March 2014

An organizational roadmap of Business Sustainability

Dr. Katrin Muff, Business School Lausanne, Switzerland
Prof. Dr. Thomas Dyllick, Institute for Economy & the Environment, University of St. Gallen, Switzerland

Abstract

6'000 words

The Business Sustainability Typology provides an answer to the difficult question of what business sustainability actually means and how to differentiate between beginning, intermediate and advanced levels in business practice. It offers a practical approach to evaluate different levels of integrating sustainability in business (Dyllick & Muff, 2013). While the Typology highlights three different shifts to move from business-as-usual to Business Sustainability 1.0, 2.0 and 3.0, this article looks at organizational challenges and consequences. The article offers concrete strategic support for companies in their sustainability journey.

Section 1 summarized the Business Sustainability Typology (Dyllick & Muff, 2013). Section 2 identifies the organizational development domains to be studied. Section 3 provides an in-depth analysis of existing studies in the relevant domains of business sustainability. Section 4 offers a comparative overview of attributes of organizations for each type of business sustainability, and concludes with open questions as well as suggested further research.

Key words: business sustainability, corporate sustainability, environmental, social and economic sustainability, triple bottom line, corporate social responsibility, responsible leadership, stakeholder engagement, alternative forms of ownership, financing sustainable business, organizational culture, sustainability culture, purpose of the firm

About the authors:

Katrin Muff serves as Dean of Business School Lausanne since 2008. Under her leadership, the school embraced sustainability, responsibility and entrepreneurship in a three pillar vision. Her international business experience includes nearly a decade with Alcoa in Europe, the U.S. and in Russia. She worked for Iams Pet Food as Strategic Planning Director and has co-founded a European incubator for early-seed start-ups. Muff researches in the interdisciplinary domains of education, business sustainability and leadership. She has co-founded the World Business School Council for Sustainable Business and is actively engaged in GRLI's project 50+20, a vision of management education for the world. katrin.muff@bsl-lausanne.ch, Rte de la Maladière 21, 1022 Chavannes, Switzerland, Phone: +41 21 619 0606.

Thomas Dyllick has been a Professor of Sustainability Management at University of St. Gallen since 1993. He is Managing Director of the Institute for Economy and the Environment and University Delegate for Responsibility and Sustainability. After having served for 2 years as Dean of the Management Department and 8 years as Vice President of the University he has recently returned to his field of research. Dyllick is a pioneer in the field of business sustainability. He has co-founded the World Business School Council for Sustainable Business and is actively engaged in GRLI's project 50+20, a vision of management education for the world.thomas.dyllick@unisg.ch, Tigerbergstrasse 2, 9000 St.Gallen – Switzerland, Phone: +41 71 224 2596.

This article builds on the article "Clarifying the meaning of sustainable business - Introducing a typology from business-as-usual to true business sustainability" (Dyllick & Muff, 2013), as well as GRLI's project 50+20 co-developed by the two authors and is intended as an example of how business research enables business to serve the common good.

1. Understanding the Business Sustainability Typology

Based on a simple "input-process-output" perspective on business, we proposed in our earlier article three different types of business sustainability. On the input side (what), there are different ***issues of concerns*** business chooses to consider and address. On the process side (how), there are different ***organizational perspectives*** business should take. And on the output side (what for), there are different ***values created*** a business should create or preserve (Dyllick & Muff, 2013).

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

Table 1: A framework for considering different approaches of business sustainability

On one hand, this approach offers a differentiated review of the existing theory and practice in business sustainability:

- ***Concerns (what):*** include "integrating short-term and long-term aspects" and the broad notion of "consuming the income not the capital" as proposed by Dyllick/Hockerts (2002: 132), and "being accountable for the impacts of business decisions and activities" captured in the ISO 26000 standard on social responsibility (2011).
- ***Organizational perspectives (how):*** include "managing risks and opportunities" (Steger 2004 and 2006; Schaltegger 2006), "managing the downside by reducing costs or risks and building the upside by increasing revenues, market share or reputation" (Esty and Winston 2009; Nidumolu et al. 2009), and "embedding sustainability throughout the organization" (Eccles, Miller and Serafeim 2012; Laszlo and Zhexembayeva 2011; Miller Perkins 2011; Belz and Peattie 2012; Smith and Lensen 2009; Esty and Winston 2009; Epstein 2008).
- ***Values created (what for):*** include "integrating economic, ecological and social value creation" or the "triple bottom line" (Elkington 1997), "blended value" (Emerson 2003), "creating shared value" (Porter and Kramer 2011), the "common goods economy" (Felber 2010), "corporation 2020" (Sukhdev 2012) and the values created by "social enterprises" (EU Commission 2011).

On the other hand, we point out that it is far from clear what it means to integrate social and environmental issues with economic issues to achieve business sustainability. "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 environmental, social or economic issues on a regional or global scale could be and should be. Such a positive contribution to society and the planet lies at the heart of a truly sustainable business." (Dyllick & Muff, 2013).

Using the same criteria of analysis, we developed requirements of business sustainability using business-as-usual as premise:

- **"Concerns: one-dimensional economic concerns vs. multi-dimensional sustainability concerns**
  While the traditional business perspective is one-dimensional with economic concerns taking center stage, the sustainability perspective includes three, sometimes even more different concerns. Sustainability typically addresses social, environmental and economic issues. Sometimes governance issues (in particular in the financial services industry) or culture (Werbach 2009) are added as further dimensions.

- **Organizational perspectives: inside-out vs. outside-in**
  Usually companies start from their existing business, strategy or product-lines and work on making them more sustainable (inside-out). This may lead them to incremental or radical improvements, depending on their cultural readiness and how far-sighted and courageous they are. "Such an inside-out perspective results in actions that are necessarily very limited in their contributions to solving the existing societal and environmental sustainability problems. True sustainability demands a radically different perspective by reversing the traditional inside-out logic to an outside-in logic, using sustainability challenges as the starting point to define possible contributions by business that also make business sense. When evaluating how particular competences and resources of a company can help solving the sustainability issues entirely new answers to business sustainability emerge. Such a change in perspective is crucial for achieving true business sustainability and well result in very different strategies, business models, products and services." (Dyllick & Muff, 2013)

- **Values created: from shareholder value to stakeholder value and the common good**
  In the current economic paradigm, the purpose of business is to create economic value, which may be measured in terms of profit, return on assets, market share, competitive advantage or stock market valuation. The main if not exclusive beneficiaries of the corporation are its shareholders. Sustainability perspectives are broader and include different kinds of values, typically balancing economic value, environmental value and social value, the triple bottom-line of people, planet and profits. They serve a broader set of stakeholders, which are directly affected by the business activities. More ambitious approaches go beyond direct stakeholders and include also stakeholders who are only indirectly affected by business activities, or include in an even more abstract sense the "common good" (e.g. society as a whole, future generations, the health of the planet). In its broadest form a business serves the common good by resolving social, environmental and economic issues on both local and global levels, by applying its resources to such a collaborative task" (Dyllick & Muff 2013).

