COLLABORATIVE GOVERNANCE TOWARDS SUSTAINABILITY
Empirical study comparing organisations’ sustainability practices in New Zealand and in Brazil

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ABSTRACT

The sustainable development debate comprises the economic, environmental, and social challenges of the 21st century. These are unavoidable issues for organisations of all sectors. Private, public, and civil society organisations are pursuing ways to address such challenges individually and through collaborations. This study investigates how organisations in New Zealand and in Brazil address sustainability concerns through collaborative governance efforts with strategic stakeholders. A comparative analysis of the central management practices adopted by organisations in both countries is presented, and the goals, benefits and limitations associated with collaborative initiatives are investigated. Ten organisations are interviewed, five from each country. Thematic analysis is used to analyse the interview data.

The results revealed that organisations in both countries are employing similar management practices that focus on addressing sustainability concerns. Organisations perceive a number of value creation outcomes from sustainability practices. These include brand and reputational gains, improved supply chain management, and risk management attainments. Furthermore, organisations observe higher employee attractiveness and operational synergy gains between departments. In addition, companies observe that collaborative efforts with strategic stakeholders improve their ability to understand other management perspectives, and anticipate market pressures and opportunities. Thus, they can meet market demands and jointly develop innovative solutions toward sustainability goals by exchanging knowledge and enhancing their operational effectiveness. The results also revealed limitations of organisations concerning collaborative efforts. Organisations perceive lack of enough human resources to effectively collect, analyse and implement sustainability projects. Furthermore, there are internal limitations of organisations concerning how their executives and general staff incorporate sustainability issues into their organisations’ strategic planning and operational decisions.

This study identifies implications for management and directions for future research. These are based on how organisations measure sustainability outcomes of management practices and collaborative alliances, and how organisations map upcoming sustainability demands of the market as the sustainable development debate continues to evolve.
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TABLE OF CONTENTS

Abstract ii
Acknowledgements iii
List of Figures vi
List of Tables vi

Chapter One - Introduction 1
  1.1 Sustainable Development in New Zealand and Brazil 8
  1.2 Motivation Of The Study 16
  1.3 Research Purpose, Significance and Questions 18
  1.4 Research Framework 19
  1.5 Structure of the Report 20

Chapter Two - Literature Review 22
  2.1 Introduction 22
  2.2 The Sustainable Development Debate 22
  2.3 Governance and Sustainability Issues 30
    2.3.1 Governance Issues in the Global Economy 33
  2.4 Collaborative Governance 38
    2.4.1 Intersectoral Partnerships 39
    2.4.2 Drivers and Motivators for Collaborative Partnerships 44
    2.4.3 Partnerships Implementation 45
    2.4.4 Learning Process & Developing Good Governance 47
  2.5 Sustainability Issues as Strategic Drivers for Organisations 49
    2.5.1 Business Management Practices and Tools 51
  2.6 Global Economic Paradigms and Sustainable Development 69
  2.7 Conclusion 72

Chapter Three - Research Method And Design 73
  3.1 Introduction 73
  3.2 Overview of the Research Strategy 73
  3.3 Research Design 74
  3.4 Sample Size and Criteria 76
  3.5 Data Collection 78
    3.5.1 Communication with Key Sustainability Executives 80
  3.6 Thematic Analysis 81
    3.6.1 Phases and Processes of Thematic Analysis 82
  3.7 Research Validity And Limitations 84
    3.7.1 Reliability 84
    3.7.2 Ethical Considerations 85
  3.8 Conclusion 86

Chapter Four - Findings and Discussion 87
  4.1 Introduction 87
  4.2 Economic Pillar 90
    4.2.1 Sustainability Initiatives as Strategic Goals 90
    4.2.2 Annual Reports and Sustainability Reporting 96
    4.2.3 Shareholder Pressure Concerning Sustainability Targets 97
    4.2.4 Sustainability Governance 102
    4.2.5 Codes of Conduct 109
4.3 Environmental Pillar
   4.3.1 Sustainability Initiatives and Resource Management / Innovation 110
   4.3.2 Business Process Management (BPM) and Key Performance Indicators (KPIs) 114
   4.3.3 Sustainability and Environmental certifications 119
4.4 Social Pillar
   4.4.1 Pressures from External Stakeholders 122
   4.4.2 Collaborative Partnerships and Stakeholder Engagement 126
   4.4.3 Benefits and Limitations of Collaborative Partnerships and Stakeholder Engagement 133
   4.4.4 Supply Chain Management Strategy and Sustainability Goals 137
   4.4.5 Participation of Employees on Sustainability Initiatives 143
   4.4.6 Change Management towards Sustainability Culture 147
4.5 Research Framework Revisited 153
4.6 Conclusion 155

Chapter Five - Conclusions, Implications, Limitations, and Directions for Future Research 156
  5.1 Implications for Management 162
  5.2 Limitations of The Study 166
  5.3 Directions for Future Research 167

References 170
Appendices 191
  Appendix A - Green Project Massey 191
  Appendix B - Letter of Approval from Human Ethics Committee 197
LIST OF FIGURES

Figure 1.1: New Zealand and Brazil in the World Map 9
Figure 1.2: Research Framework 20
Figure 3.1: New Zealand GDP Growth in 2009 77
Figure 3.2: The Three Pillars of Sustainability 79
Figure 3.3: The Phases and Processes of Thematic Analysis 82
Figure 3.4: The Coding Process 83
Figure 4.1: Sustainability Governance Structure 108
Figure 4.2: Improved Business Process Management 117
Figure 4.3: Pressures from External Stakeholders 123
Figure 4.4: AA1000 Standards 132
Figure 4.5: Supply Chain Management - Value Chain Perspective 141
Figure 4.6: Research Framework Revisited 155

LIST OF TABLES

Table 3.1: Participating Organisations in New Zealand and in Brazil 78
Table 4.1 Codes and Themes 88
Table 4.2: Sustainability initiatives as strategic goals 91
Table 4.3: Shareholder Pressure Concerning Sustainability Targets 98
Table 4.4: Sustainability Governance 103
Table 4.5: Sustainability Initiatives and Resource Management / Innovation 111
Table 4.6: Business Process Management and Key Performance Indicators 114
Table 4.7: Sustainability KPIs 119
Table 4.8: Sustainability / Environmental Certifications 120
Table 4.9: Collaborative Partnerships and Stakeholder Engagement 127
Table 4.10: Benefits and Limitations of Collaborative Partnerships and Stakeholder Engagement 135
Table 4.11: Supply Chain Management Strategy and Sustainability Goals 138
Table 4.12: Participation of Employees on Sustainability Initiatives 144
Table 4.13: Change Management towards Sustainability Culture 148
CHAPTER 1

INTRODUCTION

Background

The sustainable development debate emerged with the environmental movements of the 1960s in response to concerns around resource management (McKenzie, 2004). The first consideration of environmental concerns is often attributed to Rachel Carson’s book *Silent Spring*, published in 1962 (Bekoff & Nystrom, 2004). Since then environmental considerations have been integrated into the economic agenda progressively (Obadan, 2004). Although much of the ongoing debate on sustainable development was originally focused on environmental concerns, in the last decades there has also been the emergence of economic and social issues in the debate. These issues increasingly received equal attention in the global arena. They are evidenced by concerns that have become topical globally, including economic instability cycles, environmental stresses such as climate change, and social imbalances.

According to Elkington (1997), the economic, environmental and social concerns all represent the sustainability triple bottom-line. The triple bottom-line indicates that economic, environmental and social issues are unavoidable and inseparable concerns challenging different sectors of society, such as businesses, governments, and civil society. Organisations from all sectors have been increasingly challenged to revaluate the way they operate and compete, by incorporating sustainability issues into their strategies (Lubin &
Esty, 2010; Siebenhüner & Arnold, 2007). Presently, world leaders and many organisations recognise sustainability as a major challenge that needs to be addressed. As McIntosh (2010) has noted, the challenge of sustainable development has faced the global society, and all the organisations and sectors of society need to jointly address this challenge.

