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Discussing sustainability in business context and in performance disclosures: analysis of Brazilian case studies

Discutindo sustentabilidade no contexto de negócios e em relatórios de desempenho: análise de estudos de caso brasileiros

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Abstract: Companies have been showing growing interest in the adoption of practices related to sustainability to mitigate risks and increase their chances of survival. In this context, performance indicators aligned to sustainable development are fundamental to support managerial and operational decisions. This paper aims to evaluate aspects related to corporate sustainability performance applied in the Brazilian context. More specifically, the research seeks to analyze the unfolding of socio-environmental initiatives in the corporate business and the adoption of reports on sustainability indicators, highlighting the challenges involved in these issues. The research is based on case studies, exploring empirical evidence in two large companies located in Brazil. Data were collected through semi-structured interviews with managers responsible for sustainability department. In addition, internal and published documents, such as sustainability reports, were used to generate additional evidence for data triangulation. The case studies analysis pointed out the difficulty of incorporating sustainability into the business context, requiring intensive efforts of multidisciplinary teams to understand the interrelationships and trade-offs between the pillars of sustainability. Moreover, it appears that the use of the GRI indicators (Global Reporting Initiative) can serve as a basis for initial discussions, but there are still challenges to implement a structured sustainability performance measurement system in companies.

Keywords: Corporate sustainability; Sustainability measurement; Sustainability reporting; GRI indicators.

Resumo: *As empresas têm mostrando crescente interesse na adoção de práticas relacionadas à sustentabilidade para mitigar riscos e aumentar suas chances de sobrevivência. Nesse contexto, os indicadores de desempenho alinhados ao desenvolvimento sustentável são fundamentais para apoiar decisões gerenciais e operacionais. O presente artigo teve como objetivo avaliar aspectos ligados ao desempenho da sustentabilidade corporativa aplicados no contexto brasileiro. Mais especificamente, a pesquisa buscou analisar o desdobramento de iniciativas socioambientais no negócio das empresas e a adoção de relatórios com indicadores de sustentabilidade, destacando os desafios envolvidos nessas questões A pesquisa baseou-se em estudos de casos, explorando evidências empíricas em duas empresas de grande porte situadas no Brasil. Os dados foram obtidos por meio de entrevistas semiestruturadas com os gestores responsáveis pelo departamento de sustentabilidade. Além disso, documentos internos e publicados, tais como relatórios de sustentabilidade das empresas, foram usados para gerar evidências adicionais para triangulação dos dados. A análise dos estudos de caso apontaram a dificuldade da incorporação da sustentabilidade no contexto empresarial, exigindo empenho intensivo de equipes multidisciplinares para compreensão das inter-relações e trade-offs entre os pilares da sustentabilidade. Além disso, verificou-se que o uso dos indicadores GRI (Global Reporting Initiative) podem servir como base para as discussões iniciais, mas ainda existem desafios para a implantação de sistemas de mensuração de desempenho de sustentabilidade estruturado nas empresas.*

Palavras-chave: *Sustentabilidade corporativa; Mensuração de sustentabilidade; Relatório de sustentabilidade; Indicadores GRI.*

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1 Introduction

One of the most disseminated definitions for the concept of sustainable development is that countries should be able to "[...] meet the needs and aspirations of the present without compromising the ability to meet those of the future [...]" (WCED, 1987, p. 34). In this context, it is also associated with the concept of the triple bottom line (TBL), considering the interdependence between the three pillars of sustainability: social, economic and environmental. Based on these and other relevant publications related to sustainability, Bolis et al. (2014) show the importance of an axiological perspective of sustainable development, suggesting that decision-making should be based on values linked to the collective interests (or instead of being motivated solely by individual interests). Although the concept of sustainability continues to be a topic of discussion (Lindsey, 2011), the focus of the literature has been striving to develop more concrete tools (Veleva & Ellenbecker, 2001).