Having reviewed existing theory and practice as well as clarified the different dimensions of requirements for business sustainability, we develop the Business Sustainability Typology:

- **Business Sustainability 1.0:** "Corporate sustainability is an approach to business that creates shareholder value by embracing opportunities and managing risks deriving from economic, environmental and social developments." (SAM and PWC, 2006)
- **Business Sustainability 2.0:** "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." (Network for Business Sustainability, 2012)
- **Business Sustainability 3.0:** "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." (Dyllick & Muff, 2013)

The Business Sustainability Typology can be summarized in a schematic approach which highlights not only the definitions of the three types of business sustainability as compared to business-as-usual, but also points out the origin and order of the shifts from one type to the next:

BUSINESS SUSTAINABILITY TYPOLOGY	Concerns (What?)	Organizational perspective (How?)	Values created (What for?)
Business-as-usual	**Economic concerns**	**Inside-out**	**Shareholder value**
Business Sustainability 1.0	**Three-dimensional concerns**	**Inside-out**	**Refined shareholder value**
Business Sustainability 2.0	**Three-dimensional concerns**	**Inside-out**	**Triple bottom line**
Business Sustainability 3.0	**Starting with sustainability challenges**	**Outside-in**	**Creating value for the common good**

Table 2: Typology of Business Sustainability and their key characteristics

Table 2 illustrates that there are three important shifts as companies move to more ambitious levels of business sustainability. These are:

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 including 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, its activities and interests, to an outside-in perspective, with a focus on society and the sustainability challenges it is facing. This shift results in the associated redefinition of strategies being driven by sustainability challenges thus reframing the business concerns (what), as well as the associated redefinition in values created from the triple bottom-line to a positive contribution to solving sustainability challenges and the creation of value for the common good." (Dyllick & Muff 2013)

We highlight that only once the issues of concern shift from internal business concerns to external sustainability challenges "will a company be subsequently be able to develop the strategies and the business models needed to make relevant and positive contributions to solving societal and planetary challenges, while figuring out how this can be done in an economically viable way for the company." This shift from inside-out to outside-in is considered the sign of true business sustainability. Previous attempts to define business sustainability "have been both have been selective and partial in suggesting specific business responses to address the larger sustainability challenges. Our ambition has been to develop a more representative and comprehensive typology of all relevant approaches to Business Sustainability, thus creating an overarching framework integrating all three elements, the issues of concerns, organizational perspectives and values created" (Dyllick & Muff 2013).

It is important to note that typology does not minimize or neglect achievements and contributions made by organizations that are currently operating in the Business Sustainability 1.0 or 2.0 modes. It could indeed well be a nearly impossible challenge for large multinationals to transform into what we defined as a Business Sustainability 3.0 organization.

2. So what does this mean for business organizations?

Each of the phases of becoming a truly sustainable business holds its unique challenges. The same goes for the shifts required to move from one level of business sustainability to the next. How does the executive team of an organization know where to start? What domains are impacted and what decisions enable effective results in this transformative journey?

The organizational challenges and consequences are manifold, however, research shows that they can be grouped into the following four broad domains of organizational development:

a) **Ownership**: financing, shareholders, time-horizon and value distribution

b) **Governance:** stakeholder engagement, measuring, transparency and reporting

c) **Strategy:** business models, products and services

d) **Culture:** leadership, innovation and organizational behavior

This paper analyzes the relevant aspects of each of these organizational domains, by first reviewing existing literature in the four domains, and a comparative overview of characteristics and attributes of organizations in the different levels of the Business Sustainability Typology.

3. Overview of existing studies in business sustainability

What do research and current studies reveal in terms of the four domains identified above and what can we learn from them? We will look at a select few recent empirical contributions from Haanes et al., from Eccles, Ioannou and Serafeim, Miller-Perkins, and Pless, Maak and Waldmann.

The purpose of this section is to provide an overview of what we know in this emerging field of research and practice, and to highlight opportunities for future research.

a) Ownership: financing, time-horizon, shareholders and value distribution

While we have not found any existing research that compares sustainability firms with business-as-usual firms with regards to their differences in the composition of shareholders, investors, sources of financing or the ultimate value distributions, there is one recent study that sheds light on the long-term financial performance of sustainability vs. normal companies. Eccles, Ioannoui and Serafeim (2012) investigated the effects of corporate sustainability practices on a large number of aspects of corporate behavior and performance outcomes.

Using a matched sample of 180 companies they found that companies that adopted environmental and social policies by 1993, firms they called “High Sustainability Companies (HSC)”, exhibited fundamentally different characteristics from a matched sample of firms that adopted none of these policies, firms they call “Low Sustainability Companies (LSC)”. The LSCs correspond in our business sustainability typology to “business-as-usual companies”, whereas the so-called HSCs correspond to what we call “Business Sustainability 1.0 or above” companies (Dyllick & Muff 2013).

Eccles et al. evaluated the financial performance on a number of different domains including the cumulative stock market performance, the volatility of the stock price, the accounting performance, as well as a sector specific comparison. A detailed analysis (see table 3) reveals evidence that HSCs significantly outperform LSCs over the long-term, both in terms of stock market and accounting performance. $1 invested in 1993 in HSCs and LSCs would result in a cumulative stock performance of $15.4 vs. $11.7 and a return on equity of $15.8 vs. $9.3 respectively. The findings are critical and demonstrate that companies can adopt environmentally and socially responsible policies without sacrificing shareholder wealth creation long-term.

Another important aspect that differentiates companies that are embedding sustainability from those that keep running their business as usual, is the way they consider time (see table 4). The keyword ratio of >1yrs vs. >1yrs statements of 1.08 vs. 0.96 for HSCs vs. LSCs indicates that high-sustainability companies focus on a longer-term horizon when they communicate with their analysts and financial investors. These companies also work on and succeed to attract dedicated, and thus longer-term, investors rather transient, short-term investors (see table 4). However, as the numbers suggest, high sustainability companies are still far from attracting more dedicated than transient investors, as both HSCs and LSCs still attract more transient than dedicated investors.

In conclusion, when considering how we have differentiated between the three types of Business Sustainability 1.0, 2.0 and 3.0 in our earlier article, we can suspect that the further companies advance in embedding sustainability into the core of their business, the more such firms will differentiate from more traditional (business-as-usual) firms in regards to their composition of shareholders, investors, sources of financing or the ultimate value distributions.

b) Governance: stakeholder engagement, measuring, transparency and reporting

The study of Eccles et al. (2012) furthermore suggests that a sustainability-oriented governance may well be one of the factors for “high sustainability companies” to secure a competitive advantage and outperform “low sustainability companies” in the long-run. Such proof is very helpful as it may well incite traditional firms to embrace sustainability beyond the required regulatory requirements, thus moving from our definition of “business-as-usual” to their three types of Business Sustainability. The following five governance-related internal characteristics “appear to be contributing factors to a potentially persistent superior performance in the long-term” achieved by HSCs (Eccles et al. 2012: 33):

1. ***A distinct governance mechanisms for sustainability***
   - Active engagement and accountability of Board of directors regarding environmental and social performance
   - Link executive compensation (partially) to sustainability objectives
2. ***A superior engagement model with (some) stakeholders***
   - Establishing a relationship of mutual trust, cooperation and longer-term horizon with stakeholders
   - Using sustainability standards to select and evaluate the relationship with suppliers in order to measure the quality of the relationship
3. ***A greater attention to nonfinancial measures regarding employees***
4. ***A greater emphasis on using external environmental and social standards for suppliers***
5. ***A higher level of transparency in their disclosure of non-financial information***
   - Using objective, third-party auditing or assurance
   - Greater willingness to be transparent in the external reporting of the company’s performance.