Sustainable development has been defined and interpreted in many ways. While some prefer to use definitions associated with terms such as corporate sustainability, sustainability and sustainable growth, others are comfortable with the idea of sustainable development (Eweje, 2009). Desjardins (2007) asserts that growth signifies ‘getting bigger’, while development connotes ‘getting better’, and not necessarily bigger. However, of the numerous definitions found in literature, the most accredited and commonly accepted definition of sustainable development was developed by the Brundtland Commission. This commission was led by the United Nations World Commission on Environment and Development (WCED) in 1987. The Brundtland Commission (1987) defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p.43). This study has adopted the Brundtland Commission’s classic definition of sustainable development as its working definition in accordance with Desjardins’ perspective on development instead of growth.

Through the 1990s, due to global economic growth and controversial social and environmental issues in the world, the United Nations has organised a number of summits to discuss possible mechanisms to address sustainable development (Eweje, 2009). The Rio 1992 Summit in Brazil, which has received the most critical attention on sustainable development, marked the beginning of the consolidation of sustainable development on the
international policy scene, by bringing public, private and civil society actors together (Eweje, 2006). This allowed different sectors to discuss their own perspectives on sustainable development concerns. A pertinent concern relates to the fact that fast-changing environments, like the current globalised economy, give rise to problems which are beyond the capacity of single organisations to address (Trist, 1983). The Rio 1992 summit is also known as “The Earth Summit Agenda 21” and has precipitated many debates on sustainability around the world. According to Usui (2003), sustainable development involves the “multi-dimensional and multi-level agendas being upheld in the shadow of the Rio 1992 Earth Summit [Agenda 21] and its subsequent globalised follow-up processes” (p. 268). Furthermore, the sustainability debate also encompasses ethical and moral issues related to business management, economic growth, environmental concerns, and social imbalances. Many scholars have focused on studies concerning ethical concerns and sustainability issues (e.g. Desjardins, 2007; Drucker, 1989; Egels-Zandén & Sandberg, 2010; Epstein, 2008; Eweje, 2006; Korten, 2001; Murphy, 2000; Petschow et al, 2005; Senge et al., 2008; and Stiglitz, 1993, 2001).

Sustainability issues require a shift in the way organisations operate, as they need to develop more effective and greener practices to remain competitive in the market (Esty & Winston, 2009). This shift may be through improved sustainability initiatives that integrate innovative strategic guidelines and management practices that focus on improved economic, environmental, and social outcomes (Zadek & MacGillivray, 2007). Innovative management practices include, generally, but not exclusively, collaborative initiatives between organisations, and management models which are related to: (i) supply chain management (SCM) considering the value chain approach; (ii) brand and reputation
management; (iii) business process management (BPM); and (iv) change management. Simultaneously, governance schemes of organisations need to be improved in order to holistically incorporate sustainability concerns into actual management practices between and within organisations.

Currently, organisations from different sectors of society consider it necessary to combine efforts and engage in collaborative initiatives to solve peculiar issues that are directly or indirectly associated with their operations and corporate goals. It could be asserted that in the current economic scenario, the language of market competition has become intertwined with that of co-operation (Zadek, 2005). By cooperating, organisations may jointly map and address sustainability challenges while benefiting operationally from ‘working partnerships’ (Eweje, 2006). Furthermore, organisations benefit from collaborative efforts by understanding (and anticipating) market trends through different perspectives, exchanging strategic knowledge with partnering organisations, and gaining operational synergies that could not be achieved by any of the partnering organisations separately (Glasbergen, 2007).

In order to achieve effective collaboration between different actors, it is crucial that organisation develop consistent collaborative governance platforms. By so doing, they may establish ideal operational environment to operate in a synergetic way with partnering organisations while benefiting from collaborative interfaces and sustainability initiatives. In this direction, the aim of this study is to examine collaborative governance efforts of organisations toward sustainability. For this study, sustainability management practices implemented by organisations in New Zealand and in Brazil are investigated and compared.
Collaborative Governance

The term ‘governance’ refers to a “complex set of structures and processes, both public and private, while more popular writers tend to use it synonymously with government” (Weiss, 2000, p.795). The need for improvements in governance schemes in the global arena is evidenced through the recurring market failures, such as the recent financial crisis that emanated from the United States mortgage crisis in 2007, and the debt crises of Greece and Ireland in 2010. Such market failures have exposed the structural weaknesses of organisational governance frameworks, resulting on cyclic economic instability in the world’s economy (Clarke, 2010; Dodd, 2007).

Governance issues and sustainability concerns instigate different organisations and sectors to identify opportunities to join forces toward common sustainability goals. Collaboration is becoming increasingly essential as organisations grow in both size and influence, and society pressures them to address environmental and social issues (Eweje & Palakshappa, 2008). Moreover, collaborative governance towards sustainability goals incorporates interests and actual efforts from organisations from similar and different sectors (private, public and civil society), in collaborating, sharing benefits, risks and responsibilities (UNGC, 2003). In the present study, collaborative governance is understood as the collaborative interaction between organisations aiming to meet sustainability challenges related to the core operations of an organisation and its strategic stakeholders.

The central idea of collaboration stems from the stakeholder theory which notes that effective management demands the balanced consideration of and attention to the legitimate interests of all the stakeholders of an organisation (Freeman, 1984). Moreover, in order to
attain market competitiveness, organisations from all sectors cannot fail to take into account those who affect or are affected by their operations, which are their internal and external stakeholders (Werhane et al., 2010). In order to consider and balance the interests of its strategic stakeholders, organisations need to improve collaborative interfaces within their departments and with other organisations intrinsically associated to their operations (e.g. suppliers, business partners, public institutions, civil society organisations). Collaborative governance, or more generally action, does not in principle require transformative effects on any one class of partner (Zadek, 2005, p.20), as different organisations and sectors naturally are expected to have their own objectives. However, organisations need to identify opportunities to interact with strategic stakeholders and benefit from such interaction. There are benefits and challenges regarding collaborative governance in the extant literature. Collaboration between organisations might result in competitive advantage gains to organisations, such as: (i) relation-specific assets, (ii) knowledge sharing, (iii) complementary resources and capabilities, and (iv) effective governance (Dyer & Singh, 1998). Partnering organisations might also identify value creation opportunities through organisational learning efforts (Siebenhüner & Arnold, 2007; Wu & Eweje, 2008). Consequently, as Werbach (2009) suggests, organisations can employ innovative guidelines, develop knowledge exchange initiatives, and attain business opportunities through stakeholder engagement and collaborations.

Collaborative interactions also present operational challenges, which are mainly based on conflicting agendas of different organisations (Banerjee, 2000, 2001, 2008). The key challenge toward collaborative governance seems to be based on balancing the interests and goals between different organisations and sectors of society. Organisations need to
understand perspectives and “languages” spoken by different actors. In other words, the idea of collaborative governance should aim at a problem-solving atmosphere as an ongoing process of deliberation and learning between collaborating stakeholders (Carlsson & Berkes, 2005). By so doing, organisations may achieve more operational value while delivering more sustainability value to society at large.

As the sustainable development evolves and the world grows more interconnected globally, the responsibility of organisations and sectors of society increases towards addressing sustainable levels of development. Collaborative governance initiatives, including intersectoral partnerships have been implemented by many organisations worldwide (Senge et al., 2008). However, studies on collaborative governance initiatives have not addressed fully the actual management practices and tools associated with such collaborative interactions between and within organisations. Investigating real management practices related to collaborative governance initiatives, and analysing their benefits and constraints may provide innovative management insights and valuable management practices currently implemented by organisations in New Zealand and Brazil. Such insights would allow organisations to address sustainability concerns through holistically structured strategies. This linkage between innovative management solutions and theoretical frameworks around collaborative governance toward sustainable development might be the next stage for organisations to effectively implement sustainability actions and benefit from them while delivering more value to society.
1.1 SUSTAINABLE DEVELOPMENT IN NEW ZEALAND AND BRAZIL

This section examines issues regarding New Zealand and Brazilian economic, social and environmental aspects, and how sustainability issues are relevant to these countries. New Zealand and Brazil have unique characteristics, such as geographic distance and size (see Figure 1.1). However, comparisons between these two countries in the light of sustainability management and collaborative practices stem from the similarities that both countries share in their sustainable development issues.

