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A Holistic Perspective on Corporate Sustainability Drivers

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ABSTRACT
Since company boards are increasingly discussing 'sustainability', it becomes necessary to examine the nature of sustainability drivers. Most approaches to corporate sustainability drivers have focused either on internal or external drivers. This paper is aimed at providing a more holistic perspective on the different corporate sustainability drivers in order to better catalyse change from the unsustainable *status quo* to a more sustainable-oriented state. Empirical data was collected from experts and company leaders. The findings show that, *internally*, leadership and the business case are the most important drivers, whilst the most important *external* drivers are reputation, customer demands and expectations, and regulation and legislation. The paper proposes a corporate sustainability driver model, which considers both internal and external drivers, and complements these with drivers that connect them. This offers a holistic perspective on how companies can be more proactive in their journey to becoming more sustainability orientated. Copyright © 2013 John Wiley & Sons, Ltd and ERP Environment

Keywords: corporate sustainability; change management; drivers; leadership; leverage

Introduction

THE LAST TWO DECADES HAVE SEEN THE EXPANSION OF CORPORATE ECONOMIC AND POLITICAL POWER, MAINLY determined by privatisation, deregulation, and liberalisation, which has reduced trade barriers and facilitated globalisation (Korten, 2001; NGLS, UNRISD., 2002; Amoroso, 2003; Dunphy et al., 2003). These changes have, in many cases, been detrimental to the environment and societal welfare (WCED, 1987; Reid, 1995; Carley & Christie, 2000; Dunphy et al., 2003).

In recent years, corporations, especially large ones, have become a key focus of attention in the sustainability debate (Cannon, 1994; Hart, 2000; Elkington, 2002; 2005; Babiak & Trendafilova, 2011), since they are perceived to be responsible for many negative impacts on the environment and on societies (Dunphy et al., 2003; Kupers, 2011). Interest in sustainability from the corporate sector is evidenced by over 7700 companies in 130 countries (UNGC, 2010) having signed the UN Global Compact (UNGC, 2008), with discussions under headings such as Corporate Responsibility, Corporate Social Responsibility (CSR), Corporate Citizenship, Business Ethics, Stakeholder Relations Management, Corporate Environmental Management, Business and Society (Hopkins, 2002; Langer & Schön, 2003), and Corporate Sustainability (Dyllick & Hockerts, 2002; Weymes, 2004).

Corporations and their leaders are becoming more aware of the relationships and inter-dependences of economic, environmental, and social aspects (CEC, 2001; Elkington, 2002), and the short-, long- and longer-term effects of their operations (Lozano, 2008b), i.e. the four dimensions of sustainability (economic, environmental,

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social, and time) and their interactions. Embedding sustainability principles into a company's system represents significant challenges; however, especially due to their complexity and the multi-dimensional issues (Langer & Schön, 2003). Also, many of their approaches are based on techno-centric solutions and managerial ploys, which tend to neglect issues such as the company's culture, the supply chain, and the interactions between the company system's elements and the four dimensions of sustainability (Lozano, 2012b).

Recently, the term corporate sustainability (CS) has emerged as a concept considered a precondition for doing business, as a 'business case' (Dyllick & Hockerts, 2002; Baumgartner, 2009; Linnenluecke & Griffiths, 2012), and the desirable path for organisations (Dunphy et al., 2003; Weymes, 2004).

An analogy to the sustainable development (SD) concept posits CS as: "...meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities, etc.), without compromising its ability to meet the needs of future stakeholders as well' (Dyllick & Hockerts, 2002). This definition, as with Brundtland (WCED, 1987), has the advantage of being simple, powerful, and appealing, but the disadvantage of being vague, having little emphasis on consumption, not specifying whether meeting stakeholders' needs is to be based on competition, whether the needs of tomorrow would be different from those of today and, most importantly, making no explicit reference to stakeholder feedback. According to Siebenhuner and Arnold (2007), in order for a company to become more sustainability orientated, it should make changes that include the introduction of resource-efficient technologies, sustainability reporting schemes, and by providing sustainable products, services, and product-service combinations.

This paper is aimed at answering the question: *What have been the drivers for corporate sustainability (CS) within the context of large corporations?* It starts with a brief discussion on corporate sustainability (CS), followed by a discussion on drivers for sustainability (building from Lozano's (2012a) paper on change management for CS), it then analyses the responses from a number of experts and company leader interviews to try to answer the aforementioned question.

Organisational change for Corporate Sustainability

For the purposes of this article, CS[1] should be understood as: 'Corporate activities that proactively seek to contribute to sustainability equilibria, including the economic, environmental, and social dimensions of today, as well as their inter-relations within and throughout the time dimension (i.e. the short-, long-, and longer-term), while addressing the company's systems, i.e. operations and production, management and strategy, organisational systems, procurement and marketing, and assessment and communication; as well as with its stakeholders' (Lozano, 2011).