Let us look at what truly sustainable organizations (B.S. 3.0) would do as compared to the HSCs and LSCs (see table 5). These suggestions are provided to better frame the results obtained by Eccles et al. and to stress the significant difference between earlier stages of business sustainability and true business sustainability.

For instance, while “high sustainability” firm significantly differentiate from “low sustainability” firms by making the board of directors formally responsible for the firm’s sustainability (53% vs. 22%), a truly sustainable organization would in addition also include all of their stakeholders in the board and thus abandon the creation of a separate board committee for sustainability issues (41% vs. 15%), which can be considered a transient phenomenon in early phases of embedding sustainability.

In terms of stakeholder engagement, Eccles et al. (2012) compares the different types of companies with regard to a “superior engagement model” as expressed in a relationship of mutual trust, cooperation and longer-term horizon with stakeholders. While “high sustainability” firms are much more advanced in adapting sustainability policies as compared to “low sustainability” firms (50% vs. 10%), we could expect that 100% of truly sustainable firm have achieved that goal (see table 6).

Interestingly, Eccles et al. split stakeholder engagement in a prior to, during and after the stakeholder engagement process, as if the engagement of stakeholders was a campaign with a start and an end date. We would assume that truly sustainable companies would have fully integrated all stakeholders across all pertinent decision processes. Table 6 shows many dimensions within the three mentioned phases measured by Eccles et al. confirming that “high sustainability” firms are far ahead of “low sustainability” firms in each and every aspect. Our assumptions for truly sustainable firms show the stretch goal across all aspects and dimensions.

When looking at the various aspects of the dimensions of measuring, reporting and transparency of sustainability, we can observe again significant differences between “high” and “low” sustainability firms (table 7). It is interesting to observe the trends in measuring where some measurements have become standard practice even for traditional firms (eg. tracking health and safety performance of employees; deploying customer engagement processes; labor standards; using objective third party audits and assurance), while other aspects still show significant variation. Our comments for truly sustainable firms show that there is significant room for improvement in almost all aspects and dimensions considered.

It is of some comfort that clear differences have been been identified between traditional business-as-usual firms and firms involved in embedding sustainability. It is, however, equally important to recognize that most of these “high” sustainability companies are far from being able to be considered truly sustainable.

While Eccles et al. (2012) reveal an important gap between high sustainability companies and low sustainability companies, we are interested to understand to what an extent these “high sustainability” companies reveal the behavior of truly sustainable business. We derive from the argumentation of the authors that the implicit assumption of the working paper appears to be that sustainability strategies are pursued by companies to increase primarily their competitiveness and their shareholder value. We have framed such reasoning as a refined shareholder value management (Business Sustainability 1.0). As far as we can tell, the working paper uses or suggests no measures that suggests Business Sustainability 2.0 or beyond.

What would the characteristics used by Eccles et al. would look like if reinterpreted from the perspective of a truly sustainable business, or Business Sustainability 3.0? In terms of governance structure, sustainability in all its dimensions would a be fully integrated responsibility of the board and top management would be evaluated baed on a balanced and holistic sustainability metric. In terms of stakeholder engagement, the superior engagement model would be replaced by the recognition and understanding that establishing a relationship of trust, cooperation and longer-term horizon is a continuous task not a one-time project, and needs to be fully integrated in strategic and operational processes. Companies may introduce voluntary penalties if mutual agreements are violated and managers could be sent to work temporarily alongside all relevant stakeholders in order to become co-owners of the processes.

In terms of long-term communication with analysts, rather than just talking slightly more about issues beyond the 1 year horizon, we would consider it important for the company to talk significantly more about the longer-term. Also, dedicated investors should outnumber transcient investors. There have been excellent examples of how large stock-quoted companies have not minced with words to clarify what kind of investors they wish to attract (Unilever and Apple as the best known examples). These examples seek to demonstrate the width and breadth of opportunities and options that can be considered as a company moves into the direction of becoming truly sustainable (more ideas in figure 8).

c) __Strategy: business models, products and services__

BCG and MIT Sloan Management Review started a research project in 2009 whereby they have monitored and recorded for three consecutive years how big international companies accepted and approached sustainability management, surveying some 3000 business executives from around the world. The reported progress these companies have made is nothing short of impressive. These executives express a strong consensus that sustainability is having—and will continue to have—a significant material impact on how such multinational companies think and act. Furthermore, the study suggests that this commitment has survived the economic downturn. A summary of key findings of this three-year research project reveals:

- The percentage of executives who agree that sustainability-related strategies are necessary to be competitive moved up from 55% in 2011 to 67% in 2012. A further 22% are convinced it will be necessary in the future (Haanaes et al. 2011 and 2012).
- The percentage of executives who say their organization's commitment to sustainability (management attention & investment) has increased in the past year moved up from 59% in 2011 to 68% in 2012. A further 26% say there have been no changes (Haanaes et al. 2011 and 2012).
- The greatest benefits to the organizations in addressing sustainability are improved brand reputation (49%), reduced costs due to energy efficiency (28%) and increased competitive advantage (26%) (Haanaes et al. 2011).
- While BCG/MIT identified 24% of all companies in 2011 as "embracers", companies that are implementing sustainability-driven strategies widely in their organizations and have largely succeeded in making robust business cases for their investments, they found 31% "harvesters" in 2012, companies that said that their sustainability-related strategies added to their profits (Haanaes et al. 2011 and 2012).
- Embracers share a few specific characteristics: they are not embedding sustainability-oriented resources into pre-existing organizational structures, but are adopting new structures, new lines of communication and new performance metrics; they are demonstrably more successful in making the business case for sustainability; and they don't only change themselves in response

to sustainability considerations, but they also become more collaborative with stakeholders inside and outside their companies (Haanaes et al. 2012).

According to these studies, the progress in companies picking up sustainability strategies and embedding these in their organization is remarkable. BCG/MIT call the more progressive companies first early adapters, then embracers and most recently harvesters, making it sound rather obvious and easy to turn sustainability into business success. But is it really that simple?

To answer this question, we need to understand the implicit organizational model from which the resulting questions concerning organizational characteristics are derived. Looking more deeply into the BCG/MIT research, we are struggling with two key concerns.

First, the BCG/MIT study assumes implicitly that sustainability strategies are pursued by companies to increase their competitiveness and their shareholder value. Such reasoning refers to what we have termed Business Sustainability 1.0, or refined shareholder value management. If and what the surveyed sustainable companies contribute to social or environmental value creation (Business Sustainability 2.0) or to solving regional or global sustainability challenges (Business Sustainability 3.0) cannot be answered by these studies as these additional two dimensions have not been addressed. The implicit perspective applied by BCG/MIT is strictly a maximizing business performance perspective. As a result, we know less than we wish about a company's contributions to sustainable development from these studies.

Second, the study does not clarify what the interviewed executives interviewed really understood by the term "sustainability". The 2011 study reveals that executives interpret the term "sustainability" mostly in its economic dimension and relating it to the organization from this one-dimensional perspective (i.e. considering financial performance as a key measure). As such "sustainability" is viewed primarily as having an increased focus on the company's long-term perspective. The other two dimensions of sustainability, namely the social or corporate social responsibility (CSR) and the environmental or ecological aspects are rated lowest among the 6 possible considerations factored in by the respondents (Haanaes et al. 2011: 23; Question 2). The survey merely confirms that executives continue to focus their attention primarily on their companies' financial performance, long before considering CSR or environmental issues. To thus conclude that these executives and their multinational organizations are moving ahead to integrate and embed sustainability to the degree suggested seems largely overstated.