Three main aspects relating to both countries are worth mentioning: (i) Agricultural and other natural resources related economic activities such as dairy industry and tourism, are significant for both countries’ prosperity; (ii) the interest of New Zealand and Brazil in developing independent study that is focused on generating valuable insights for each country’s organisations; (iii) New Zealand’s implementation of national sustainability acts (e.g. New Zealand’s Resource Management Act 1991) and ministries (e.g. Ministry of Economic Development; Ministry for the Environment; Ministry of Social Development, and Energy Efficiency and Conservation Authority) that integrate key principles of sustainable development into economic, social and environmental drivers. This attests to the country’s willingness to take sustainability issues seriously in a global leadership position. Similarly, Brazil has established public organisations that focus on addressing sustainable development issues. For instance, public organisations such as Ministry for the Environment (Ministério do Meio Ambiente), IBAMA, and ITESP, have embarked on integrating environmental and social issues in the economic agenda, by considering indigenous populations into sustainability planning. This is a sustainability concern also faced in New Zealand, in light of the Maori population.
New Zealand

New Zealand is a wealthy Pacific nation, which is predominantly populated by European descendents, and the minority Maori. However, there has been a steady increase in Asian and Pacific populations (Statistics New Zealand, 2010). The capital city of the country is Wellington, even though Auckland remains the most populated city and economic hub in the country. New Zealand is also a member country of the Organisation for Economic Co-operation and Development (OECD). Its current gross domestic product (GDP) is in the region of USD 125 Billions (World Bank, 2010).

In 1984, the government embarked on an economic reform programme, which lifted controls on wages, prices and interest rates and removed agricultural subsidies. Since then, New Zealand remains one of the few OECD countries that have low free trade barriers such
as low or inexistent agricultural subsidies (Eweje, 2009a). However, agriculture is a major building block of the country’s economy. The production and processing of agricultural products, including meat, dairy, wool, fruit, vegetables and wine typically generate around 16 percent of the annual gross domestic product and employ around 15 percent of the workforce (Ministry of Foreign Affairs and Trade, 2010).

Manufacturing and tourism are economically important to the country (Reserve Bank of New Zealand, 2009). Concerning agricultural products, 95% of all milk produced in New Zealand is exported, without government subsidies or incentives. Even though around 90% of the New Zealand businesses are based on small and medium enterprises, the dairy company, Fonterra, is a major New Zealand corporation. Fonterra is the main dairy company of New Zealand and one of the most important in the world, which processes 95% of the NZ milk, and trades about 50% of the milk marketed globally (Basset-Mens, Ledgard, & Boyes, 2009).

Along with agricultural products, New Zealand has diversified its export markets and developed strong trade links with Australia and Asian countries. In April 2008, it became the first Western country to sign a free trade deal with China. According to the Zhang (2009), New Zealand has observed a significant growth in the country’s exports to economies in Asia, particularly China, Hong Kong, Malaysia, Singapore, South Korea, and Taiwan. The exports to such Asian economies have increased in the last decades from 8.5 percent in 1989 to 21 percent in 2009.
A significant amount of New Zealand's electricity is generated by hydropower sources and the country has a range of renewable energy sources at its disposal, even though coal generation is still used to generate energy to Auckland area in the North Island. Migration patterns have changed, with most incomers arriving from Asia and Pacific island, rather than from the UK and Australia. Officials estimate that Asians will make up 13% of the population by 2021 from about 9% in 2009 (Statistics New Zealand, 2010).

**Brazil**

The Federative Republic of Brazil is South America's most influential country, and one of the world's biggest democracies (Governo Federal do Brasil, 2010). The Brazilian population is based on three ethnic groups: European descendents, African and indigenous populations (Governo Federal do Brasil, 2010). Today, there are 190 million Brazilians of all races, creeds and cultures, who are part of the fifth biggest world population. Brazil’s current GDP is around USD 1.6 Trillion (World Bank, 2010). Brazil's natural resources, such as iron ore, are highly priced by major manufacturing nations, including China. Moreover, the nation has developed world class off-shore oil technologies and recently discovered major oil reserves in the south-eastern coast (Governo Federal do Brasil, 2010).

Like many South American countries, Brazil has had a history of constant economic instability, with its development dramatically impaired by high inflation and foreign debt. However, economic reforms in the 1990s brought considerable financial stability to the country (World Bank, 2010). Sound economic policies and countercyclical measures helped the country weather the 2009 global financial crisis with relatively minor effect, and
recovered from it in 2010 (World Bank, 2010). Major multinational corporations from different countries operate in Brazilian’s fast growing market. In parallel, major Brazilian corporations are becoming strong international players (e.g. Natura, Banco Itau-Unibanco) implementing management systems focused on sustainability concerns (SustainAbility, 2010). Furthermore, ethanol and other bio-fuel products are increasingly being developed and enhanced toward meeting internal demands and export market opportunities.

Brazil has immense natural resources and a strong industrial development potential. However, there is still a widening gap between the rich and the poor, and social conditions are below ideal. In major cities, such as Sao Paulo and Rio de Janeiro, a third of the population lives in poor conditions (Instituto Brasileiro de Geografia e Estatística [IBGE], 2010). Innovative social programs implemented by the government and a more inclusive growth in recent decade have been gradually decreasing this inequality (World Bank, 2010). Brazilian environmental issues are largely discussed, as the rapid and poorly controlled exploitation of the Amazon forest has become a major worry globally. Aimed at improving the effective control and use of the Amazon forest, the National Bank for Social and Economic Development of Brazil since 1996 started to make its financial support conditional on programmes and projects that respect the legislation concerning the environment, health and safety in the workplace, and the efficient use of energy (Banco Nacional do Desenvolvimento Economico e Social [BNDES], 2010).

**New Zealand & Brazilian Compared**

Taking into account the individual information of each country, a comparison is made of New Zealand and Brazil in this study. The Brazilian territory is around 32 times larger than
New Zealand’s. It is the largest country in South America with 8.5 million square meters (IBGE, 2010). However, both countries have similar gross domestic product (GDP) composition by sector, presenting reasonable economic dependency on the agricultural sector. Brazilian agricultural sector contributes 6.5% of the GDP, while New Zealand agricultural sector contributes about 6.8% (Reserve Bank of New Zealand, 2009). Furthermore, industry and services sectors are the most important in both countries, representing more than 90% of each country’s individual GDP (Central Intelligence Agency [CIA], 2010).

Brazil is densely populated with more than 190 million people, which is almost 47 times larger than the New Zealand population. This report is based on the data available at IBGE (2010), the World Bank (2010), and Statistics New Zealand (2010). Considering the ease of conducting business in these two countries, New Zealand is the second easiest country in the world to do business, while Brazil is the 125th (World Bank, 2009a, 2010a). This is based on many factors such as labour and tax regulations as well as social infrastructures. The main difference between these two countries however, stems from the fact that while New Zealand is considered a developed country, Brazil is regarded as an emerging country, in which economic development has not been matched by the attainment of satisfactory social standards and balance. In other words, there is a wide gap between rich and poor (Viola, 2003). Brazil remains one of the main unequal countries in the world. This implies the need for Brazil to develop much of its social pillar of sustainability, and the unfair distribution of income per capita needs to be addressed. For instance, it has been noted that 1% of the richest sector of the population gets 14% of the national income and 50% of the poorest sector of the population gets 13% of the national income (Viola, 2003). According
to the World Bank, the unemployment rate of the labour force in Brazil is double the New Zealand’s figure of unemployment rate (2010).