Organisations, such as corporations, are complex social systems with sets of inter-related units engaged in joint problem-solving to accomplish a goal (Rogers, 1995). They are sub-systems of a larger environmental system (Porter et al., 1975; Stacey, 1993).

The study of systems, or systems thinking, can help to give an understanding of the interdependences, interactions, and the interconnectedness of an organisation, and among organisations; the importance of boundaries between parts of an organisation and between organisations; and the roles of individuals within and across the boundaries (Stacey, 1993). It also helps analysts and researchers to comprehend certain elements of the change process, such as leverage or drivers to change (Maurer, 1996; Senge, 1999), system state, with reference to equilibrium (when the forces acting within and on the system are in balance (Chin, 1969; Ludwig et al., 1997)), and stability or 'steady state', referring to the capability of a system to return to, or remain in, equilibrium after perturbations (Chin, 1969; Ludwig et al., 1997; Senge, 1999; McCann, 2000).

Some authors consider organisations as open systems[2] (Porter et al., 1975; Miller, 1990; Kanter, 1999; Senge, 1999; Luthans, 2002). Others have considered organisations, such as corporations, as stand-alone units or 'islands' (Drury & Farhoomand, 1999), or closed systems[3] (Litvin, 2003). However, they could be better understood as semi-

[1]A caveat is in order. CS should not be confused with the term 'sustainable corporation', which refers to sustaining practices and for corporations that are simply long-lived (Hill & Jones, 2001; Afuah, 2003), or with the term 'viable', but not necessarily the integration of SD principles.
[2]Open systems are those that are open to other systems in respect to exchanging, importing and exporting, resources (e.g. energy, materials, labour, money, and information) (Chin, 1969; Daly, 1991).
[3]Closed systems do not exchange any resources with other systems. Resources are subjected to tight materials cycles and immediate feedbacks (Chin, 1969; Daly, 1991).

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open (or semi-closed) systems, where there are resources that enter (e.g. employees when they arrive to work, raw materials, and energy); resources that exit (e.g. emissions and effluents, waste energy, products and by-products, employees when their work is finished); and resources that stay in the system (e.g. patents, organisation secrets, intellectual property, and organisational routines and behaviours).

In the corporate context, the study and management of change is most relevant. Organisational change aims to move from the current state to one more desirable (Ragsdell, 2000), ranging from minor to radical changes (Dawson, 1994). Change represents an opportunity; it must be anticipated, prepared for, and managed (European Commission, 1998). Failure to change and respond to new opportunities, processes, or technologies can result in economic losses, thereby making economic benefits a primary justification for change in organisations (Cannon, 1994). Companies that refuse to change, even with a meaningful core ideology, run the risk of being side-lined by external events (Collins & Porras, 2002), for example, changes in government regulations, technologies, products, workforce, and competition.

Although a number of CS voluntary initiatives have appeared (Robert et al., 2002; Lozano, 2012b), they have been limited in capturing the full spectrum of sustainability and its implications of and for corporations (Oskarsson & von Malmborg, 2005; Baumgartner, 2009; Linnenluecke & Griffiths, 2012), for example, through pollution prevention and cost savings projects (Salzmann et al., 2005), or helping sustainability to be fully transferred to the reality of business processes (Baumgartner & Zielowski, 2007).

Companies that have engaged in sustainability have done so mainly through upper management level initiatives (Siebenhuner & Arnold, 2007), but companies have been, generally, treated as 'black boxes', thus not accounting for subcultures and intra-organisational differences (Baumgartner, 2009; Linnenluecke et al., 2009; Kupers, 2011), or failing to engage with their organisational systems (Lozano, 2008a; 2012b).

Some authors (see Baumgartner & Zielowski, 2007; DeSimone & Popoff, 2000; Baumgartner, 2009; Linnenluecke et al., 2009) indicate that CS should not only be about changes in raw materials, processes, and products, but also about changing corporate culture and attitudes, applying know-how, and overcoming non-technical barriers, i.e. organisational changes. Thus, organisational changes for sustainability need to go beyond changes in technology or management systems; they require changes in culture (Cannon, 1994; Doppelt, 2003; Baumgartner, 2009; Linnenluecke et al., 2009; Linnenluecke & Griffiths, 2010). Cultural change programmes require 'changing the hearts, minds, and souls' of the organisation's members, which takes a long time and requires some luck (Gill, 2003), and skill. Long-lasting CS change requires a holistic perspective on change management (Baumgartner, 2009; Linnenluecke et al., 2009; Lozano, 2011), including 'soft issues' such as mental models, the organisational structure, operations (Diesendorf, 2000), management (Doppelt, 2003), and proposals on how to achieve these changes (Hodge et al., 1999; Robert et al., 2002).