As long as executives and companies define sustainability only from its economic perspective, thus primarily seeking to achieve the longevity of the organization by adapting a longer-term perspective, true sustainability is not achieved. In our previous article, we define all forms of business sustainability as attempts to embrace broader concerns of the planet and society, above and beyond a mere isolated economic perspective. We are thus less optimistic about the progress already achieved by multinational corporations worldwide than the BCG/MIT research leads us to believe (Dyllick & Muff, 2013).

d) Culture: leadership, innovation and organizational behavior

While we have gained some insight into what differentiates Business Sustainability 1.0 firms from business-as-usual corporations in terms of organizational characteristics, there is still little we know about how to actively engage a company in its transformation to serve the common goods. We suspect that truly sustainable organizations may indeed use a variety of new organizational forms, including the B-company but also more loosely-organized citizen initiatives as have been emerging around the world. We anticipate that it is easier to start a new organization, business or initiative that fits the Business

Sustainability 3.0 model, than attempting to transform an existing business organization towards this model. However, as we consider the shift from business-as-usual and Business Sustainability 1.0 to a more advanced perspective that underlines that Business Sustainability 2.0 and a total new paradigm that underpins Business Sustainability 3.0 as critical to the achievement of our global common goal of "9 billion people living well and within the planet" (WBCSD Vision 2050), we will need to enable and support existing medium and large-sized companies to successful transform their purpose and operations into these advanced forms of business.

One of the most critical elements in determining the starting base from which a company embraces its journey towards sustainability is to understand its culture. A practical way of evaluating where a company stands is to look at the Competing Values Framework[1] (see figure 9). The framework marries the dimension of flexibility vs. stability with the dimension of internal vs. external focus. We may conclude that a stable, internally-focused company is likely to tolerate much less ambiguity than a flexible, externally-focused company.

There is an obvious need for congruence between an organizational culture and sustainability strategies. It is estimated that a flexible, externally-focused company is more likely to succeed sustainability strategies that require a deep change such as reconsidering its product and service offering or including sustainability into its strategy, than a internally-focused, stable company that may be more included to increase efficiency and saving cost in a series of incremental change.

While the culture of a company is no doubt of critical importance to understand what kinds of transformational shifts a corporation can envision, much has been written about the importance of the leader in making such transformations happening. Pless, Maak & Waldman (2013) provide an interesting framework to understand the individual leadership level in implementing sustainability in business. They have interviewed CEO and Presidents of organizations recognized as being sustainability companies and have studied how the tension between a leader's intentions expressed in interviews and the observable actions in terms of value creation. The authors suggest four types of leaders starting with the traditional economist, the opportunity seeker, the integrator and ultimately the idealist.

The Pless et al. model provides an interesting addition on the individual leader's level to our attempt to create a framework on the organizational level. Further research will be needed to establish if we could suggest that the traditional economist represents Business Sustainability 0.0, the opportunity seeker represents the underlying thinking behind Business Sustainability 1.0. Integrators are the emerging Sustainability 2.0 pioneers and the idealist expresses our suggested truly sustainable company of Business Sustainability 3.0 (see figure 10).

Pless et al. provide also an attempt to translate the impact of a leader's mindset on the resulting position of the corporation of the leader. As such, they also highlight a number of related traps associated with these four positions. The idealist might be trapped in the underperformance trap, while the integrator risks facing a prioritization trap. The opportunity seeker might have to face the credibility trap, while the traditional economist risks being exposed to the myopia trap.

What if we could place companies on this framework? Pless et al. provide an interesting perspective of where the authors place some well-known corporations and how some of them have shifted in recent years (see figure 11). The corporate sustainability pioneers are placed in the top left corner as "integrators" living both humanistic values and pursuing multi-dimensional goals in their value creation. We also see how the Grameen Bank has shifted from an originally idealist position to an integrator

[1] Cameron K.S. and Quinn R. E. (2006): Diagnosing and Changing Organizational Culture", Jossey-Bass, San Francisco

position, and how BP has reversed its shift from a traditional economist to an opportunity seeker back in the 90s to return back to the traditional economist's position.

The question remains however how we measure organizations in their corporate actions. While Pless et al provide insight on the individual level; Miller Perkins offers a glance at the organizational level of transformative change towards sustainability.

The SCALA report[2] offers an interesting insight into how "sustainable" companies (defined as "early adopters") differentiate themselves from those operating in the "business as usual" model (defined as "others"). It compares the two organizational modes (Business Sustainability 1.0 and business-as-usual in our language) on the following dimensions: organizational leadership, organization systems, organizational climate, change readiness, internal stakeholders and external stakeholders.

Miller Perkins summarizes her findings by drawing a three step process for organizations to become sustainable:

- Level 1: The organization merely predicts and complies with consistently evolving regulations
- Level 2: The company aggressively seeks savings in energy costs and efficiencies in the supply chains
- Level 3: The company looks for ways to achieve a competitive advantage.

These steps reveal that the implicit assumption of the study appears to correlate to how a refined sustainability management model which we have defined as Business Sustainability 1.0. In terms of organizational leadership, employees of "sustainable" companies considers that their leaders are capable of inspiring (97% vs. 83% of normal companies) and that their leaders collaborate well across boundaries (93% vs. 76%). There are important differences in the organizational climate, namely continuous learning is a core focus of the organization (93% vs. 71%), people are encouraged to learn new things about sustainability from external sources (86% vs. 53%), the level of trust is high in their organization (87% vs. 77%), people from different departments find it easy to communicate with each other and work effectively (87% vs. 59%), our people are good at resolving conflicts effectively (90% vs. 65%), and innovation is rewarded here (87% vs. 59%). These are some pretty solid indications for business wondering what they can do to improve their sustainability culture!

Another clear indication is the employee perception of their organization's change readiness, which looks a strong track records of implementing large-scale change successfully (89% vs. 37%) and strong track record of implementing incremental (small, continuous) change successfully (97% vs. 88%). While both capabilities are important, each of these are important to progress through different shifts in the Business Sustainability Typology. Implementing large-scale change successfully implies a fundamentally more advanced corporate culture in terms of change readiness than successfully implementing continuous change.

Furthermore, there are distinct and important differences in how employees feel they are valued by their company (93% vs. 65%) and if the company actively seeks suggestions and input from all internal stakeholders (90% vs. 65%). Not surprisingly, sustainable companies are viewed to have a clear strategy for engaging all internal stakeholders in their sustainability efforts (71% vs.30% of normal companies). An emerging and growing element is how companies are viewed from the outside. When employees are

---

2 Miller Perkins K. (2011): Sustainability: Culture and Leadership Assessment, Miller Consultants Inc., www.millerconsultants.com/sustainability.php

asked if their company sends a clear and consistent message to external stakeholder about their commitment to sustainability 96% of sustainable company employees confirm (vs. 63% of others) – see figure 12.