A number of institutions (e.g. Yale University & Columbia University, Germanwatch, AccountAbility) have conducted main studies ranking sustainability attainments of countries worldwide as well as sustainability initiatives implemented by each country. The studies have focused on issues relating to climate change, environmental management, responsible competitiveness, etc. According to the AccountAbility’s Report entitled, *The State Of Responsible Competitiveness 2007*, New Zealand ranked the 7th position overall and was classified as an ‘innovator country’. The report describes its definition for the ‘innovators’ labelled countries:

Innovators are [the countries] working to embed responsibility into the core of their domestic economies, stewarded by relatively well enforced statutory regulation, well-designed corporate responsibility strategies, reinforced in most instances by strong NGOs, media watchdogs and consumers demanding responsible new products. Beyond this, knowledge-based innovation provides the leading edge of all of these economies. Sustained innovation in the context of scarce and highly mobile talent requires flexible working conditions, and dynamic, trusted public as well as private institutions. It also demands attention to detail, cascading responsibility into [small and medium sized enterprises] SMEs and overseas investments as well as large domestic firms. For Innovators, responsibility competitiveness is no longer an add-on, but the heart of the economic model (Zadek & MacGillivray, 2007, p.28).
On the other hand, the AccountAbility report labelled Brazil as a ‘complier’ country, and it is ranked at number 56 in the same report. According to Zadek and MacGillivray (2007), “[countries labelled as] compliers focus on demonstrating progress on meeting international quality, labour and environmental standards, and so are building their capacity to capture market share in the global supply chains of more quality-conscious brands and consumers […] domestic civil society is not a significant driver for compliers” (p. 27).

The report entitled *The 2010 Environmental Performance Index (EPI) Summary for Policymakers*, developed by Yale University and Columbia University, presented a series of analysis focused on countries’ environmental performance that impact on sustainable development concerns. The study ranks 163 countries on 25 performance indicators tracked across ten policy categories, covering critical environmental aspects such as environmental public health and ecosystem vitality (EPI, 2010). Such study ranks New Zealand as the 15th best country, while Brazil is the 62nd; presenting arguments that Brazil needs to develop its environmental standards in order to be a more sustainable country.

When examining climate change efforts implemented by countries, the *Climate Change Performance Index 2010* developed by the organisation, Germanwatch, presented a completely different scenario. Even though the report states that “no country is yet on the path to contribute adequately to avoid dangerous climate change” (Burck, Bals, & Rossow, 2009, p. 4), Brazil is in the top ranking position, followed by Sweden and United Kingdom. New Zealand, on the other hand, is ranked number 55 in terms of its efforts towards avoiding climate change, as the carbon emission levels per capita in New Zealand are considered high in such report.
Different reports have presented different analysis approaches to the efforts of countries toward sustainable development goals. The information gathered demonstrates a clear understanding that both countries are building their path towards sustainable development. However, New Zealand is portrayed as an interesting, young, and developed society from which organisations in Brazil could possibly learn from.

1.2 MOTIVATION OF THE STUDY

Fundamental to this present study is the author’s undergraduate studies in business management in Brazil which was completed in 2007. The main inspiration for this master thesis project was the desire to participate in the academic and professional knowledge creation process. After four years of working with major business consulting companies, the opportunity arose to engage in a study with which professional and personal innovative beliefs on management practices could be tested. Furthermore, undertaking this study was crucial because of the aspiration to participate in the academic body of knowledge by presenting practical management insights that will, not only yield higher profits for organisations, but also help to make the world a better place for future generations.

An intrinsic interest arose to analyse whether collaborative efforts within and between different organisations could result in effective sustainability initiatives, and consequently yield valuable results. The author has specifically chosen New Zealand and Brazil as a focal point of study on the basis of comparing and analysing how a developed and an emerging country addressed issues of management practices and sustainability challenges. Moreover, this research project was based on a NZAID postgraduate scholarship program, under the proposition of knowledge exchange between the two countries. Also, comparing
management insights from different countries offer a critical base on which international management rests, even though the economy is growingly globalised (Punnett & Shenkar, 2004).

As previously indicated, sustainable development issues concern the prosperity of the global society. Currently, it is interesting to identify and compare what is being done in both developed and emerging countries in terms of effective management practices and collaborative efforts. Organisations operating in both developed and emerging countries might have varying sustainability approaches, depending on each country’s specific market perspectives. Furthermore, regulations and policies concerning economic, social, and environmental issues in developed and emerging countries may differ. In the light of this, a comparison of organisations from developed and emerging countries may likely offer valuable management insights on how organisations in each country address sustainability concerns.

The author of this study is a management professional involved in business consultancy and resource management improvements. He believes that the basic principles of management practices need to be constantly revised and improved upon. This apart, in addressing sustainable development goals, the onus falls on business professionals to enhance their management effectiveness and collaboration with stakeholders in order to add higher value to society and enhance economic results.

Analysing the “big picture” of the current operational reality of organisations in a developed country and in an emerging country might result in identifying sustainability best practices.
As a consequence, significant management insights for organisations may be achieved. Ultimately, this may motivate organisations to implement individual and collaborative sustainability projects in both countries.

1.3 RESEARCH PURPOSE, SIGNIFICANCE AND QUESTIONS

Unlike previous studies on sustainable development, this study focuses on analysing and comparing real management practices and collaborative governance initiatives employed by organisations that operate in New Zealand as a developed country, and organisations operating in Brazil as an emerging economy. This focus intends to establish whether collaborative governance initiatives can effectively address economic, environmental and social sustainable development challenges, while analysing the management practices that can facilitate sustainability achievements. This research intends to contribute to the current literature available by presenting relevant indications of: (i) real organisational routines related to collaborative governance initiatives in New Zealand and Brazil; and (ii) current management practices and models that support the operationalisation of sustainability initiatives in such countries.

The following research questions guided this study:

1. How do organisations that operate in a developed country, such as New Zealand address sustainability concerns, in comparison with organisations that operate in a developing country such as Brazil?
2. Can the collaborative governance between organisations support economic, environmental, and social sustainable development goals?
1.4 RESEARCH FRAMEWORK

In order to investigate how organisations in New Zealand and Brazil address sustainability concerns, as well as how they engage and collaborate with strategic stakeholders, it is appropriate to examine relevant literature. The research framework (see Figure 1.2) combines knowledge developed by different studies and approaches, such as Desjardins (2007), Epstein (2008), Jabareen (2006), and Porter & Kramer (2006). It shows how the sustainable development debate is associated with governance issues. In addition, it links how strategic guidelines of organisations from the three sectors of society need to incorporate sustainability concerns and related governance issues.

Also relevant in the research framework is how it relates the applicability and adaptability of management practices toward sustainability initiatives. The framework also covers ethical concerns inherent in the ideal sustainable development scenario. Topics and questions aimed at this study are developed. Furthermore, the research framework is used to identify initial codes and themes, which are refined with empirical data gathered through semi-structured interviews with ten participating organisations. Please see Figure 1.2:
Figure 1.2: Research Framework


1.5 STRUCTURE OF THE REPORT

This thesis is presented in six chapters. The introductory chapter presents current sustainable development challenges and opportunities for organisations. It considers how collaborative governance efforts can be a possible path towards generating value to
organisations and addressing sustainable development concerns. It also discusses the motivation of the study, its purpose, significance, and research questions. Chapter two introduces the literature review. It also examines: sustainable development debate; governance and collaborative governance issues in the global economy; management practices towards sustainability goals; and the current scenario of New Zealand and Brazil regarding sustainability issues.

Chapter three presents the research method and design, providing an overview of the research strategy, information about the similarities of New Zealand and Brazil that motivated this study. Furthermore, this study introduces the techniques employed for data collection, and the factors that motivated this study to follow qualitative approach and thematic analysis method.

The results of the semi-structured interviews conducted with relevant organisations in New Zealand and in Brazil are presented in Chapter four. In addition, the main insights provided by the organisations in both countries are analysed, compared, and discussed in relation to the literature review. Chapter five concludes the present study, summarising the main findings achieved in this investigation. Finally, implications for management, limitations of study, and directions for future research are presented.
CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews the extant literature on sustainable development and collaborative governance issues. Different perspectives on the three pillars of sustainability, namely economic, social, and environment are examined. In addition, concerns pertaining to the management practices associated with sustainability goals are also addressed.