'Soft issues' can be addressed by organisational changes towards sustainability, and thus help companies move from an unsustainable *status quo* (SQ) to a new level or equilibrium, a more sustainability orientated state (MSOS), or Lewin's (1947) new 'level'. This process has to address individuals, groups, and the company (as an organisation), as well as their respective attitudes (informational, emotional, and behavioural). Drivers, such as leadership (Holliday et al., 2002; Szekely & Knirsch, 2005; Ditlev-Simonen & Atle, 2011), can help break from current unsustainable attitudes, whilst the institutional framework can help to maintain stability during the changes, and thus facilitate CS institutionalisation. During these changes, the system would pass through a transitional period, where the different balances of force adjust to each other, to reach the MSOS. Once all the forces are rebalanced, and the new structure and goals are set, the MSOS starts becoming the *status quo novo* SQN (different from the *status quo ante*). Because of the dynamism of sustainability, the process has to start again after stabilisation. This process is shown in the Orchestrating Change for Corporate Sustainability model in Figure 1.

This paper focuses on the 'leverage' part of the model (left part of the figure), while resistance to change and how to overcome it is addressed by Lozano (2012a). It should be noted that if the system is unstable (whether inherently or momentarily) the changes will upset it and the transition period will become perennial and the SQN would not be reached.

Thus, it can be argued that achieving CS is a journey requiring continuous adjustment and improvement to internal activities, structures, and management, and to how companies engage and empower stakeholders (including the environment) to contribute to sustainable societies more effectively (Lozano, 2012a).

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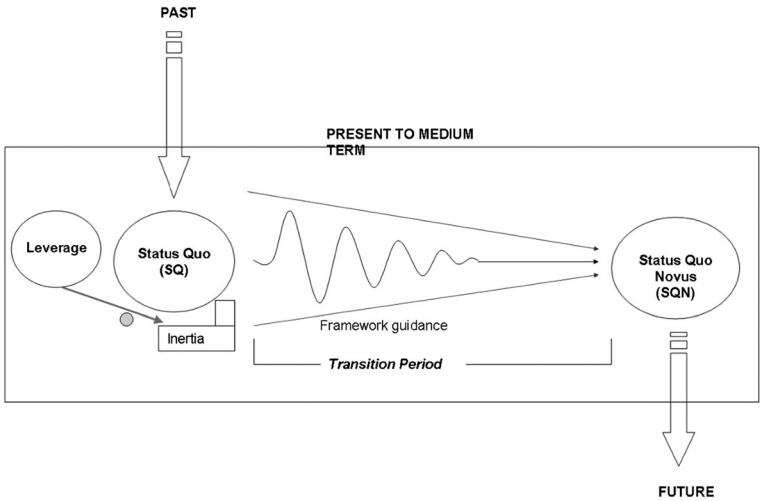

Figure 1. Organisational changes, moving from the Status Quo (SQ) to the Status quo novus (SQN). Source: (Lozano, 2012a)

Drivers as Leverage for Corporate Sustainability Change

The CS concept has been driven, mainly, by large corporations, with some complementary efforts by SMEs and co-operatives (Farmer & Hogue, 1973; CEC, 2001; 2002). CS is being driven by many factors (Hopkins, 2002; Oskarsson & von Malmborg, 2005; Salzmann et al., 2005). Different drivers act as change leverage for CS. These are usually divided into: (1) External, which according to DeSimone and Popoff (2000) tend to result in reactive measures, being less likely to help move towards sustainability, and (2) Internal, which are more proactive.

External, or extra-mural, drivers, such as national policies, have played an important role in driving CS. For example, the French government requiring all corporations listed on the French Stock Exchange to report on CS issues (MacLeod & Lewis, 2004). In Japan, CS is driven by social action under administrative guidance (*gyosei-shido*), imperatives in Japanese society, business leadership, government, and universities (Fukukawa & Moon, 2004). Other external drivers include NGOs and stakeholder pressure (Zadek, 1999; Frehs, 2003; Fernández et al., 2006). From this perspective, the company is seen as a 'black box', i.e. the internal elements and processes are not fully explained or understood (Jensen & Meckling, 1976).

One of the internal, or intra-mural, drivers in large corporations has been ethical leadership, which is recognised to be one of the key elements for the successful introduction, implementation and institutionalisation of change (Dawson, 1994; Kotter, 1996; DeSimone & Popoff, 2000; Doppelt, 2003; Gill, 2003). However, an organisation cannot change, or even flourish (Fullan, 2002) based only on the efforts of the leadership (Kotter, 1996). Other internal drivers include: risk management and protection of business reputation (Lantos, 2001; Ditlev-Simonen & Atle, 2011), improvements in economic values (Carroll, 1999; CEC, 2001; Lantos, 2001), and enhancements in corporate image (Frehs, 2003).