We are left to find out how Business Sustainability 2.0 and 3.0 firm differentiate themselves in terms of their approach, implementation, measurement, priorities and success criteria from the above business-as-usual and Business Sustainability 1.0 (early adapters) firms. We consider it of critical important to identify best practice examples from around the world across different industries to understand how organizations can move through the business sustainability framework to become truly sustainable. These challenges form an integral part of our global research project which is currently being prototyped within the 50+20 framework[3] at Business School Lausanne[4].

e) ***<u>Concluding thoughts: what might a Business Sustainability 3.0 firm look like</u>***

One of the questions we are grappling with is the question of how the different logics of ethics (utilitarian, deontological, consensual and fairness ethics) impact both the underlying belief system of leaders and their organizations but more importantly to what degree these logics dictate the communication of why a company is engaging in sustainability. The utilitarian perspective perfectly matches the currently dominant neo-liberal business paradigm and companies or business leaders that may have different inner-motives may choose to communicate their ambitions and vision using a utilitarian language in order to be understand by what they estimate to be the dominant majority of their audience.

Last but not least, we need to gain a better understanding of the extent and degree to which the societal framework and context is critical to advance this organizational transformation towards true sustainability. Existing and anticipated incentives, laws and regulations have played an important role in advancing corporations from Business Sustainability 0.0 to 1.0. While most sustainability experts agree that the legal framework will be significantly too late to force the kind of deep change that is needed for the business community to achieve the shift that is needed to "save the planet", we do recognize that changes in law, regulations and procedures will be an important contributor in this change process. Further research is needed to understand where and to what degree the legal framework and societal pressure are indeed of critical importance and instrumental to provoke the required shift in business.

4. *Characteristics, attributes and differences of the four types of Business Sustainability*

The above attempt to place Business Sustainability 3.0 in the context of high sustainability companies has enabled us to asked ourselves a deeper and more complicated question: What are the challenges, risks and opportunities related to shifting from one type of business sustainability to the next.

As a re-cap, here a summary overview of how the four types are differentiated in terms of definition:

[3] Vision 50+20 describes a vision of management education for the world. More information www.50plus20.org
[4] More information on the BSL doctoral program: http://www.bsl-lausanne.ch/programs/doctorate/dba/home

The Business Sustainability Typology Grid			
Bus-as-usual	**B.S. 1.0**	**B.S. 2.0**	**B.S. 3.0**
- following strictly legally required minimal activities and managing risks	- creates shareholder value - embracing opportunities and managing risks - based on new environmental, social and economic developments	- broadening the stakeholder perspective - re-defining their business models and products/services to reflect a triple bottom line approach - process by which firms manage their financial, social and environmental risks, obligations and opportunities - these goals and values are addressed through particular programs, measured and reported about	- a re-definition of internal capabilities, competencies and resources in service of societal issues - new strategies, business models, products/services as a voluntary & pro-active response to societal, environmental or economic issues/challenges - typically an active collaboration with non-market actors across all sectors - changing the rules of the game in order to generate a significant positive impact in critical and relevant areas for society and the planet

Figure 13: Differentiation between the four types of Business Sustainability (Dyllick & Muff, 2013)

While anything but obvious, we have attempted to answer this question by considering a number of distinguishing criteria which hopefully enable the reader to better understand the underlying implications and differences of the Business Sustainability Grid. We consider in each of these criteria, how the four types differentiate and what different perspective an organization in any given type would take:

1. Value creation
2. Primary corporate attitude
3. Primary focus
4. Strategy
5. Market definition and positioning
6. Product & services
7. Governance & leadership
8. Type of CEO (based on Pless et al, 2013)
9. Type of companies (based on Pless et al, 2013)
10. Sustainability implementation
11. Processes
12. Reporting
13. Stakeholder influences

To enable executive teams of sustainability firms at all levels to better understand both where they stand and what it would take to get to where they might want to be, we have prepared the Business Sustainability Typology Grid which summarizes our reflections in the 13 perspectives mentioned above across each of the types of business sustainability:

The Business Sustainability Typology Grid				
Criteria	**Bus-as-usual**	**B.S. 1.0**	**B.S. 2.0**	**B.S. 3.0**
Value creation	Shareholder value maximization	Improved shareholder value	Triple value beyond shareholder value, including social and environmental values	Creating significant positive impact in critical areas of societal/planetary concern
Primary corporate attitude		A pattern of reacting to societal pressures	A pattern of active exchange with broad stakeholders	A pattern of voluntary, pro-active and most likely inter-active collaboration with new players
Primary focus		Shareholder	Stakeholder	Society & planet
Strategy	Managing risks ensuring compliance	Managing primarily risks while starting to embrace first opportunities of new environmental and social developments	Triple bottom value is created not just as a side-effect of business activities, but as the result of deliberately defined goals and programs addressed at specific sustainability issues or stakeholders	Societal concerns replace the traditional customer and trigger an “outside-in” view on the company’s capabilities and resources which are employed to provide significant positive societal & planetary value while ensuring the long-term well-being of the company
Market definition and positioning		Mostly reactive to challenges from outside of traditional market influences	Exploration of new opportunities outside existing markets	Defining business activities outside existing markets
Product & services		Probably no changes (beyond cosmetics)	Most likely adaptation of products/services (but not questioning their societal value)	Creation of new products and services as a voluntary & pro-active response to societal/environmental problems, likely in collaboration with new partners
Governance & leadership		Probably not yet affected	- Cross-functional sustainability committee - Compensation of (top) management includes triple bottom line value creation	- Relevant societal representatives are fully integrated in the relevant decision-making processes at all levels of the organization
Type of CEO (based on Pless et al, 2013)	Traditional economist	Opportunity seeker	Integrator	Idealist
Type of companies (based on Pless et al, 2013)	Most companies, including again BP (moving from BS 1.0)	P&G, Nestlé, Danone, General Electrics and Walmart (moving in from Bus-as-usual)	Wholefood, Patagonia, Timberland, Novo Nordisk, Bodyshop, Unilever, and also Interface (moved in directly from business-as-usual)	A largely empty space, used to house Grameen Bank which has shifted back to BS 2.0 since its start in 3.0
Sustainability implementation		Most likely centralized	Most likely to become integrated into line functions	The company re-organizes around the societal issues they address and include other players into such new open & dynamic structures
Processes		Primary focus, particularly around expanded value chain	An secondary focus reflecting the strategic changes	Becomes a service-function key to deliver the value

Criteria	Bus-as-usual	B.S. 1.0	B.S. 2.0	B.S. 3.0
Reporting		Little beyond what is required, tendency on good news (risk: green washing)	- Internal reporting includes triple bottom line - External reporting on sustainability	- Reporting reflects the societal value created and includes voices of beneficiaries
Stakeholder influences		Mostly external process-focused interventions from non-market players (media, government/regu lations, NGOs and communities)	Internal stakeholders (employees) as well as suppliers, customers as well as (new) external partners/cooperation	Company takes a pro-active approach in identifying and engaging concerned stakeholders

Figure 14: Evaluating the four types of Business Sustainability across 13 key criteria

If we want organizational models to respond to the need for truly sustainable business, we will have to identify different organizational characteristics in order to measure success and improvements; characteristics that comply with more advanced typologies of business sustainability. The characteristics proposed in the above figure are intended as initial – possibly utopist – yardstick that may serve in the search for organizational models that cater for advanced business sustainability typologies. Such models need yet to be discussed, evaluated, tested in practice and further developed.

Open questions and areas of further research

The single biggest business challenge in the coming decade can be defined as follows: how can organizations that wish to become sustainable actually become truly sustainable? While we know that there is a majority of executives with a desire to implement sustainability, we also know that only a minority concrete knows how to go about it[5].