There are eight main sections in this chapter. The section 2.2 begins by examining the Sustainable Development Debate. This is followed by section 2.3, which discusses Governance and Sustainability Issues. In section 2.4, Collaborative Governance is considered, followed by section 2.5, which investigates Sustainability Issues as Strategic Drivers for Organisations. Global Economic Paradigms and Sustainable Development are further explored in section 2.6, while section 2.7 presents a summary of the chapter.

2.2 THE SUSTAINABLE DEVELOPMENT DEBATE

This section examines the background of the sustainable development debate, discussing sustainability challenges and opportunities of the 21st century for organisations and society. Sustainable development is a current and broadly debated concept, and its intrinsic concerns are seemingly crucial to the prosperity of a global society.
The concerns around environmental issues and their implications on economy represent the basis of the sustainable development debate, since such concerns relate to economic growth and the environment (Asefa, 2005). Environmental concerns are vital to any society’s development. This point has been well conveyed by Ulhoi et al (1996) who maintain that environmental degradation threatens the possibility of future economic development of society.

The concept of sustainable development is commonly cited as sustainability, and it emerged in the 1960s in response to issues about poor resource management and environmental degradation (Mckenzie, 2004). The first remarkable landmark in the environmental concerns dates back to 1962, when Rachel Carson published a book titled *Silent Spring*. This book became the benchmark pertaining to the major events that launched the modern environmental movements (Bekoff & Nystrom, 2004). Since then, the world’s economy has been significantly impacted, increasingly inter-connecting events in different parts of the globe, and consequently, integrating countries, economies, and local communities.

Over the years, not only did the globalisation process increase the interconnectedness and interdependence among countries, businesses, institutions and communities. Consequently, the sustainable development debate and its environmental considerations were integrated in the economic agenda progressively (Obadan, 2004; Welford, 1995).

Although sustainable development debate is centred on environment concerns, economic and social issues have equally been given attention as they all represent the sustainability triple bottom-line (Elkington, 1997). Due to economic growth, controversial social
inequality, and environmental issues especially in emerging countries, a number of global summits have been organised by the United Nations to discuss possible mechanisms to address these concerns (Eweje, 2009). Such summits attracted global, public, private, and civil society organisations from different parts of the world. The popular summits included the “Montreal Protocol” and the “Brundtland Commission” in 1987. Although there has been subsequent global summits such as the one that took place in Johannesburg South Africa in 2002, and Copenhagen Denmark in 2009, the Brundtland Commission seemed to have been more impacting.

The Brundtland Commission was led by the United Nations World Commission on Environment and Development (WCED). It presented the definition of sustainable development that is most commonly accepted globally. Sustainable development was defined as the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p.43). Furthermore, the Brundtland report related sustainable development with ethics by stating that “human survival and well-being could depend on success in elevating sustainable development to a global ethics” (p. 308).

The Commission played a crucial role in expanding the sustainable development debate globally. However, the most important summit around the sustainability concerns took place in Rio de Janeiro, Brazil, in 1992. The relevance of the Rio 1992 summit to the sustainability debate stemmed from two main reasons: (i) the fact that its main outcome, popularly known as “The Earth Summit Agenda 21” was considered by many as ‘the sustainable development bible’; (ii) that Agenda 21 represented an important step in the
sustainable development debate globally, as it involved the active participation of civil society. Symbolically, it became widely accepted by politicians, NGOs, and business leaders that economic, environmental and social considerations need to be solved together (Keating, 1993).

According to Eweje (2006), the Rio 1992 summit “marked the beginning of the processes that marked the consolidation of sustainable development on the international policy scene and brought non-state actors together as potential players on this agenda” (p.18). Since Agenda 21, social and environmental issues have received more attention across the globe and have attracted more open discussion. On the other hand, as a consequence of mainstreaming environmental concerns, some have upheld the view that Agenda 21 has not positively impacted future debates altogether, as many relevant environmental critiques were dismantled by the summit’s results (Doyle, 1998).

Interpretations of Sustainable Development

Although Agenda 21 claims to have helped solidify the Brundtland’s definition of the term Sustainable development around the world, there are several limitations concerning the complete alignment and understanding of such term among different strata of society. In other words, there is no unanimous understanding of such term. While some (Penny et al., 2001) assert that sustainable development is only a problematic expression that anyone can take and re-invent to suit their needs, others suggest that the term is increasingly used as a label to place over modes of existence that are neither sustainable nor developmental (Luke, 2005).
Beder (1994) explains how different interpretations of sustainable development might limit the broadness of such concept. According to this view, sustainable development is not about giving priority to environmental concerns; it is about incorporating environmental assets into the economic system to ensure the sustainability of the economic system (p.8).

Public institutions and civil society are more likely to understand sustainable development the way it was defined by the Brundtland Commission. The private sector is more comfortably aligned with terms such as ‘Corporate Sustainability’, ‘Sustainability’ and ‘Sustainable Growth’ (Eweje, 2009). Sustainability has been defined as “the ability to ensure economic development is accompanied by progress towards social inclusion and does not take place at the expense of the natural environment” (Benn & Dunphy, 2009, p.277). From Kohn, Gowdy, Hinterberger, & Van der Straaten’s perspective (1999), sustainability can be thought as a process of regulatory decision-making.

In order for sustainable development to effectively take place, Ehrenfeld (1998) sees certain factors such as organisational responsibility as pivotal. He presents his working definition of sustainability as

a possible way of living or being in which individuals, firms, governments, and other institutions act responsibly in taking care of the future as if it belonged to them today, in equitably sharing the ecological resources on which the survival of human and other species depends, and in assuring that all who live today and in the future will be able to satisfy their needs and human aspirations (p. 4).
While maintaining the main idea of Brundtland Commission’s definition of sustainable development, corporate sustainability also incorporates terms that are more commonly seen in the private sector, such as ‘stakeholders’. According to Dyllick and Hockets (2002), corporate sustainability is the process of “meeting the needs of the firm’s direct and indirect stakeholders [such as shareholders, employees, clients, pressure groups, and communities] without compromising its ability to meet the needs of future stakeholders as well” (p. 8). In addition, until the 1980s, business leaders in the private sector used the word ‘sustainability’ to mean the ability of an organisation to increase its earnings steadily (Werbach, 2009). However, the definition of sustainability nowadays seems to present a broader perspective, adapting the main idea of the Brundtland definition into corporate realities.

As of 2001, CEOs of large corporations, such as Chad Holliday of Dupont Corporation, understood sustainable growth - and not sustainable development - as the most appropriate term to express how to actually incorporate sustainable development in the business operational environment. The Chief executive’s word is well cited by Allen, Bonazzi, and Gee (2001) in their book, *Metaphors for Change: Partnerships, Tools and Civic Action for Sustainability*. It states:

As we (Dupont) think about the next century, we believe our central focus must be on ‘sustainable growth’. By this I mean we must create both shareholder and societal value while we reduce our environmental footprint. Sustainable growth is our operational definition of sustainable development. We believe growth is a very necessary element of both successful corporations and successful societies, but that growth in the future must be much different than it has been in the past (p.15).
Another significantly differing view around sustainability is the usage of the term “sustainable development” and sometimes “sustainable growth.” Desjardins (2007) noted that growth itself signifies ‘getting bigger’, while development connotes ‘getting better’, and not necessarily bigger. Economic stagnation is not the way towards society’s prosperity; rather, re-evaluating the usage of these terms may elucidate these perspectives for organisations and assist them in defining their strategic planning targets and guidelines. A central feature underlying this study is Brundtland definition of sustainable development, in relation to the viewpoint that development should replace the idea of growth as the ideal path to economic, social and environmental stability and development.

Although the literature has revealed that sustainable development is not a process that can be attainable in the short term, debates around climate change, social unbalances, and water availability exemplify issues that need to be addressed by society working towards sustainability. A close examination of the debate on sustainable development may impel one to broadly conclude that sustainability cannot be achieved in isolation by individual organisations. In other words, sustainability needs to be addressed by organisations from different sectors of society, as it is concept that stems from the systems level, and not merely organisational (Milne, Tregidga & Walton, 2004).