Some of the most characteristic motivations for corporations to engage in CS are presented in Table 1. They are divided into (following the aforementioned categorisation): internal motivations (dealing with processes inside the corporation); and external motivations (relations with external stakeholders). Figure 2 is designed to pull together and illustrate a range of external and internal drivers extracted from different literature sources. As can be observed, there are approximately the same numbers of internal and external drivers. Some drivers are mentioned by more than one author. Internal drivers: ethics (4 authors); resources and cost savings, profits and growth, and employees' shared values (3 authors); and leadership, and quality (2 authors). External drivers: corporate brand and reputation (5 authors); market expectations, national government, reduction of regulatory pressures, and generate/restore trust (3 authors); access to markets and customers, 'licence to operate', competitors benchmarking, and customer satisfaction (2 authors).

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Internal motivations	*External motivations*
• Attract and retain employees	• Avoid fines and penalties
• Help improve trust within the company, *i.e.* stronger employee motivation and commitment	• Help improve trust outside the company, *i.e.* with business partners, suppliers, consumers, and others
• Have a more compliant workforce	• A belief that corporations must earn their 'licence to operate'
• Increase employee productivity	• Meet and exceed stakeholder expectations
• Help to increase product quality	• Behave ethically
• Help boost innovation and innovative practices	• Improve relations with regulators and ease access to permits
• Help manage risks, intangible assets, and internal processes	• Improve access to markets and customers
• Improve performance and generate more profits and growth	• Improve customer satisfaction
	• Help to restore trust in corporations
• Reduce costs while improving process efficiencies and reducing waste	• Help enhance corporate and brand reputation
	• Reduce or eliminate pressures from NGOs

Table 1. Internal and external motivations to engage in CSR
Sources: (Compiled from C.E.C, 2001; Ditlev-Simonen and Atle, 2011; Frankental, 2001; Frehs, 2003; Fukukawa and Moon, 2004; Laffer, Coors, & Winegarden, 2004; Lantos, 2001

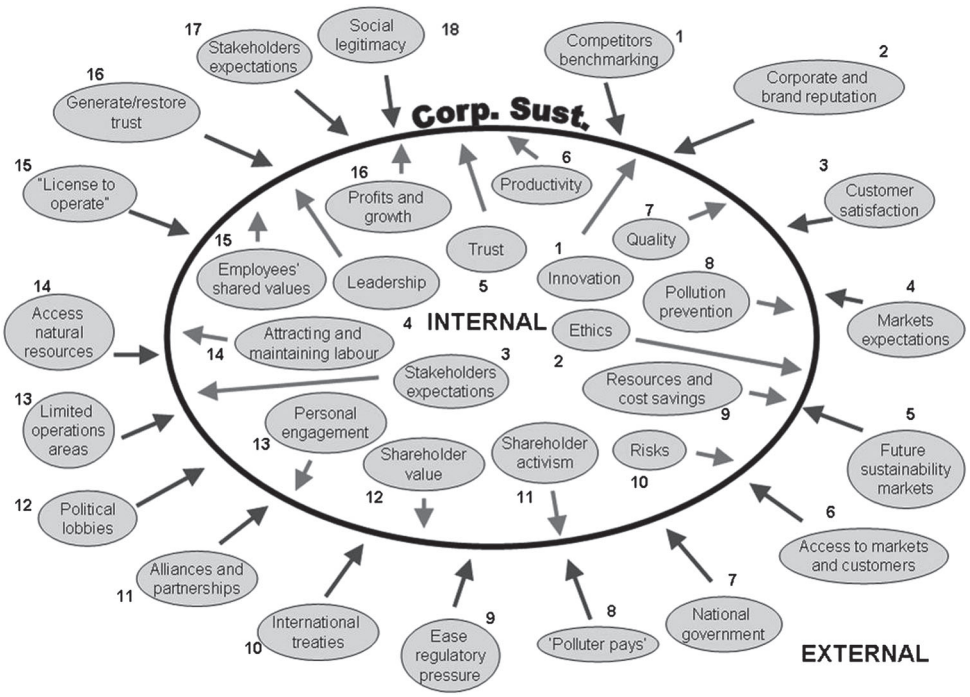

Figure 2. Corporate Sustainability internal and external drivers.
Sources: Internal: 1 (C.E.C., 2002; Frehs, 2003); 2 (C.E.C., 2002; Ditlev-Simonen & Atle, 2011; Frankental, 2001; Frehs, 2003; Lantos, 2001); 3 (Busse, 2004); 4 (Gill, 2003; M. E. Porter & van der Linde, 2000); 5 and 10 (C.E.C., 2002); 6 (Laffer, et al., 2004); 7 (Laffer, et al., 2004; Quazi, 2001); 8 (S. Hart, 2000); 9 (Henriques & Richardson, 2005; Lovins, Lovins, & Hawken, 2000; Quazi, 2001); 11 (Doppelt, 2003); 12 (Weymes, 2004) 13 (Oskarsson & von Malmborg, 2005) ; 14 (Quazi, 2001) ; 15 (Frankental, 2001; Frehs, 2003; Quazi, 2001); 16 (C.E.C., 2001; Frehs, 2003; Laffer, et al., 2004). External: 1 (McIntosh, Leipziger, & Jones, 1998; Quazi, 2001); 2 (Dunphy, et al., 2003; Frehs, 2003; Hopkins, 2002; Oskarsson & von Malmborg, 2005; Quazi, 2001); 3 (Frankental, 2001; Laffer, et al., 2004); 4 (Biscaccianti, 2003; Dunphy, et al., 2003; McIntosh, et al., 1998) 5 and 18 (DeSimone & Popoff, 2000); 6 (Frehs, 2003; Quazi, 2001); 7 (Atkinson, 2000; Dunphy, et al., 2003; McIntosh, et al., 1998); 8 (Cannon, 1994); 9 (Cannon, 1994; Frankental, 2001; Frehs, 2003); 10 and 11 (Dunphy, et al., 2003); 12 (Biscaccianti, 2003); 13 (Cannon, 1994); 14 (Busse, 2004); 15 (C.E.C., 2002; Fukukawa & Moon, 2004) ; 16 (C.E.C., 2001; Frankental, 2001; Frehs, 2003); 17 (Busse, 2004).