Several factors motivate businesses to be concerned with sustainable development, such as legislation, pressure from stakeholders, economic opportunity and ethical issues arising from corporate leadership values (Bansal & Roth, 2000). One way to boost the logic of sustainable development in business is seeking its alignment with the business strategy and the market dynamics in order to contribute to the competitive advantage of a business (Crittenden et al., 2011; Porter & Linde, 1995; Savitz & Weber, 2007). This integration of sustainability values into corporate strategy and operation has also been indicated by the literature as issues linked to a sustainable business model (or business model for sustainability) (Bocken et al., 2014; Boons & Lüdeke-Freund, 2013). Moreover, it is noteworthy that the involvement of many areas of knowledge within the operations management on sustainable development is very relevant, since the economic, social and environmental impacts are generated from different processes throughout the organization (Jiménez & Lorente, 2001; Lozano, 2012). As businesses are what they can measure (Hauser & Katz, 1998), a performance measurement system that incorporates environmental and social issues into economic objectives is key to a company engaged in sustainable development. The literature on sustainability performance is broad, addressing various issues such as environmental accounting (Schaltegger et al., 2013), sustainability reporting (Hahn & Kühnen, 2013); indicators associated with stock exchange (Consolandi et al., 2009; Orsato et al., 2015), among others. However, the literature on sustainability performance measurement is still fragmented and dispersed, pointing out the need for research on the challenges of implementation of corporate sustainability into companies' practices (Morioka & Carvalho, 2016). Thus, translating the concept of sustainability in the activities in the organization and measure its results still represents a major challenge for organizations.

With these considerations in mind, this article aims to evaluate aspects related to corporate sustainability performance applied in the Brazilian context. More specifically, the research seeks to analyze the unfolding of socio-environmental initiatives into business and the adoption of reports including sustainability indicators, highlighting the challenges involved in these issues. There are previous publications on corporate sustainability performance focused on the Brazilian territory, addressing issues such as the Corporate Sustainability Index (Índice de Sustentabiliade Empresarial, ISE) (Cavalcante et al., 2009; Cunha & Samanez, 2012) and sustainability reports (Trierweiller, fish, Tezza, Bornia, & fields, 2013). These studies indicate, for example, that the timid performance of Brazilian companies in the field of corporate sustainability can be explained by the still low investors' interest in more sustainable companies, coupled with the lack of appropriate regulations for companies to internalize externalities linked to negative impacts on environment and society (Cunha & Samanez, 2012). Thus, this research seeks to complement this literature, bringing further discussion of Brazilian cases studies as a way to qualitatively explore other specific aspects of the sustainability performance of organizations. In this sense, exploratory case studies were conducted in two large companies, one in the agribusiness sector and the other focused on electrical and electronic engineering solutions. This article is divided into five sections. Section 2 discusses the key concepts of corporate sustainability and sustainability indicators. In Section 3, the research method conducted in the case studies is described, which is followed by the presentation of the field of survey results in Section 4. Final considerations and limitations of this study are discussed in section 5.

2 Theoretical background

The following sections are dedicated to the theoretical background of the study, including aspects related to corporate sustainability performance in terms of the integration of sustainable development logic into business and of sustainability performance dissemination in published reports.

2.1 Corporate sustainability: integrating sustainable development to business logic

There are several publications that seek to delimit the concept of sustainable development (Bolis et al., 2014; Hopwood et al., 2005; Kajikawa et al., 2007). This section does not intend to exhaust the subject,

but to bring the main points from these discussions. Elkington (1997) states that for a business to become sustainable, it is necessary to consider the three pillars of sustainability (e.g., economic, environmental and social pillars), placing them with the same degree of importance. Moreover, it is necessary to understand the interaction between these pillars, in which the most interesting challenges reside (Elkington, 1997). The author refers to the trade-offs between the pillars, which are not always trivial to resolve. Seeking to take advantage of the positive interactions between the pillars, Savitz & Weber (2006, 2007) recommend that companies should find the sweet spots, looking for opportunities that can be beneficial not only for their financial performance, but also for social and environmental performance. Based on extensive literature review, Bolis et al. (2014) present a model of sustainable development that goes beyond the triple bottom line and highlights the need for a paradigm shift with the inclusion of axiological aspects in decision making. The relevance of the paper was to identify the basic elements of sustainability concept: society well-being as aimed goal, natural resources as key constraints; and values (moral and ethical) for decision-making as an essential factor for achieving sustainable development goals. This view considers the issues discussed so far, but also seeks to provoke further reflection of what is considered as "sustainable" using this axiological approach.