**Globalisation and Sustainable Development**

Since 1962 when Silent Spring was published up until present, the global economy has changed dramatically in terms of the influx of products, capital, people, and information worldwide. Such intense outflow commonly known as the globalisation process can be understood as a multifaceted process, characterised as a systematic decline in the barriers to
the cross-national flow of products, capital, people, values and ideas (Kaplinsky & Morris, 2001).

In the globalisation process, the equality of opportunities is a driving force to the free market to prosper across the world. According to Stiglitz (2001), globalisation is seen as a solution for the social and economic issues observed everywhere in the world, especially in the developing countries. Although globalisation itself can be considered neither good nor bad (2001), Soros (1998) has pointed out that “the development of a global economy has not been matched by the development of a global society” (p. 102). Similarly, Korten (2001) argues that globalisation has not brought the expected social and economic benefits to all countries in the world. Such assertions can be exemplified by issues intrinsically related to economic and social imbalances seen daily in newspapers and media reports around the globe. This development has generated calls for new ideas and brought pressure on many actors of society to discuss how to attain sustainability goals.

Currently, any occurrence in almost any part of the world may impact the global economy, customer trends, social behaviour, and much more. Every product or service bought or used is related to a broader utilisation of resources from raw material extraction to the final product’s disposal. Thus, every product or service is part of a value chain (Kaplinsky & Morris, 2001). The important fact to be considered when examining supply chain and globalisation issues related to sustainable development is that organisations need to operate globally under sustainability codes. This means that organisations need to be environmentally and socially responsible in any country in which they operate directly or indirectly, through outsourced suppliers. The responsibility of organisations should also
respect the limitations and scope of each organisation’s mission in society. The concerns related to sustainable development in the global value chain are further discussed in the Supply Chain Management / Value Chain Approach section.

DesJardins (2007) cautions that there are considerations to be done about the way corporations understand and execute sustainability initiatives globally, arguing that "if we allow government regulation to establish environmental standards for business, we are still faced with the ability of business to influence government regulation and consumer demand” (p.52). Desjardins’ assertions reinforce the idea that organisations from the three sectors of society need to improve the way they communicate with each other in order to develop collaborative efforts and effective governance mechanisms towards sustainability goals, especially in such a globalised society.

2.3 GOVERNANCE AND SUSTAINABILITY ISSUES

As discussed previously, organisations need to be accountable and effective in order to have their ability to operate in the market legitimated by society (Eweje, 2006). This section presents how a broader understanding of governance issues is relevant in order to establish crucial links between good governance, economic stability and social balance, while managing environmental concerns as well.

Although there is an agreement that institutions are required to solve governance problems, there is no agreement as to what and how best they are to accomplish this. Three possible governance structures are identified by Ostrom (1990) namely, private; government management; and local community management. Along with public governments and
international organisations, a number of institutes globally have developed competences related to implementing good governance mechanisms.

As an organisation focused on improving the effectiveness of the interrelations between public organisations and civil society, the Institute on Governance (IOG) of Canada, describes the core principles of sound good governance: legitimacy and voice; direction; performance; accountability; and fairness (IOG, 2009).

Concerning private property, corporate governance is the type of governance which focuses on effective operational routines and corporate strategy of private organisations. Currently, parallel processes such as globalisation transformations in the ownership structure of firms have increased the perceived need for more effective monitoring mechanisms to improve corporate governance systems (Aguilera & Cuervo-Cazurra, 2004).

With reference to corporate governance in Brazil, the Brazilian institute for Corporate Governance (IBGC) focuses on contributing towards sustainable corporate performance, and encouraging society to demand greater transparency, fairness, and responsibility from organisations (IBGC, 2009). In its majority, those are open capital private companies that operate in Brazil and internationally. According to the IBGC’s code (2009), the main principles of governance are: transparency: This is more than the duty to inform; it is a wish to keep stakeholders informed about developments of their interest that might go beyond law or regulations standards;  
Fairness: By this is meant respect for the rights of all stakeholders; Accountability: This concerns taking full responsibility for all actions performed during one’s term of office; Corporate Responsibility: Its focus is on caring for
the organization’s continuous, long-term social and environmental considerations when defining businesses and operations concerning corporate sustainability.

So far, it could be deduced that the main motivation of corporate governance stems from avoiding corporate scandals that may damage an organisation’s reputation and its right to operate (Day & Arnold, 1998). Poor management effectiveness may lead to controversial situations such as dumping of toxic wastes, sweatshops, corruption, and other issues that compel private organisations to conduct their business within a moral context, which focuses on anticipating and appreciating their effects on communities (Dawson, 2004). Dawson also argues that in scandals related to lack of governance of private organisations, it is the responsibility of society at large to “enact a moral framework for business activities. There is no escape from individual moral responsibility and our part in creating and sustaining social institutions beyond corporations” (p.1).

Public and civil organisations also demand societal attention, considering that not only private organisations can be involved in controversial situations. Along with Dawson (2004), many authors (Desjardins, 2007; Murphy, 2000; Norton, 2007) commonly approach terms such as “moral” and “ethics” in order to emphasise the need for governance improvements in society as a whole, which includes organisations from all the three sectors.

On a broader governance perspective, in terms of the economic and political powers of its members, there is the Organization for Economic Cooperation and Development (OECD). Such organisation is formed by 30 of the main developed countries in the world, and one of its main goals is supporting sustainable economic growth (OECD, 2009). Besides OECD,
other global institutions, such as the World Bank, the United Nations, the World Trade Organisation (WTO), and the International Monetary Fund (IMF) present themselves as institutions whose overall focus is on the global economy growth and stability, thus, employing an image of global governance (Eweje, 2009). According to OECD (2009), corporate governance “is a key factor to the integrity of corporations, financial institutions and markets, and it is central to the health of economies and their stability.” The OECD’s description reiterates that good governance and economic stability are inter-connected.

2.3.1 Governance Issues in the Global Economy

It is an interesting era to focus on the financial market failures, as current events indicate that the recent global financial and debt crises are intrinsically related to structural weaknesses of the market (Dodd, 2007). Such weaknesses are consequences of poor governance frameworks and failed regulations, which are resulting on cyclic economic instability in the world’s globalised economy (Clarke, 2010).

Many of the governance and economic issues currently seem to stem from the voracity of financial markets, where the short term profits are prerogative for the financial viability of private organisations, and the recent financial crises have exposed poor governance frameworks related to such failures. According to Dyllick and Hockerts (2002):

In recent years, driven by the stock market, firms have tended to overemphasise short-term gains by concentrating more on quarterly results than the foundation for long-term success. Such an obsession with short-term profits is contrary to the spirit of sustainability, which requires a balance between long-term and short-term needs, so as
to ensure the ability of the firm to meet the needs of its stakeholders in the future as well as today. However, the existence of an economic discount rate tends to value short-term gains higher than distant costs caused by social or environmental degradation (p.132).

The most current and relevant examples of the financial crises are the Greek debt crisis of 2010 and the global financial crisis. The global financial crisis of 2009 was initiated by the Subprime mortgage which emanated from the United States in 2007. Basically, what happened in the U.S mortgage crisis was that major banks, using relatively little capital of their own, borrowed heavily to buy extremely risky real estate assets (Stiglitz, 2009), resulting on an unsustainable financial bubble. This mortgage crisis has had profound effects around the world, providing new insights into financial interlinkages and risk management issues in the global economy (Brown & Davis, 2008).

The Subprime mortgage crisis appears to relate to the power of financial markets, and the lack of proper governance to monitor risky financial operations. Stiglitz et al. (1993) argues that financial markets “can be thought of as the brain of the entire economic system […] they are the central locus of decision making, so that if they fail, the performance of the entire economic system may be impaired” (p.3).

Considering that society currently lives in an integrated globalised world, the mortgage crisis appears to have affected the entire globe, in spite of it originating from the U.S market. A report of the IMF published in March 2009 reinforces Stiglitz’s arguments. In assessing the global impacts of the Subprime financial crisis, the IMF report made the following remark:
The financial turmoil that erupted in the U.S. subprime mortgage market in 2007 has mutated into a full-blown global financial crisis. Indeed, the extraordinary intensification of the crisis since the collapse of (investment bank) Lehman Brothers in September 2008 has raised the spectre of another Great Depression. After an initial period of resilience, the turmoil has reached the emerging economies. In the final quarter of 2008, many emerging economies experienced major stress in their foreign exchange, stock, and sovereign debt markets (IMF, 2009, p.139).