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Methodology

To answer the question '*What have been the drivers for corporate sustainability (CS) within the context of large corporations?*' 13 semi-structured interviews were conducted with top-level corporate managers, complemented by three interviews with experts in the field (Table 2). The interviews ranged from 30 to 90 minutes. Most of the interviews were done face-to-face, digitally recorded, and backed up by note taking.

The use of qualitative interviews has the potential to detect issues not covered in the literature (Campbell et al., 2004). Interviewing top executives can provide answers to: how can companies improve sustainability performance; and how can managers identify, manage, and measure the drivers to sustainability? (Epstein & Roy, 2001). As Walker (1997) indicates, leaders in a team, or a company, can be the most reliable source of knowledge.

The responses from interviewees were analysed with the help of Grounded Theory's constant comparative analysis (Glaser & Strauss, 1999), which has four stages:

Name	Position	Company or organisation
Ruben Rodriguez	Human Resources (HR) Director	Grupo IMSA
Eugenio Clariond	President and CEO	Grupo IMSA
Rebecca Andrew	Senior ESH/ Sustainability Advisor	Johnson Controls Inc.
Mark P. Chatelain	Manager, Blue Sky Program	Johnson Controls Inc.
Jeff Werwie	Director Environmental Control	Johnson Controls Inc.
Mario Arrellin	Executive Vice President Finance, Planning & IT	Peñoles
Mario Huerta	Corporate Manager of Environmental Planning and Development	Peñoles
Octavio Alvidrez	Executive Vice President Exploration, Engineering and Construction	Peñoles
Rafael Rebollado	HR director	Peñoles
Dawn Rittenhouse	Director of SD	*DuPont Chemicals*
Mark Wade	Principal consultant leadership director	*Royal Dutch/Shell*
Michael Tost	SD advisor	*Rio Tinto*
Scott Noesen	Director of SD	*Dow Chemicals*
Marcel Engel	Regional Network Director	*World Business Council for Sustainable Development*
Sandra Vijn	Research Coordinator	*Global Reporting Initiative*
Sheila von Rimscha	Senior Associate	*Cambridge Programme for Industry*

Table 2. Details of interviewees
*The opinions of the interviewees are personal and may not represent the opinion of their organisation.

Internal drivers	Number of interviewees who mentioned the driver
Proactive leadership	10
Business case	7
Precautionary principle	4
Company's culture	4
Moral and ethical obligation to the contribute to CS	3
Sustainability reports	3
Avoiding risk	3
Champions	2
Demands from employees about companies CS efforts	2
Economic considerations	1

Table 3. Internal drivers mentioned by the interviewees

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External drivers	Interviewee(s)
Reputation, e.g. corporate or brand reputation	6
Customer demands and expectations	6
Regulation and legislation	5
Society's raising awareness	3
Access to resources	2
Collaboration with external parties	2
Raising awareness in the student population	2
Negative publicity	2
NGOs activism	2
Environmental or social crises	2
National or regional contexts	2
Market opportunities	1
Market positioning	1
Shareholder activism	1
Institutional shareholders	1
Peer-pressure	1
Market demands for non-financial information	1

Table 4. External drivers mentioned by the interviewees

1. Comparing incidents applicable to each category, as developed from the literature review (*a priori* drivers). Those indicated in the literature, and mentioned by the interviewees were highlighted in yellow (Figure 2).
2. Integrating categories and their properties. The individual interviewee responses were classified according to the starting categories.
3. Recognising relationships, which help to develop new categories by juxtaposing data from the categories, or by modifying the categories to provide new insights into how the drivers found empirically can be compared against the literature. In this stage the *a posteriori* drivers that emerged during the interviews were integrated into Figure 2 (highlighted in green in the online version of this paper).
4. Writing the new or modified theory, which can then be used to develop or test hypotheses (Strauss & Corbin, 1998; Glaser & Strauss, 1999).