One way to frame the activities of an organization is using Porter's value chain, which considers the value of the company is obtained through its primary activities (inbound logistics, operations, outbound logistics, marketing and sales and services); and support activities (acquisition, technology development, human resource management and infrastructure) (Porter & Millar, 1985). This model can help illustrate sustainability in the business context (Lozano, 2012). Figure 1 shows that the marginal value results from the composition of social, environmental and economic effects, since decisions pertaining to primary activities and support can have an impact on the three pillars of sustainability. As the financial drivers are already traditionally considered in the decision-making processes, the challenge for companies is to understand the effects of business processes on the environment and society (including various stakeholders, such as community, employees, non-profit organizations, government, etc.) and use that knowledge to add value to the business. For example, companies can invest financial and human resources to innovate its products and processes to improve the efficiency on the use of raw materials in order to raise their product, improve their corporate image and, at the same time, reduce negative impact on the environment and improve working conditions (Jiménez & Lorente, 2001). Thus the value of the organization as the result of their economic, environmental and social performance (Figure 1) is affected by the company's ability to solve trade-offs from the interaction between sustainability pillars. Sustainability practices in the Brazilian context tend to be more reactive, as shown in the study Vanalle & Santos (2014) studying the Brazilian automotive sector. The authors indicate that the most valued practices by companies are linked to issues such as environmental compliance (included as one of the supplier selection criteria) and monitoring and reducing the generation of hazardous waste and industrial effluents. In this sense, studies also show evidence of the importance of quality management initiatives, maturity in environmental management and green management supply chain to support improved environmental performance (Jabbour et al., 2014).

A possible evidence of increased company's concern for the socio-environmental issues is the growing adoption of integrated management systems focusing on standardization of processes, which are represented mainly by setting voluntary standards in the ISO 14000 series (Jabbour et al., 2014; Jørgensen, 2008), health and safety OHSAS

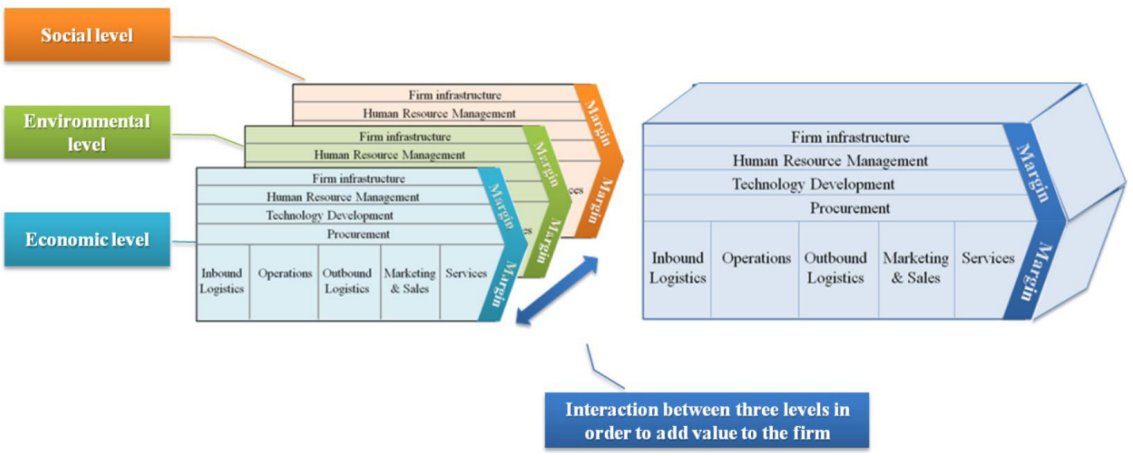


Figure 1. Porter's value chain and *triple bottom line.* Source: Adapted from Porter & Millar (1985).

18001 (Jørgensen, 2008) and social responsibility (ISO 26000) (Carvalho, 2012). Companies that apply these standards from an integrated perspective are dealing with several important issues related to the triple bottom line. These voluntary standards are inspired by the ISO 9001 improvement perspective, established in 1987, which focuses mainly on the economic pillar of sustainability, as it is directly linked to cost reduction of products quality and business processes. Standards are important tools for integrating business processes and tasks in the management cycle (planning, implementation, evaluation and action), as indicated by Jørgensen (2008). The author believes that the integrated system also serves to create a learning culture that promotes stakeholder involvement and continuous improvement, which are fundamental aspects of sustainable development performance of a particular company or an industry as a whole. This voluntary standards perspective encourages business process management thinking and eventually the adoption of key performance indicators (KPIs) to control the main factors that lead and establish the basis for future improvement (Carvalho, 2012).