Furthermore, even though we have first insights into how high-sustainability companies are different from low-sustainability companies, and we make assumptions of how such high sustainability are different from what we consider to be truly sustainable companies, we know hardly anything about correlations, causalities and interdependencies between these traits.

To what degree do current sustainability indices such as the Wall Street Sustainability Index (WSSI) provided by Down Jones Index (DJI) and Sustainable Asset Management (SAM) to pick just one, accurately reflect a company's "temperature"? Or do investors and consumers alike remain mainly in the dark when trying to figure out which organizations has attempted this courageous quantum leap and which company is using sustainability simply to better their corporate image while further enhancing their profitability? An important aspect of being able to operationalize sustainability in its different stages in order to measure the different performances is to materialize sustainability issues by industry. Current and pending work by the Sustainable Accounting Standards Board (SASB) provides an excellent basis for such measurements[6].

5 BCG (2009): The business of sustainability, September 2009, The Boston Consulting Group, Boston

6 Currently available is an overview of 43 material issues in the 6 industries of the health care sector (www.sabs.org)

Given the need to move from Business Sustainability 0.0 to 3.0, there are a number of key research challenges that emerge. These can be summarized into the following 4 overarching research questions or domains:

- Question 1: What does business sustainability mean in the context of the coming decades?
- Question 2: What do real life examples of such companies look like?
- Question 3: How do we rate organizations in this process of transformation?
- Question 4: What are the related transformational challenges?

We are working on these questions in a prototype of what we consider developing into a global sustainability virtual research platform. The prototype is embedded in the doctoral program at Business School Lausanne and was developed in 2013 collaboration with 50+20 and GOLDEN. We have defined a case-study and action research approach which doctoral students can enroll in. While there are a number of conceptual elements, many parts of the research will be longitudinal in nature. Researchers and institutions around the world are invited to join us in this important effort.

Bibliography

BCG (2009): The business of sustainability, September 2009, The Boston Consulting Group, Boston

Dyllick, T., Muff, K. (2013): Clarifying the meaning of sustainable business - Introducing a typology from business-as-usual to true business sustainability. Accessible on SSRN: http://ssrn.com/abstract=2368735

Eccles R.G., Ioannoui I. and Serafeim G. (2012): The impact of a corporate culture of sustainability on corporate behavior and performance. Working Paper 12-035, May 9, 2012. Boston: Harvard Business School.

Elkington, J. (2012): The Zeronauts. Breaking the Sustainability Barrier. Milton Park: Routledge.

Esty, D. and Winston (2009): Green to Gold. How smart companies use environmental strategy to innovate, create value, and build competitive advantage. Paperback. Hoboken, N.J.: Wiley.

Felber, C. (2012): Die Gemeinwohl Ökonomie (the common goods economy – translation pending), Deuticke, February 2012, Austria, www.gemeinwohl-oekonomie.org/en/

Haanaes, K. et al. (2012): Sustainability nears a tipping point. MIT Sloan Management Review and BCG, Research Report Winter, Boston.

Haanaes, K. et al. (2011): Sustainability: The "embracers" seize advantage. MIT Sloan Management Review and BCG, Research Report Winter 2011, Boston.

ISO 26000 (2011): Guidance on social responsibility. Geneva.

Kelly M. and White A., (2007), Corporate Design – The Missing Business and Public Policy Issue of our Time, Tellus Institute, Boston.

Laszlo, C. and Zhexembayeva, N. (2011): Embedded sustainability. The next big competitive advantage. Stanford: Stanford Business Books and Sheffield: Greenleaf.

Miller Perkins K. (2011): Sustainability: Culture and Leadership Assessment, Miller Consultants Inc., www.millerconsultants.com/sustainability.php

Muff, K. (2012): The collaboratory method and approach, discussion paper for 50+20, www.50plus20.org

Lydenberg, S. (2012): On Materiality and sustainability: the value of disclosure in the capital markets, Initiative for Responsible Investment, Harvard University, Cambridge, September 2012

Network for Business Sustainability (NBS) (2012): Definition of Business Sustainability, http://nbs.net/about/what-we-do/ (accessed Nov. 30, 2012)

Pless N., Maak, T., Waldman D. (2013): Different Approaches toward Doing the Right Thing: Mapping the Responsibility Orientations of Leaders. In: Academy of Management Perspectives, (accepted for publication, publication pending)

PWC/SAM (2006): The Sustainability Yearbook 2006. Zurich.

Sustainable Accounting Standards Board (SASB), www.sasb.org

Tables and figures

Characteristics	Underlying values (2009)	Business-as-usual Low sustainability companies	Business Sustain. 1.0+ High sustainability companies
Financial performance			
1. Cumulative stock market performance	Return on Portfolio of firms:	Investing $1 in a portfolio in 1993:	
	- Value-weighted	$14.3	$22.6
	- Equal-weighted	$11.7	$15.4
	Annual abnormal performance: - Value-weighted (equal-weighted)	4.8% (2.3%)	
2. Volatility of stock price	Volatility of stock:	Monthly standard deviation	
	- Value-weighted	1.72%	1.43%
	- Equal-weighted	1.79%	1.72%
3. Accounting performance	Return on Assets:	Investing $1 of assets in 1993:	
	- Value-weighted	$4.4	$7.1
	- Equal-weighted	$3.3	$3.5
	Return on Equity (book value):	Investing $1 of book value of equity in 1993:	
	- Value-weighted	$25.7	$31.5
	- Equal-weighted	$9.3	$15.8
4. Sector specific comparison	The B2C sector (as compared to B2B)	Significant at 5% level	
	Sectors driven by brands and reputation	Significant at 5% level	
	Sectors involving extraction of large amounts of natural resources	Significant at 10% level	

Table 3: Comparing the long-term financial performance of LSCs vs. HSCs (source: Eccles et al, 2012)

Characteristics	Underlying values (2009)	Business-as -usual Low sustainability companies	Business Sustain. 1.0+ High sustainability companies
Long-term time horizon [7]			
1. Adopting a longer-term approach as part of the corporate culture	Focus on a longer-term horizon in communication with analysts and investors	Ratio of keywords relating to >1yr vs. <1yr	
		0.96	1.08
	Attracting dedicated rather than transient investors	Dedicated minus transient investors	
		-5.31	-2.29

Table 4: Comparing the long-term time horizon of LSCs vs. HSCs (source: Eccles et al, 2012)

[7] Measures not relevant and results not conclusive: large firms more likely to have dedicated investors, and high-growth firms communicate on long-term results

Characteristics	Underlying values (2009)	Business-as - usual	Business Sustain. 1.0+	Business Sustainability 3.0
		Low sustainability companies	High sustainability companies	Truly sustainable organizations
Overall adaptation of sustainability policies	**Summative result**	**10%**	**50%**	**100%**
		Governance structure		
Active engagement and accountability of Board of directors regarding environm. & soc. performance	Board of directors is formally responsible for the firm's sustainability	22%	53%	All stakeholders are represented on the board
	Creation of a separate board committee for sustainability issues	15%	41%	Not necessary any longer
Top management incentive systems based (partially) on company's sustainability performance	Senior management incentives are aligned with environmental performance metrics	8%	18%	Based in full on a balanced economic, environmental and social performance
	Aligned with social perform. Metrics	22%	35%	
	Aligned with external (i.e. customer) performance metrics	11%	32%	