Seen within the context of the OECD’s definition of governance, and making a parallel between its applicability in the corporate world and the subprime crisis, the IMF’s point of view illustrated that private organisations were not executing their operations prior to the economic stability of the entire system. The 2009 OECD article entitled, “The Corporate Governance Lessons from the Financial Crisis” reinforces the statement above by noting the excessive risk taking operations of the financial corporations and the governance failures related to the Subprime mortgage crisis. According to the article, “the financial crisis can be to an important extent attributed to failures and weaknesses in corporate governance arrangements. When they were put to a test, corporate governance routines did not serve their purpose to safeguard against excessive risk taking in a number of financial services companies” (OECD, 2009).

Although IMF and OECD presented a clear point of view indicating weak governance schemes and regulatory failures, what such global organisations do not seem to openly comment on is that their main role, which was focused on economic stability and growth, was not enough to control the U.S mortgage financial crisis.
More recently, in 2010, there has been a scandal apparently relating to the major investment bank, Goldman Sachs Group Inc. and the Greek government which has had critical consequences to the entire economic system. According to an article published by Bloomberg, the investment bank “…managed $15 billion of bond sales for Greece after arranging a currency swap that allowed the government to hide the extent of its deficit” (Martinuzzi, 2010). Such scandal has impacted many other governance spheres, not only the Greek government and the Goldman Sachs Group Inc., but also the entire European Union (EU) stability. European politicians have questioned whether Goldman Sachs helped Greece to hide its deficit to comply with the EU currency’s membership criteria. Greece is also being accused by fellow euro-region countries of failing to disclose the swaps to EU regulators” (Martinuzzi, 2010). The New York Times added information around such scandal’s previous steps, arguing that:

It had worked before. In 2001, just after Greece was admitted to Europe’s monetary union, Goldman helped the government quietly borrow billions, people familiar with the transaction said […] that deal, hidden from public view because it was treated as a currency trade rather than a loan, helped Athens to meet Europe’s deficit rules while continuing to spend beyond its means (Story et al., 2010).

The governance issues illustrated by such recent examples from Subprime and Greece may indicate that the power and eventual influence of private organisations could have been strong enough to drive government leaders to act not entirely favourable to serving the interests of society. The examples may supply society with the findings that it is needed a more concise governance structure which may facilitate the balance between economic and
social interests towards sustainable development. Structural economic decisions need to be more responsibly planned and employed, and different sectors of society should get involved in such important issues.

In order for the world to effectively achieve economic stability, collaborative efforts may be required which may benefit society as an outcome. The search for a balanced and prosperous society is not a new discussion, and the bases of the western prosperity should be currently revisited. The west prospered in the post-World War II period by rejecting extremist ideologies in favour of democratic pluralism (Korten, 2001). The author states that the west prosperity is centred on “a system of governance based on pragmatic, institutional balance among the forces of government, market, and civil society” (p.94). The words of Korten indicate that the most desired prosperous scenario balances the interests of public, private and civil organisations, in order to avoid economic issues that increase social levels of inequality, government debt, financial imbalances, and so forth.

The viability of the economic system may be reached with the empowerment of society with mechanisms that counter the concentration and abuse of both state and market power and the erosion of natural, social, and moral capital that such abuses commonly exacerbate in society (Korten, 2001). Although Korten does not present an ideal framework, once again, the governance debate incorporates the lack of balance of diverse societal interests. Governance imbalances arise from the lack of alignment of interests between those who formulate the rules and those who are subject to them, such as private and civil organisations (Young, 2002). Thus, many constraints related to governance and sustainable
developments are based on different perspectives among organisations from private, public and civil society.

Governments should understand the needs of organisations in order to facilitate economic development while mapping risky activities and implementing effective regulations focused on avoiding economic instabilities. Such concerns should apply not only to financial institutions, but also to all sectors of society - private, public, and civil organisations. Seen from this perspective, the roles of policy analysts should focus on new institutional arrangements, involving from merely designing policy instruments, to facilitating collaborative interactions as core in the policy making processes (Glasbergen, 2007). Therefore organisations from common or different sectors should join forces to develop collaborative systems towards shared governance efforts, resulting in mutually beneficial gains.

2.4 COLLABORATIVE GOVERNANCE

This section examines types of collaborative governance platforms such as strategic partnerships between organisations, and how such collaborative interfaces might result on sustainability gains to partnering organisations and society. The re-occurrence of market failures, as examined in the previous section, leads to the debate of how long the economic system will demonstrate weak sustainability signs resulting on unstable economic cycles. These cyclical situations deliver low social and environmental value to many economies and communities around the world. Such scenario must be addressed with effective governance mechanisms and collaboration among organisations and different sectors.
Complex societies in fast-changing environments, as the current globalised economy, rise to problems which are beyond the capacity of single organisations to meet (Trist, 1983). In such scenario, collaborative efforts amongst organisations are needed to manage differences, join forces, and benefit from sharing efforts (Gray, 1989). A possible solution towards a more balanced society might be the shared governance approach towards sustainable development, as explored in this study.

Based on the IBGC’s concept of governance presented previously, the idea of collaborative governance is intended to be understood as the collaborative interactions within and between organisations aiming to meet common sustainability challenges intrinsically related to the core operations of an organisation and its strategic stakeholders. In such collaborative system, organisations share benefits, responsibilities, and risks. The next section examines current types of collaborative initiatives, such as partnerships employed by organisations.

2.4.1 Intersectoral Partnerships
The last decades’ demands for sustainable development attitude have stimulated initiatives from public, private and civil society organisations (Cerin & Karlson, 2002). Such demands have made it necessary to understand the macro level failures and map the local governance arrangements that may gather efforts from different actors in order to address the sustainable development issues (Armstrong & Stratford, 2004). This is indicative of the need for collaboration between organisations, and also between different sectors of society. Intersectoral collaborative initiatives seem to be a solution to “jointly address challenges such as economic development, education, health care, poverty alleviation, community capacity building, and environmental sustainability” (Selsky & Parker, 2005, p.850).
According to the United Nations Global Compact (UNGC), “partnerships are commonly defined as voluntary and collaborative relationships between various parties, both State and non-State, in which all participants agree to work together to achieve a common purpose or undertake a specific task and to share risks, responsibilities, resources, competencies and benefits” (UNGC, 2003, p. 4). The partnerships or ‘agreements’ (Warhurst, 2001) between different sectors are commonly known as Cross-Sector Partnerships (Selsky & Parker, 2005), Multi-Party Collaboration (Bouwen & Taillieu, 2004), Collaborative Governance (Huxham, Vangen, Huxham, & Eden, 2000), Strategic Partnerships (Eweje, 2006), Tri-sector Partnerships (Warhurst, 2001) and other appellations. Other authors (Tonn, 1999; Penny, Bonazzi, & Gee, 2001; Epstein, 2008; Hartman, Hofman, & Stafford, 1999; Millar, Choi, & Chen, 2004; Korten, 2001; Petschow, Rosenau, & von Weizsacker, 2005; Reed & Reed, 2009; Senge et al., 2008; Waddell & Brown, 1997) have explored collaborative governance approaches as means to address sustainable development issues.

Such collaborative partnerships appears beneficial to all the parties involved, since different perspectives over present and future issues can be raised. It is about all the participants acting positively towards aligned goals. Partnerships seem to be increasingly used as drivers for private organisation’s business strategies, since much external information from stakeholders are elemental to helping such organisations to create more value through sustainability initiatives (Cook & Barclay, 2002), and such concerns are applicable to public and civil society organisations.