2.2 Corporate suustainability performance measurement and sustainability reporting

Performance indicators are important tools in the hands of managers. A performance measurement system is the basis for decision-making, because it quantifies the efficiency and effectiveness of past actions through the collection, analysis, interpretation and dissemination of appropriate data (Neely, 1998). Recent discussions on sustainable development indicated the potential to further explore the challenges and solutions of incorporating sustainability into corporate performance measurement systems (Escrig-Olmedo et al., 2017; Pádua & Jabbour, 2015). Although proposals of sustainability indicators, for example, by the Global Reporting Initiative (GRI) and the technical indicators of life cycle assessment (LCA), there are still gaps in the literature.

Chatterji & Levine (2006) argue the need for indicators to supplement the financial measures for two reasons: (i) to provide a more comprehensive and long-term health of the company (and thus to help mitigate risk) and (ii) to give certain stakeholders (such as customers, potential employees, regulators and community) the opportunity to help find businesses aligned with their values. Thus, sustainability indicators that incorporate environmental and social criteria, beyond economic factors into decision-making can become increasingly useful for businesses.

A company that decides to implement indicators to monitor its sustainable production hardly have clear goals and defined for measurements (Veleva & Ellenbecker, 2001). Thus, the authors emphasize the importance of knowledge management through organizational learning, since companies often do not succeed in their first attempts to implement a system of sustainability indicators. Companies should start with partial and temporary solutions, refining them over time to develop indicators that are part of an effective system of sustainability indicators (Veleva & Ellenbecker, 2001). The importance of addressing performance systems as a dynamic issue is consistent with recommendation of the literature on "traditional" performance measurement, which indicates the need of adherence of performance measurement tools to the reality of the company (Bourne et al., 2002; Hauser & Katz, 1998; Kennerley & Neely, 2002; Lynch & Cross, 1991). The evolution of sustainability indicator system through the accumulation of knowledge is evident in the framework proposed by the Lowell Center for Sustainable Production at the University of Massachusetts (Veleva & Ellenbecker, 2001). See Figure 2.

One challenge faced by firms that intend to develop sustainable indicators for monitoring their businesses is to define proper indicators that are good proxies for the three pillar of sustainability and simultaneously demand viable and reliable data collection (Delmas and Blass 2010). Indicators that are general, such as the Toxic Release Inventory (TRI) published by the US Environmental Protection Agency (EPA), are open to the public and useful in comparing firms (Delmas & Blass 2010). Yet the available data are not in all cases the best representation of the data required to evaluate the economic, environmental and social

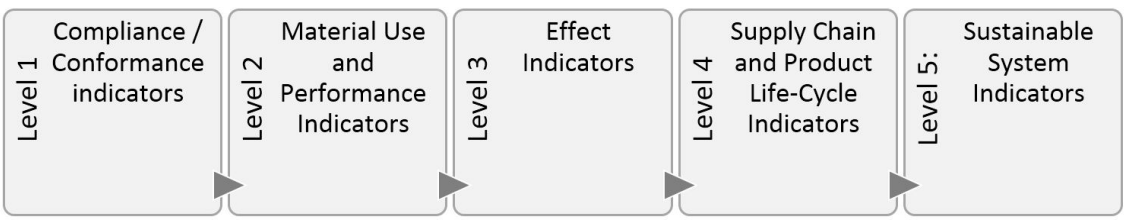


Figure 2. Framework proposed by Lowell Center for Sustainable Production. Source: Adapted from Veleva & Ellenbecker (2001).

performance of a firm because each firm has its own context and premises (Delmas & Blass, 2010).

One of the most heavily disseminated propositions for sustainable indicators is the Global Reporting Initiative (GRI) (Ethos, 2007; Parris & Kates, 2003), which has studied the indicators set that should (or can) appear in a firm sustainability report. Thus, the firm may choose to publish a series of sustainability indicators regarding the differentiation between levels of implementation of the report (A to C, where C is the most simplified version). These indicators are organized as the triple bottom line that has social, environmental and economic pillars, as shown in Chart 1.