Table 5: Comparing the long-term time horizon of LSCs vs. HSCs (source: Eccles et al, 2012)

Characteristics	Underlying values (2009)	**Business-as – usual** Low sustainability companies	**Business Sustain. 1.0+** High sustainability companies	**Business Sustainability 3.0** Truly sustainable organizations
Overall adaptation of sustainability policies	**Summative result**	**10%**	**50%**	**100%**
		Stakeholder Engagement		
Establishing a relationship of mutual trust, cooperation and longer-term horizon with stakeholders (a superior engagement model)	*Prior to the stakeholder engagement process:*			
	- Training of local managers in stakeholder mgmt practices	0%	15%	Managers work temp. at various stakeholders
	- Due diligence of stakeholders on costs, opportunities and risks	3%	31%	Done together with stakeholders
	- Mutual agreement on a grievance mechanism	3%	19%	Including voluntary penalties for firm
	- Agreement on targets of the engagement process	0%	16%	Including board buy-in & alignment
	- Mutual agreement on type of engagement with stakeholders	8%	37%	Of course, this is the basis of trust
	During the stakeholder engagement process			
	- Identify issues and stakeholders that are important for long-term success	11%	46%	Stakeholders are co-owners and co-determine issues
	- Ensure that stakeholders raise their concerns	3%	32%	Stakeholders have direct access to mgmt.
	- A common understanding with stakeholders of the issues relevant to the underlying issues at hand	14%	37%	100%
	After the stakeholder engagement process			
	- Provide feedback of stakeholders to the Board and other key dept	5%	32%	Not necessary as stakeholders are on the board
	- Share results of engagement process with involved stakeholders	0%	31%	Stakeholders are co-responsible for process
	- Sharing results of the stakeholder engagement process with the public	0%	20%	100%

Table 6: Comparing the long-term time horizon of LSCs vs. HSCs (source: Eccles et al, 2012)

Characteristics	Underlying values (2009)	Business-as - usual	Business Sustain. 1.0+	Business Sustainability 3.0
		Low sustainability companies	High sustainability companies	Truly sustainable organizations
Overall adaptation of sustainability policies	**Summative result**	**10%**	**50%**	**100%**
Measurement and Disclosure				
Measuring employee engagement and well-being[8]	Measuring execution of skill mapping and development strategy	16%	54%	Employees are co-responsible for developing their potential
	Measuring the number of fatalities in company facilities [9]	26%	77%	Not killing/hurting people is not equal to taking care of people
	Measuring the number of "near misses" on serious accidents in company facilities [10]	26%	65%	
	Tracking health and safety performance of employees	90%	95%	Measuring fulfillment and work-life balance
Deploying customer engagement processes [11]	- Customer lifestyle - Geographical segmentation - Potential Lifetime value - Customer generated revenue - Historical sales trends - Products bought - Cost of Service	There is no statistically relevant difference between "high" and "low" sustainability companies		Measuring the contribution to the well-being of the products and services to the customer/client and also to the society
Using standards to select and evaluate the relationship with suppliers (as a measure of evaluating the quality of the relationship)	Environmental Measuring Systems in certification / audit / verification processes	18%	50%	100% of the companies use all standards when evaluating suppliers as a basic requirement What about environmental and societal impact of supplier (rating)?
	Supplier's environm. policies	0%	17%	
	Supplier's environmental production standards	26%	46%	
	Using human rights standards[12]	6%	17%	
	Using occupational, health and safety standards	26%	63%	
	Using compliance to international general standards	0%	12%	
	- Environmental data availability by the supplier - Labor standard requirements - Compliance to domestic general standards - Product Lifecycle Impact Assessment - Grievance process - Labor standards	There is no statistically relevant difference between "high" and "low" sustainability companies		

8 "Engagement" is measured through the execution of skill mapping and development strategies. "Well-being" is defined in the study as a lower number of fatalities, "near miss" and serious accidents. We question the value of these measures

9 Outsourcing is a nice way around this – wrong measure

10 Sharing of best practices from industry leader

11 There is virtually no difference between so-called high and low sustainability firms

12 Human rights standards include forced labor, slave labor and child labor

<table>
<tr><th rowspan="2">Characteristics</th><th rowspan="2">Underlying values (2009)</th><th>Business-as - usual</th><th>Business Sustain. 1.0+</th><th>Business Sustainability 3.0</th></tr>
<tr><td>Low sustainability companies</td><td>High sustainability companies</td><td>Truly sustainable organizations</td></tr>
<tr><th colspan="5">Measurement and Disclosure (continued)</th></tr>
<tr><td rowspan="3">Using objective, third-party audit or assurance</td><td>External audit of sustainability report</td><td colspan="2" rowspan="3">There is no statistically relevant difference between “high” and “low” sustainability companies[13]

<u>Small exception:</u>
External audit of sustainability report and companies based performance measures on external standards such as AccountAbility’s AA1000 or GRI’s G3 guidelines</td><td rowspan="3">To what degree are these the right and relevant measures?</td></tr>
<tr><td>Assurance provision process:
- Information collection review
- Data aggregation review
- Document review
- Relevant management interviews
- Mapping against standards
- Auditor competency disclosure
- Relevant management discussions
- Sample site visits
- Stakeholder consultation</td></tr>
<tr><td>Distribution network quality:
- External audits
- Standardized external audits
- Internal audits</td></tr>
<tr><td rowspan="6">Willingness to be transparent in the external reporting of the company’s performance</td><td>ESG disclosure score (calculated by Bloomberg)</td><td>18%</td><td>30%</td><td></td></tr>
<tr><td>ESG disclosure score (calculated by Thomson Reuters)</td><td>37%</td><td>46%</td><td></td></tr>
<tr><td rowspan="2">Balance between financial and nonfinancial[14] discussion in conference calls with analysts</td><td colspan="3">Ratio of nonfinancial vs. financial keywords</td></tr>
<tr><td>0.68</td><td>0.96</td><td>Not specific enough a measure!</td></tr>
<tr><td>Integration of environmental information in financial reports</td><td>5%</td><td>26%</td><td rowspan="2">We need specific standards here (yet to be developed)</td></tr>
<tr><td>Integration of social information in financial reports</td><td>11%</td><td>32%</td></tr>
</table>

Table 7: Comparing the long-term time horizon of LSCs vs. HSCs (source: Eccles et al, 2012)

[13] A key barrier to auditing nonfinancial information is the lack of an agreed-upon set of measurement standards

[14] Non-financial keywords include: employees, customers and products. Note by authors: talking about these topics does not yet serve as a sustainability measure

