovative and economic solutions. We need to ask the question, however, why companies seem to have much less problems accepting high risks in certain highly unsustainable business areas than in some other more sustainable areas?

Second, Peter Drucker has rightly pointed out that social and global issues are “business opportunities in disguise”. Embracing these new opportunities may well require changes in the current rules of the game. But this also is not so new and not so different from what we have known for a long time, although industry pressures to keep up unsustainable rules still seem to dominate. For example, global subsidies for fossil fuels are still outnumbering by a factor of 6 those for renewable energies (IEA, 2011, p. 507), and all attempts in changing this situation have been failing. This tilted situation strongly favors entrenched and unsustainable technologies while effectively preventing new and more sustainable energy solutions from taking their place at a much faster rate.

There is without any doubt significant room for commercially-oriented businesses to become truly sustainable, although such an approach requires a fundamentally different strategic approach. It invites companies to start thinking and acting from the outside-in and remain focused on contributing to solving sustainability challenges, even if there are more economically attractive, but unsustainable alternatives available. As long as such outside-in strategies provide not only a positive contributions to sustainability challenges, but also offer a satisfactory economic value for the shareholders, such a strategic approach is feasible for commercial businesses. Such strategies then fall into the domain of shared value creation.

There are, however, limits for commercial businesses to follow the true sustainability route, in particular when they have to live-up to strong shareholder pressures from financial markets. Financial markets are very short-term oriented while true sustainability strategies – like many other strategies as well –need a longer-term perspective. In addition, true BST cannot be achieved by solving sustainability issues incidentally or opportunistically, as such initiatives are typically cancelled as soon as the prospects for economic gain diminish. Instead, true sustainability requires a solid foundation in pursuing social benefits as a worthy cause as such, as it is the case with social businesses. May be it helps also to remind ourselves of the fact, that many big and successful corporations started out as social businesses, with, for example, Henri Nestlé providing baby-food to help mothers who were unable to breastfeed and William Lever, a founding father of Unilever, helping to make cleanliness, hygiene, and health common place in Victorian England.

We agree with Peter Bakker (2012), president of the World Business Council for Sustainable Development, that business has both the opportunity and the responsibility to play an essential role in responding to and solving the societal and planetary sustainability challenges. But this will only be the case when business starts to live up to its possibilities by using its immense resources in a truly sustainable way. This may lead to a world, where business one day may indeed be celebrated for its contribution to society and is no longer criticized for achieving economic success at society's cost.

Summary

1. Linking business contributions to the global sustainability challenges enables us to assess their value for society and the planet. This allows us to distinguish between improvements of the triple bottom line and contributions to sustainability challenges.
2. We highlighted reasons why business sustainability has been framed and developed in a very narrow way by addressing educational shortcomings, a missing interdisciplinary perspective, a very limited perspective on skills, missing incentives for researchers, and ideological prejudices.
3. We provided a framework for the comparative analysis of existing and emerging models of business sustainability, differentiating between a) the concerns considered by business, b) the organizational perspectives taken, and c) the different values created by sustainable business.
4. We developed a typology for business sustainability, ranging from Business-as-Usual to Business Sustainability 1.0 (Refined Shareholder Value Management), Business

Sustainability 2.0 (Managing for the Triple Bottom Line) to Business Sustainability 3.0 (Truly Sustainable Business), allowing to categorize different approaches based on their contribution to solve sustainability challenges.
5. We have learned that truly sustainable business shifts its perspective from seeking to minimize its negative impacts to understanding how it can create a significant positive impact in critical and relevant areas for society and the planet.

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