The effort to study sustainable indicators is not restricted to the GRI and the issue is also discussed by the International Organization for Standardization ISO 14031, the World Business Council for Sustainable Development (WBCSD), the Center for Waste Reduction Technologies (CWRT) (Veleva & Ellenbecker 2001), in addition to the Consultative Group on Sustainable Development Indicators (CGSDI), the World Conservation Union (WCU) (who established the Wellbeing Index), Global Scenario Groups, Ecological Footprint, Genuine Progress Indicator, U.S. Interagency Working Group on Sustainable Development, Costa Rica System of Indicators for Sustainable Development and Boston Indicators Project (Parris & Kates 2003). In Brazil, we have the Índice de Sustentabilidade Empresarial (ISE) of da Bolsa de Mercadorias e Futuros e Bolsa de Valores de São Paulo (BM & FBOVESPA), already studied in several previous publications (Cavalcante et al, 2009; Cunha & Samanez, 2012; Orsato et al., 2015). These previous attempts to assess sustainable development have different areas of emphasis, as more or less focus on environmental or social aspects, or the consideration of an organization or a country as the unit of analysis. Moreover, these initiatives illustrate the non-triviality in defining performance indicators that adequately represent sustainability issues.

3 Research method

As presented in the Introduction (Section 1), the purpose of the article is to evaluate aspects related to corporate sustainability performance applied in the Brazilian context. More specifically, the research seeks to analyze the unfolding of socio-environmental initiatives in the corporate business and the adoption of reports with sustainability indicators, highlighting the challenges involved in these issues. Complementing previous studies focused on quantitative analysis of sustainability performance in the Brazilian context (Cunha & Samanez, 2012; Trierweiller et al, 2013; Vanalle & Santos, 2014), a qualitative research was conducted using exploratory case studies conducted in two large companies. This approach was adopted as a way to better understand the context of each company (Eisenhardt & Graebner, 2007; Yin, 2009), trying to analyze qualitative data of perception involved in corporate sustainability in practice.

The case selection criteria were that the company should be recognized for its concern for sustainability, have a formal area for sustainability issues and be willing to allow access to internal documents and employees. The field research was conducted in collaboration with two Brazilian subsidiaries of large multinational companies. One is an American agribusiness company and the other is a German electronics and electrical engineering company. The guidelines for conducting case study were consistent with Voss et al. (2002), with data obtained from the interpretation of internal documents and published reports, plus two semi-structured interviews with five respondents (two managers in the area of sustainability, two employees in the same area and a project office manager).

After the choice of companies, the main topics for the semi-structured interviews were defined. The focus was on the relevance of sustainability to the company, the actions taken in this regard and the GRI indicators. To reduce possible misunderstandings, the interviews were recorded, transcribed into an electronic document and validated by the interviewees.

Chart 1. GRI indicators.

Category		Aspect
ECONOMIC		Clients, Suppliers, Employees, Investors, Public Sector
ENVIRONMENTAL		Materials, Energy, Water, Biodiversity, Emissions and Waste, Suppliers, Product and Services, Legislation, Transport
SOCIAL	*Labor policies*	Employment, Employee Relations, Health and Safety, Education, Opportunity
	Human Rights	Strategy and Management, Non-Discrimination, Freedom to Negotiate, Child Labor, Forced Labor, Disciplinary and Security Procedures
	Society	Community, Corruption, Political Contribution, Price Policies
	Responsibility for Product/Services	Health and Safety of Consumers, Products and Services, Advertisement, Respect of Privacy

Source: Adapted from GRI (2013).

Data analysis and discussion were performed in two stages, framed by the specific objectives of the research. Initially it is analyzed how sustainability is deployed in the business for each case study. Then the contents of sustainability reports are discussed, bringing a comparative discussion between cases. These discussions are presented in Section 4.

4 Results presentation and discussions

The results are presented and discussed in two stages: (i) individual description of each case study; and (ii) cross-case analysis.

4.1 Case 1 – Agribusiness company

The first case study was conducted in a Brazilian subsidiary of an American company in the agribusiness sector, with products such as soybeans, seeds and fertilizers. Starting operations in 1901, the company came to Brazil in 1963. Its fundamental objectives are directly linked to enhancing food production, promoting more conservation of natural resources, helping farmers around the world in its mission to feed, clothe and provide fuel.

In this context, sustainable development has always been present in the business, as the efficient use of resources has always been closely linked to reduction of production costs and competitive advantage for its products. The company has always had a group of key employees, the researchers. Their technical capabilities enable the firm to disseminate the culture of innovation, but are not always followed by an appropriate expression ability with the lay public in general. In this context, the company began structuring their sustainability initiatives in 2010, aiming to collect and consolidate information of projects that contribute to sustainable development of the company in order to communicate clearly and objectively both internally and externally.