Walker (1997) presents some of the problems and limitations of interviewing top executives, such as limited resources, geographic perspectives, hierarchical bias, and self-justification. The literature on methodology (Jupp, 2006; Saunders et al., 2007) indicates that there are threats to validity and reliability – the former, refers mainly to whether the conclusions drawn from a particular study can be generalised to other contexts (Jupp, 2006; Saunders et al., 2007). As Walker (1997) posits, some of the problems with data validity can be avoided through triangulation. The interviews with experts for this research were aimed at this. For the latter, this includes subject or participant error, subject or participant bias, observer error, and observer bias (Saunders et al., 2007). For this research the reliability might have been affected by:

- **Subject or participant error:** the limited time available for the interviews, may not have allowed the interviewee to expand upon answers to some of the interview questions;
- **Subject or participant bias:** the interviewees may have provided answers that were prompted by the semi-structured interview, as indicated by Salzmann et al. (2005), or by the attitude of the interviewer. As the subjects were from the top-level of the company, this might have resulted in a bias towards top-down, over bottom-up, approaches with the implication of leadership as the main CS driver;
- **Observer error:** This was lessened by the use of semi-structured interviews conducted only by one interviewer. However, there is the possibility of cultural differences that may have affected the research, especially during the translation and interpretation stages. Additionally, since CS was an important topic for the interviewer, this may have biased some responses; and
- **Observer bias:** The shared concern of this paper's author and the interviewees for CS and SD issues, which might not have been the case if another researcher, or other companies, or other interviewees had been approached.

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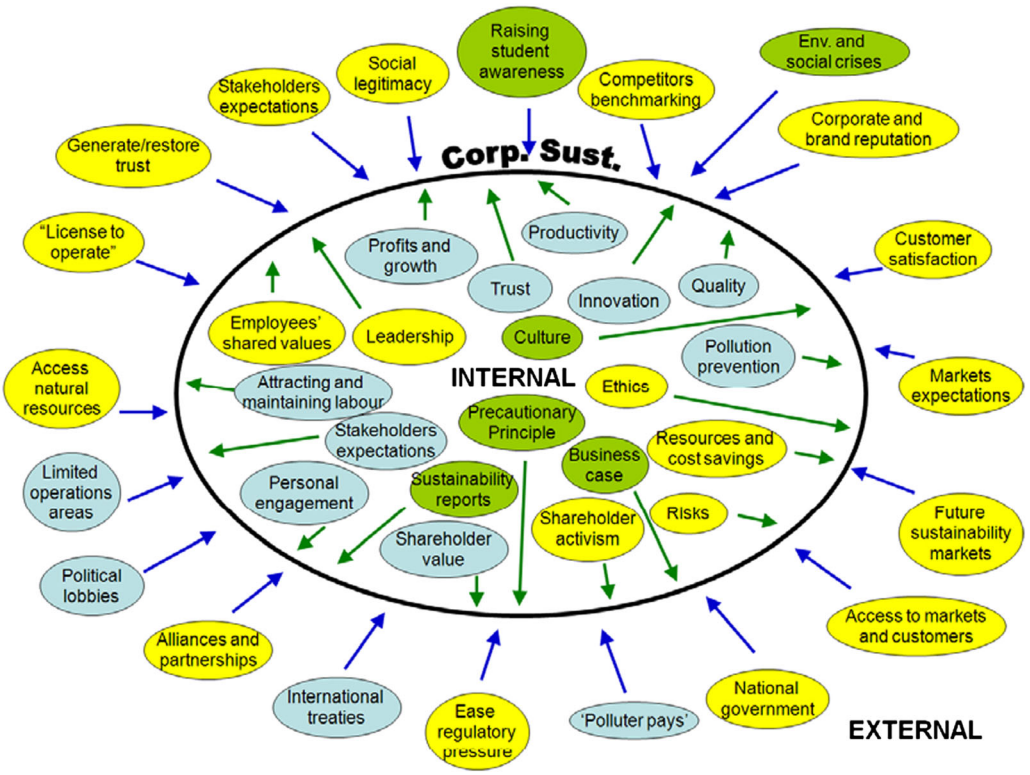

Figure 3. Corporate Sustainability drivers mentioned in the primary data highlighted in yellow, and green

Although access to the companies was a challenge, this was overcome with the help of three in-company gatekeepers (Mark P. Chatelain, Eugenio Clariond, and Mario Huerta), who facilitated contact with the other company interviewees. It should be noted that the context of the research (North America[4] and Western Europe) might limit the findings' generalisation to other regions of the world.

Findings from the Interviews

Table 3 presents the internal drivers mentioned by the interviewees. As can be observed, the majority of the interviewees considered leadership to be the main internal driver, for example Rodriguez indicated that 'an example from leadership is better than just words'. Tost mentioned 'What happened, in the case of Rio Tinto in the late '80s, was Bougainville copper, in Papua New Guinea, where we became involved in a civil war. At that time the chairman said, "Stop, there is an outside world; we have to engage with the outside world. There is an environment; we have to take care of the environment. If we don't do this, we'll go out of business.".' This is followed by the business case; for example, Noesen, with respect to eco-efficiency measures: '[you can] spend 1 billion dollars but save 5 billion in the long term, in spite of rising energy prices'.