Characteristic	High sustainability companies	Truly sustainable firms (Business Sustainability 3.0)
Governance structures	- Only 40-50% assign a formal responsibility for sustainability to the board - Only 18-35% assign some kind of environmental, social or customer oriented performance metric to the top management	- Sustainability in all its dimensions must be a fully integrated responsibility of the board - Top management is evaluated based on a balanced & holistic sustainability metric (covering environmental, social and economic measures equally)
Stakeholder engagement	- The measures used for the "superior engagement model" are divided into before/during/ after a stakeholder engagement process (some 15-46% engage in the various activities). A sectional approach is fundamentally flawed.	- Establishing a "relationship of trust, cooperation and longer-term horizon" is a continuous task and needs to be fully integrated in strategic and operational processes. - We suggest voluntary penalties for companies violating mutual agreements - We suggest managers work temporarily at various stakeholders, who themselves become co-owners of different processes.
Longer-term horizon	- Firms communicate only slightly more about >1 year issues than <1 year issues (ratio 1.08 vs. 0.96) - HSCs have only 3% more dedicated investors than LSCs, but transient investors still dominate	- We suggest that they should report significantly more about the longer-term (ratio of 5) - We suggest that dedicated investors should clearly outnumber transient investors by a factor of 2 to 3
Measurement & disclosure	- Employee engagement and well-being is measured mainly through reporting of fatalities, near-misses and serious accidents. These are basic pre-conditions of well-being not indicators. - There is no statistically relevant difference between LSCs and HSCs in the customer engagement process - Only a few standards are applied to select and evaluate the quality of the suppliers engagement - Objective, 3rd party audit or assurance is not really conducted (except AA1000 and GRLI G3) - Willingness to be transparent in external reporting is limited (<30%). Validity of criteria is questioned	- Employees are co-responsible for developing their and their colleagues' potentials. We suggest to measure job fulfillment and work-life balance. - Suggested relevant indicator would be to measure the contribution of products/services to the well-being of the customer and to society - We suggest a rating based on a comprehensive analysis of the supplier, incl. the supplier's environmental and societal impact on society - We suggest the Common Goods Matrix (Felber 2010) as a holistic measurement tool - We need specific standards here. These must go beyond comparing ratio of nonfinancial vs. financial keywords

Figure 8: Comparison of High Sustainability Companies and Truly Sustainable Firms (Business Sustainability 3.0)

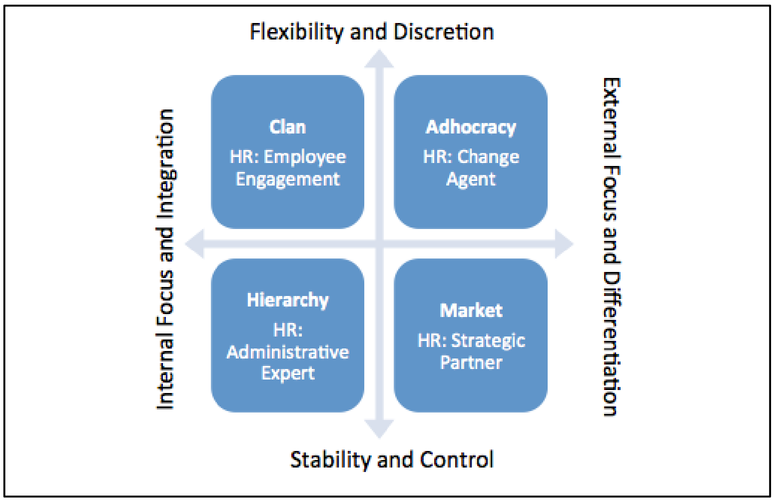

Figure 9: The Competing Values Framework by Cameron and Quinn

High Humanistic **INTENTION**	**IDEALIST** - Responsibility towards stakeholders in need - Vision: creating social or environmental value - Motivation: making the world a better place - Purpose: Business in service of society	**INTEGRATOR** - Responsible to all legitimate stakeholders affected by the business - Vision: Reconciliation of profit and purpose - Motivation: conscious-led, humanistic values - Purpose: Doing the right thing is the right thing to do
Materialistic Low	**TRADITIONAL ECONOMIST** - Responsible for company's shareholders - Vision: Maximizing short-term profits - Motivation: need to be pushed to do CSR/sustainability (legal req., minimizing risks, owner demands or client pressure) - Purpose: the business of business is business	**OPPORTUNITY SEEKER** - Strategic / instrumental view on sustainability - Vision: A clear business case (active approach) - Motivation: doing well by doing good (it pays to do CSR) - Purpose: looking for shared value (Porter/Kramer)
	One-dimensional **ACTION**	Multi-dimensional

Figure 10: Applied from "the responsible leadership mindset in the tension of action vs. intention" (Pless et al 2013)

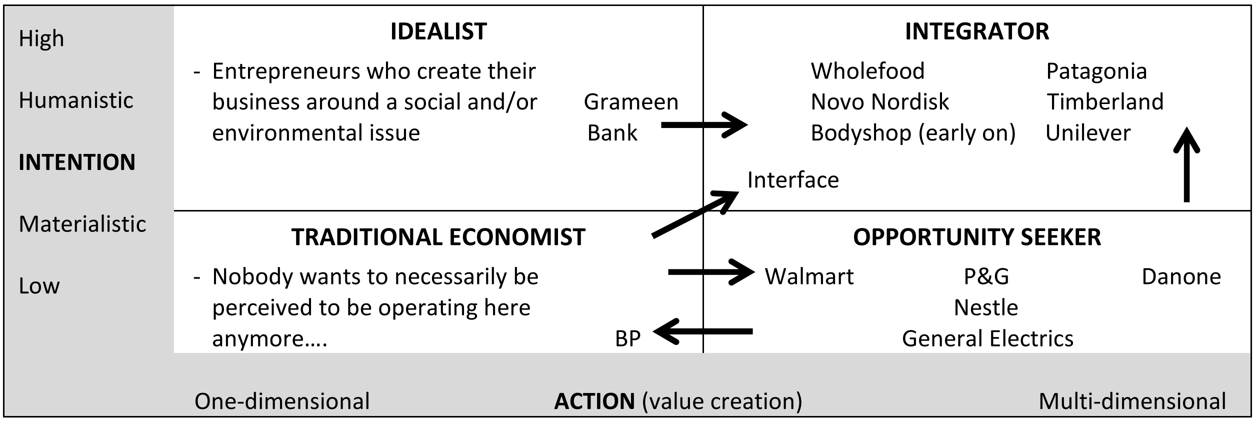

Figure 11: Translating the responsible leadership mindset to their companies (Pless et al 2013)

Dimension	Indicators	Early adopters (sustainable)	Others (business as usual)
Organizational leadership	Leaders are capable of inspiring	97%	83%
	Leaders collaborate well across boundaries	93%	76%
Organization systems	No statistically relevant differences		
Organizational climate	Continuous learning is a core focus of the organization	93%	71%
	People in this organizations have enough time to reflect and think about the outcomes of their actions	23% disagree (not stat. relevant)	53% disagree (not stat. relevant)
	People are encouraged to learn new things about sustainability from external sources	86%	53%
	The level of trust is high within this organization	87%	77%
	People from different departments find it easy to communicate with each other and to work effectively	87%	59%
	People in this organization are good at resolving conflicts productively	90%	65%
	This organization rewards innovation	87%	59%
Change readiness	Strong track record of implementing large-scale change successfully	89%	37%
	Strong track record of implementing incremental (small, continuous) change successfully	97%	88%
Internal stakeholders	Most employees believe that the organization values them and their contribution	93%	65%
	Company demonstrates concern for meeting its employee's needs and expectations	100%	83%
	Company actively seeks suggestions and input from all internal stakeholders affected by activities in the organization	90%	65%
	Company has a clear strategy for engaging all internal stakeholders in its sustainability efforts	71%	30%
External stakeholders	The company sends a clear and consistent message to external stakeholders about its commitment to sustainability	96%	63%
	The company is viewed by the public as ethical	100% (81% strongly)	93% (43% strongly)

Figure 12: Overview of the sustainability culture and leadership assessment (source Kathy Miller Perkins)