For this firm, a formal concern and communication of their sustainable concerns and concrete initiatives is fundamental for its perennial existence, since the corporate image is directly linked to the environment and to the agrarian community near industrial installations. Besides investments in sustainable development can be reduce chances of an accident with severe impact of the land and the population, which is a permanent risk to the one of the firm's most important intangible asset, its image before internal and external stakeholders.

Chart 2 shows the main aspects of the firm's sustainable issues.

4.2 Case 2 – Electronics and electrical engineering company

The second case study was conducted in a large technology company, engaged in the areas of industrial automation, energy, health and infrastructure and solutions for cities. Founded in Germany over 150 years ago, the company has affiliates in several countries. Its strategy is closely linked to innovation, in the attempt to be consistently active in global trends, as climate change and population growth. Given its privileged market position, the company is aware of its ability to influence the market and governments. In this context, the Area of Sustainability has been formally structured, given the strategic importance of

Chart 2. Summary of sustainability in Case 1.

	Case 1 – The agribusiness firm
Sustainability in Case 1	- 2010: creation of the Area of Sustainability - Area of Sustainability: multidisciplinary teams, with the objective to consolidate initiatives data spread throughout the firm - Sustainability committee: involving certain people representing respective business areas as well as external stakeholders (NGOs, financial institutions, forest companies etc.) - Green Team: any employee who wants to propose and take part in sustainability actions
Certifications	- Chemical sites: ISO 14000, ISO 9000 and OHSAS 18000 - Seed sites: ISO 14000 (in progress), ISO 9000 e OHSAS 18000 - ISO 26000: without intention so far
Example of social actions	- Education: dissemination of concepts and sustainable practices - Culture: Support for social inclusion through sponsorship of events
Example of environmental actions	- Projects of energy consumption reduction in industrial units - Project to promote recycling in industrial units and office facilities
Impact to business	- The company's image is directly related to the environment. Therefore, it is essential to be able to communicate their social and environmental concerns. - Reduced risk of image for the company in case of accidents with impacts on the environment and society.

sustainable development for its image, aggregating value to offered products and services.

The increased relevance of the theme of sustainability led to the process of structuring the activities of the formal Area of Sustainability in Germany in 2009. The guidelines for the establishment of the area in Brazil began in 2010, and the area has gained strength over time.

In Brazil, the area originally consisted of 20 people who were divided into smaller groups. Nowadays the structure is leaner, consisting of two collaborators and the Director of Strategy and Sustainability. Meanwhile the other participants of the Area were relocated to other facilities, since sustainable development is spread throughout the firm and should not be treated separated from the rest of the organization.

The main function of the Area of Sustainability is corporate governance, making the alignment of concepts and sustainable practices throughout the business areas, and consolidating information to support the preparation of reports for publication. Furthermore, the area of sustainability is responsible for managing specific sustainability stakeholders such as institutions for sustainable development (Ethos), CNI (National Confederation of Industry) and academics (Fundação Getúlio Vargas). With these partnerships, the company has contact not only with the organizations themselves, but also with other companies that belong to these associations, promoting the exchange of information and knowledge.

Indicators of sustainability specific for the firm's context are being implemented in two waves with the ultimate goal to gain recognition in the market, building a distinctive corporate image in terms of sustainability. The first wave is in moment in discussion, with more simplified indicators. The second wave planned for the coming years should contain precise and most appropriate indicators to assess sustainability in the company, since they can rely on lessons learned in the first wave, as well as academic progress.

The main aspects of the sustainable initiatives are summarized in Chart 3.

4.3 Analysis of case studies' sustainability reports

Despite the difference between the business segments, the two case studies can be compared. One possible comparison is shown in Chart 4, which shows the indicators used by the firms for the published annual report (available from 2010 for the technology firm and from 2011 for the agribusiness case). In both cases, the Area of Sustainability selected performance indicators for sustainability from the set of indicators suggested by the GRI, in form of the most simplified report, the type C.

One can observe that the cases' report incorporated issues such as waste treatment and health/safety. Furthermore both companies claimed that the Area of Sustainability is recent and therefore there are still difficulties to appropriately collect needed data.

Figure 3 shows the sustainability profile in both cases studied, based on their GRI reports. The lines' thickness represents the percentage of the number of indicators used in each case sustainability report, in relation to the number of indicators suggested by the GRI. The profile for Case 1 suggests greater focus from the environmental point of view (EN),

Chart 3. Summary of sustainability in Case 2.