The other internal drivers mentioned by interviewees, as presented in Table 3, included: the precautionary principle (Rittenhouse, Chatelain, Engel, Rittenhouse); company culture (Andrew, Chatelain, Clariond, Noesen); an ethical and moral case (Huerta, Noesen, Wade); sustainability reports (Rebollado, Rittenhouse, Vijn); avoiding risk (Tost, Engel, Werwie); employees' point of view, wanting to know what's going on in the company (Chatelain, Rittenhouse), for example, employees who do not want to work for a company that is a major polluter or destroyer of the ozone layer (Rittenhouse); sustainability champions (Huerta, Vijn); and economic considerations (Clariond).

[4]North America is considered under the North America Free Trade Agreement (NAFTA) agreement, including Canada, Mexico, and the USA.

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The interviewees identified 5 out of 16 internal drivers mentioned in the literature review. They complemented these with four others: the business case; company culture; sustainability reports; and the precautionary principle. Of the external drivers, they mentioned 14 out of 18 found in the literature review, and complemented them with another two: raising student awareness, and environmental and social crises.

Table 4 presents the external drivers mentioned by the interviewees, where the most frequently mentioned were: reputation; customer demands and expectations; and regulation and legislation. For example, Rittenhouse indicated 'We were the largest producers of CFCs in the world, and when the toxic release inventory came in the late 1980s, we were also the largest polluter in the US. I think those two things were huge drivers for DuPont, even though we were in compliance with all laws and regulations. What we were doing was clearly not acceptable to the public and we needed to change the way we operated.' Wade mentioned that 'If you damage the environment and anger the natives, then you're going to damage your reputation; that is the negative element of the business case.'

Discussion

The literature review helped propose a model attempting to depict the myriad CS drivers, as depicted in Figure 2, where the drivers are divided into internal and external.

The empirical data findings concur with the literature (Dawson, 1994; Kotter, 1996; DeSimone & Popoff, 2000; Gill, 2003) that leadership is the main CS driver. This emphasis on leadership could be due to the top-level positions of the interviewees. The findings also indicate the importance of reputation as a driver. The other drivers can be divided into:

- **Internal:** Shared values, resources and cost saving, company culture; sustainability reports; customer demands and expectations; moral and ethical obligations to contribute to CS; and champions.
- **External:** National government; raising student awareness; access to resources; environmental crises; regulations and legislation; raising society awareness; and collaboration with external organisations.