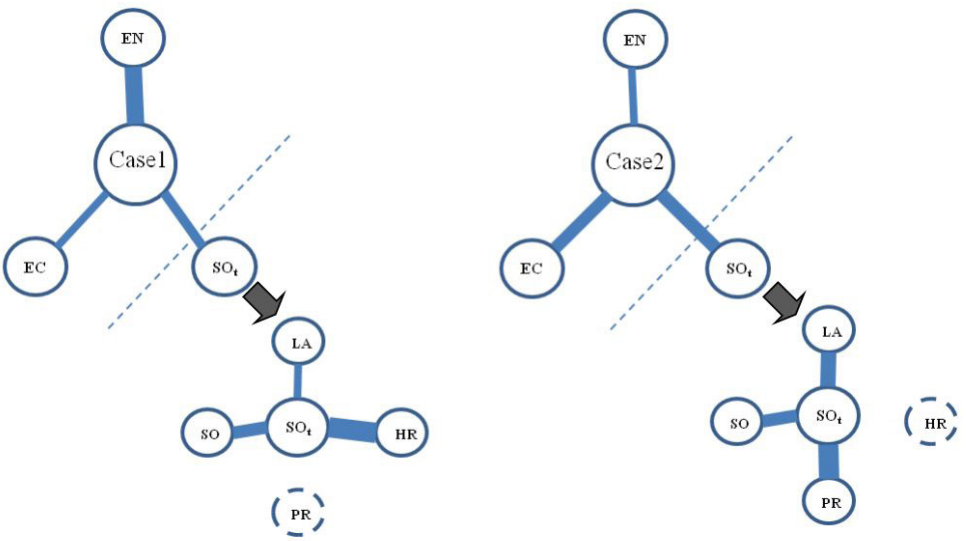
	Case 2 – The technology firm
Sustainability in Case 1	- Started in 2010 in Brazil (in 2009 in Germany) - Area of sustainability: aimed at consolidating sustainable initiatives information throughout the company (governance role) and at leading the two waves for definition of sustainability indicators - Multidisciplinary teams of people interested in sustainability to specific objectives: eco-efficiency, internal communications, vendor selection and engagement of employees.
Certifications	- ISO 14000, ISO 9000 and OHSAS 18000 - ISO 26000: without intention so far
Example of social actions	- One task of training new project managers is to perform a social action, given a limited budget. - Encouragement of volunteer work for the community
Example of environmental actions	- Projects to reduce energy consumption in industrial units - Servitization: sale of bundled services and products (dematerialization) - Alignment between the Area of Environmental Management and the Area of Sustainability
Impact to business	- For the company's business, build your image around sustainability has great potential to add value to their products - Reduce risk of corporate image in case of accidents with impacts on the environment and society.

Chart 4. GRI indicators from case studies.

	Code	Description	Case	
			1	2
Economic	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings and payments to capital providers and governments	x	
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change		x
	EC3	Coverage of the pension plan benefit offered by the organization		x
	EC5	Variation in the proportion of lowest wage compared to local minimum wage at significant locations of operation	x	
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation		x
Environment	EN3	Direct energy consumption broken down by primary energy source	x	
	EN4	Indirect energy consumption broken down by primary energy source	x	
	EN8	Total water withdrawal by source	x	
	EN21	Total water discharge by quality and destination		x
	EN22	Total weight of waste by type and disposal method	x	x
	EN26	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation	x	x
	EN28	Monetary value of significant fees and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	x	
	EN30	Total investments and expenditures in environmental protection by type	x	
Work policies	LA1	Total workforce by employment type, employment contract and region	x	x
	LA4	Percentage of employees covered by collective agreements		x
	LA7	Rates of injury, occupational diseases, lost days, absenteeism and work-related deaths by region	x	x
	LA8	Education programs, training, counseling, prevention and risk control in place to assist employees, their family or community members regarding serious diseases		x
	LA9	Issues relating to health and safety covered in formal agreements with trade unions	x	
	LA10	Average hours of training per year per employee broken down by functional category		x
	LA12	Percentage of employees receiving regular performance analysis and career development		x
	LA13	Composition of area responsible for corporate governance and breakdown of employees per category according to gender, age, and other indicators of diversity.	x	
Human Rights	HR6	Operations identified as having significant risk for occurrence of child labor and measures taken to contribute to the abolition of child labor	x	
	HR7	Operations identified as having significant risk for occurrence of forced labor or compulsory labor and measures taken to contribute to the eradication of forced or compulsory labor	x	
Society	SO1	Nature, scope and effectiveness of any programs and practices that evaluate and manage the impacts of operations on communities, including entering, operating, and exiting		x
	SO2	Percentage and total number of business units analyzed for risks related to corruption	x	
	SO3	Percentage of employees trained in anticorruption policies and procedures of the organization	x	x
	SO4	Actions taken in response to incidents of corruption		x
	SO8	Monetary value of significant fees and total number of non-monetary sanctions resulting from non-compliance with laws and regulations	x	