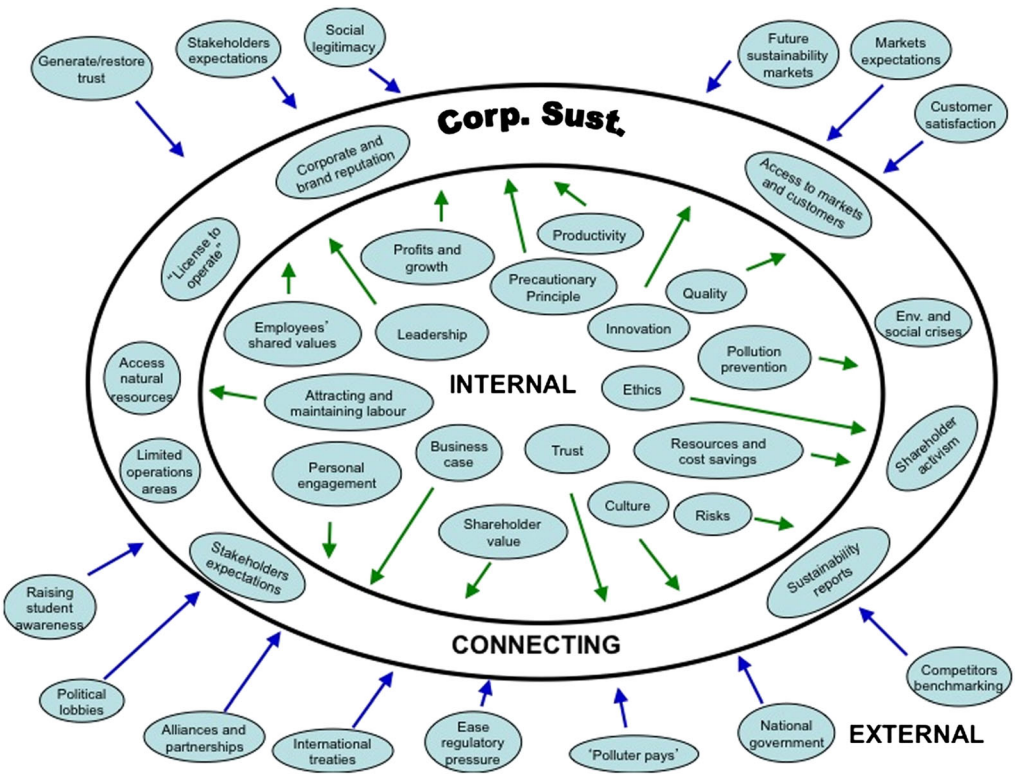

Figure 4. Corporate Sustainability driver model

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Internal drivers	Number of interviewees who mentioned the driver
Proactive leadership	10
Business case	7
Precautionary principle	4
Company's culture	4
Moral and ethical obligation to the contribute to CS	3
Avoiding risk	3
Champions	2
Demands from employees about companies CS efforts	2
Economic considerations	1
Connecting drivers	*Interviewee(s)*
Reputation	6
Sustainability reports	3
Access to resources	2
Environmental or social crises	2
Market opportunities	1
Market positioning	1
External drivers	*Interviewee(s)*
Customer demands and expectations	6
Regulation and legislation	5
Society's raising awareness	3
Collaboration with external parties	2
raising awareness in the student population	2
Negative publicity	2
NGOs activism	2
National or regional contexts	2
Shareholder activism	1
Institutional shareholders	1
Peer-pressure	1
Market demands for non-financial information	1

Table 5. Internal, connecting, and external drivers mentioned by the interviewees

The drivers that complement the literature included:

- **Internal:** The business case, company culture, Sustainability Reports, and the precautionary principle.
- **External:** Raising student awareness, and environmental and social crises.

Most of the external drivers were identified (14 out of 18), but relatively few internal (6 out of 16). However, the interviewees did not mention all of the drivers indicated in the literature. This could indicate that, although there is recognition that corporations need to change from within, external stimuli tend to be more easily identified than internal ones or that there is a reactive mentality, instead of a proactive one. The empirical research also provided new drivers not mentioned in the literature. The drivers are presented in Figure 3, where those that were mentioned in the literature are highlighted in yellow, and those that add to it are highlighted in green in the online version of this paper.

There were four internal drivers that were mentioned by four or more interviewees (leadership, the business case, the precautionary principle, and the company's culture), whilst there were only three external drivers (reputation, customer demands and expectations, and regulation and legislation). However, overall a total of 9 internal drivers were identified, and 14 external drivers. This could imply that internal changes might have more leverage, and yet the company is affected by a large number of external stimuli. This is in line with Fukukawa and Moon (2004).

The sustainability model presented in Figures 2 and 3 implies that there is a limiting barrier that separates the internal and external stimuli for sustainability in companies, which would depict companies as closed systems (Drury

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& Farhoomand, 1999). If corporations are to be considered as semi-open or semi-closed systems, then the empirical data findings must be reformulated to propose a new category of drivers, 'connecting drivers', which can offer a more in-depth understanding of operant CS drivers. This includes corporate brand and reputation, operation areas, access to natural resources, 'licence to operate', access to markets and customers, and environmental and social crises. Adding this category to Figure 2 produces Figure 4, which offers a more integrative and holistic model of CS drivers.

The drivers mentioned as helping CS move forward are presented in Table 5. They are organised according to the number of interviewees who mentioned them, and divided according to the convention set up in Figure 4. Those mentioned most frequently were: proactive leadership, and the business case (in internal drivers); reputation (in connecting drivers); and customer demands, and regulation and legislation (in external drivers).

Conclusions

Corporate sustainability (CS) is gradually being better integrated into company activities and culture. The CS concept (as outlined in this paper) seems to offer the potential to be more encompassing, both in terms of the company system (including operations, strategy, organisational systems, etc.), and in terms of stakeholders (internal and external, as well as social and environmental).

Although a number of authors have been discussing the leverage and drivers for the CS concept, they have, mainly, taken either an external (companies as 'black boxes') or internal perspective (companies as isolated 'islands'). A limited number of authors have considered a holistic perspective of sustainability, where there are interactions between the economic, environmental, and social dimensions in the short and long term, as well as, between internal and external stakeholders.

As discussed in the literature review and found in the empirical research, there are a large number of recognised drivers that affect the complex social organisations that are corporations. This poses a challenge for corporate leaders and champions on how to manage and balance the internal, connecting, and external drivers and stimuli, so that the company can respond quickly to external stimuli, and promote and reward internal drivers.

This paper proposes a CS driver model, which considers internal and external drivers, and complements them with drivers that connect them. This offers a holistic perspective on how companies can be more proactive in their journey to becoming more sustainability orientated.

This research should be followed up with a quantitative study, which could provide more information on the drivers and their importance. This proposed research could also take into consideration different hierarchy levels, different geographical locations, and even, perhaps, external stakeholders. To reduce observer bias, the data could be analysed by several researchers. Another interesting topic for research would be leadership types with respect to the promotion of sustainability changes.

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