Chart 4. Continued...

	Code	Description	Case	
			1	2
Responsibility for product/ service	PR1	Phases of products and services life cycle that impact on health and safety are assessed for improvement, and percentage of products and services subject to this procedure		x
	PR3	Type of information about products and services required by labelling procedures, and percentage of products and services subject to such requirements		x
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction		x



Legend:

Sustainability pillars	
EN	Environmental
EC	Economic
SO_t	Social (Total)

Aspects composing SO_t	
SO	Society
LA	Labour
HR	Human Rights
PR	Product Responsilbity

Figure 3. Sustainability profile of each case study. Lines' thickness represents the percentage of the number of indicators used in each case sustainability report, in relation to the number of indicators suggested by the GRI.

while Case 2 tends to emphasize the economic outlook (EC) and social (SO_t). Whereas the social perspective is divided into four dimensions, labor policies (LA), human rights (HR), society (SO) and product responsibility (PR), Figure 3 also shows a distinct profile in both cases.

The agribusiness case claims that one of the justifications for the urgency of the concern with sustainability is the need to reduce the downside risk of the company. The approach is also demonstrated in the risk indicators HR6 and HR7. On the other hand, the case studied in the technology industry is more focused on product, evidenced by indicators PR1, PR3 and PR5 (see Chart 4). In general, both cases have difficulty in setting appropriate indicators with the ability to reasonably represent the business' reality. Moreover, there is the challenge of data collection scattered across several business areas and in various projects to obtain the consolidated value to the organization as a whole. The process of data collection is not yet well defined and data are not always organized and stored in the proper form.

There is the expectation that the appropriate indicators and processes to evaluate the performance of such indicators are refined with increasingly internal experience incorporated to external knowledge.

5 Conclusions, limitations and future studies

Based on the literature and two case studies, this article seeks to evaluate aspects related to corporate sustainability performance applied in the Brazilian context. More specifically, the research seeks to analyze the unfolding of socio-environmental initiatives in the corporate business and the adoption of reports on sustainability indicators, highlighting the challenges involved in these issues. Case studies in one company in the agribusiness area and another company in the electrical engineering and electronics sector shed light on important issues. Regarding the first specific objective, it is noteworthy that the studied organizations understand the importance of incorporating issues related to sustainable development into the business as a way to add value to their corporate image and to ensure long-term survival. In this sense, these companies, whose respective areas of sustainability have less than two years of experience, are still learning to cope with the challenges of sustainable development, seeking knowledge within and outside their borders. To implement sustainable development in the business environment is a complex task, because it requires an intensive commitment of multidisciplinary teams to understand the interrelationships between the pillars of sustainability (e.g. economic, environmental and social pillars). Therefore, the area of sustainability is responsible for integrating the departments and promoting corporate knowledge in sustainability, and not for conducting technical decisions on issues concerning sustainable development at the operational level, as observed in both cases studied.

About the second specific objective, evidence was identified that both cases use the GRI indicators as basis for their reports, despite the difference of sectors. This difference, however, directly influences the emphasis of sustainability reports. Moreover, evidence collected in the field shows that companies are still in the process of defining appropriate indicators. The challenge is not restricted to the definition of indicators, but it also extends to data collection process. It is worth noting the importance of defining measurement mechanisms and data collection, as central to the alignment of corporate sustainability with the corporate strategy in order to promote performance considering the economic, environmental and social aspects.

The study is limited to the discussion of two cases, which makes it difficult to generalize the results to any company or industry. Future work with the participation of a larger number of cases for discussion of sustainability indicators have strong potential to add positively to it. Another interesting discussion is the development of studies to better understand the interrelationship between the indicators, as the social and environmental effects of a company are interdependent and very complex phenomena.

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