Many scholars also refer to types of stakeholder engagement in discussing the relevance and effectiveness of collaborative partnerships (e.g. Banerjee, 2000, 2001, 2008; Freeman, 1984;
Werhane, Kelley, Hartman, Moberg, 2010; Wu & Eweje, 2008). A stakeholder is “any group or individual who can affect or is affected by the achievement of an organisation’s objectives” (Freeman, 1984, p.46), such as shareholders, employees, government, suppliers, consumers, communities and any other groups or individuals of interest. Freeman is the author of the stakeholder theory, which implies that effective management demands the balanced consideration of and attention to the legitimate interests of all the stakeholders. Many authors (e.g. Marrewijk, 2003; Smith, 2010; Cuppen, Breukers, Hisschemöller, & Bergsma, 2010) also refer to stakeholder engagement as stakeholder dialogue.

The international organisation, ‘AccontAbility’ presents the strategic benefits of stakeholder engagement to organisations and sustainable development goals. It argues that stakeholder engagement “is to drive strategic direction and operational excellence for organisations and to contribute to the kind of sustainable development from which organisations, their stakeholders and wider society can benefit” (2005, p.9). This assertion is followed by three macro benefits of engaging stakeholders presented by AccountAbility: (i) Learning, (ii) innovating, and (iii) performing.

Werhane et al. (2010) has argued that “all organisations including MNEs (multinational enterprises), NGOs (non-governmental organisations), foundations, aid agencies and local governments cannot fail to take into account those who affect or are affected by their choices and actions, their internal and external stakeholders” (p.23). However, while involving stakeholders through empowerment is indeed a noble goal, one wonders how this would affect the economic performance of a firm when the stakeholders it is supposed to ‘empower’ have opposing agendas to industry (Banerjee, 2000, 2001, 2008).
In order to align or sustain tensions between collaborating organisations, Hardy, Lawrence, and Phillips (2006) maintain that improving conversation between organisations is crucial to developing effective collaboration. They further assert that “While the recognition of a connection to a particular issue may be enough to bring organisations together to discuss it, there is no guarantee that these organisations will necessarily identify with their partners in the collaboration or even support a collective route to a solution” (Hardy et al., 2006, p. 104).

On the path of diminishing conflicting perspectives between partnering actors, and improve the effectiveness of stakeholder engagement initiatives and sustainability accountability, the organisation AccountAbility created the AA1000 series. This series comprise standards and guidelines for solid stakeholder engagement, and sustainability accountability. According to Beckett & Jonker (2002) “the notion of accountability clearly relates to the provision of information to stakeholders, information that can be verified to build trust in its value, as the foundation of social, environmental and economic performance” (p.3). AA1000 is a useful tool for organisations of different sizes and at different stages of development in respect of their accountability and sustainability strategies (2002). It aims to secure the quality of information through engagement and regular dialogue with stakeholders, generating strategic information for organisations to address stakeholder demands and anticipate market demands. In other words, it is an accountability tool that helps the improvement of collaborative interfaces between organisations and stakeholders.

The fundamentals of collaboration are central to partnerships (Hartman, Hofman, & Stafford, 1999). According to Gray (1989), collaboration is “a process through which parties who see
different aspects of a problem can constructively explore their differences and search for solutions that go beyond their own limited vision of what is possible” (p.5). The arguments of Gray indicate that seeing issues and challenges through different perspectives may lead organisations to innovative and collaborative solutions.

When it comes to involving civil society in collaborative partnerships with private organisations, Banerjee (2000; 2001; 2008) warns against the real effectiveness of such partnerships, since many goals of civil society and private organisations are controversial. However, businesses seem to be focusing on partnerships with civil society organisations preferably when compared to other sectors of society (United Nations Global Compact [UNGC], 2007)

The literature has indicated many types of partnerships between different sectors, such as private and public organisations; private and civil society organisations, and public and civil society. This study focuses on the collaborative governance between the three sectors of society operating through collaborative partnerships. However, understanding how different types of partnerships (e.g. private-civil organisations) operate may generate insights about how public organisations can also participate and benefit from it.

By comprehending the drivers that instigate different sectors to develop strategic partnerships, it may facilitate an understanding of how different sectors, including civil society can collaborate with each other towards shared goals.
2.4.2 Drivers and Motivators for Collaborative Partnerships

The main drivers that motivate organisations from different sectors to set collaborative initiatives, such as partnerships, are based on macro-economical aspects and market pressures resulting from the globalisation process (e.g. supply chain constraints, resource competition, environmental changes), pressures from international institutions (e.g. UN; OECD), financial conditions of the market, voluntaries codes of conduct, society demands, etc. (Warhurst, 2001). Making the most out of collaborative partnerships rise the gains of collaborative advantage, gaining synergies that could not be achieved by any of the partnering organisations separately (Glasbergen, 2007).

The five forces driving industry (market) competition may indicate the main motives that lead organisations to partnering with different sectors. Such forces are (i) threat of new entrants; (ii) bargaining power of suppliers; (iii) bargaining power of buyers; (iv) threat of substitutive products and services; and (v) rivalry among existing organisations (Porter, 1980). Organisational strategy goals must consider the threats of market forces, which pressure all the sectors of society. Thus, organisations from all the sectors need to search continuously for competitive advantages in order to attract sources of capital and investments.

The main motivations for the different sectors of society to partner with other organisations are very similar when it comes to management perspectives, since all the sectors seek for leaner operations through improved effectiveness and other benefits related to reputation and right to operate (see for example Austin, 2007; Brinkerhoff, 2007; Eweje, 2006; UNGC,
2010; Schenini, 2000; and Warhurst, 2001). How such sustainability concerns are addressed is examined in Section 2.6, where business management tools and practices are discussed.

2.4.3 Partnerships Implementation

Building collaborative initiatives such as partnerships is not an easy process. Warhurst (2001) argues that the partnership between business, government and civil society is “a model or framework for managing coherently and systematically over time project-level partnerships between business, government agencies/intergovernmental organisations and local communities or civil society organisations” (p.59).

Implementing partnerships requires leadership to ensure the integration of different points of view, specific interests, and in the sustainable development arena, constructing partnerships focused on addressing issues that go beyond each party’s individual vision is even more challenging (Gray, 2007). According to the author, generally speaking, there are 4 phases of effective collaborative partnership implementation; (i) Problem Setting; (ii) Direction Setting; (iii) Implementation; and (iv) Institutionalisation.

After setting the 4 phases of implementing partnerships, the relationship between organisations from different sectors may occur or progress in three main stages: (i) the philanthropic stage, (ii) the transactional stage, and the (iii) integrative stage (Austin, 2000). These stages are briefly discussed.

- **The Philanthropic Stage:** This is the most common type of relationship. It involves donations, such as money and products, from private organisations. At this stage, the level
of interaction and engagement are very limited, but it allows external reputational enhancement for the company, and supports financially civil society organisations and public institutions

- **The Transactional Stage:** This stage represents the move from philanthropic to specific projects or activities more organised and planned commonly. The programmes here are more specific programmes than the first stage. It comprehends utilising each partner’s capabilities, and exchanging value in a two-way perspective

- **The Integrative Stage:** At this stage, organisations begin to have deeper strategic interactions which are more complex and demanding. However, the outcomes are generally more beneficial to society and businesses.

In the same vein as Austin’s framework, the management consulting firm Mckinsey (2009) points out that higher levels of integration between organisation from different sectors through collaborative partnerships enables more value creation to both society and business than lower levels of involvement, such as of charity or philanthropy money distribution (Keys, Malnight & van der Graaf, 2009).

**2.4.4 Learning Process & Developing Good Governance**

As new management scenario such as collaborative partnerships is implemented, the organisational learning curve becomes a naturally evolving process for the partnering organisations. Once the collaborative partnership is well established, such process tends to move from more superficial interactions to more detailed knowledge interactions. The more the partnerships progress in levels of interaction and strategically related efforts, the more
value creation and good governance outcomes can be reached, particularly legitimacy to operate (Brinkerhoff, 2007).

On the path of value creation and development, collaborative partnerships need to consider that “accountability drives decisions, which in turn drives performance and outcomes, implying that partnerships governed by clear accountability structures, processes and norms aligned to its mission will have enhanced performance and outcomes” (Zadek & Radovich, 2006, p.17). Individual organisations need to have clear and effective governance structure in order for the relationship with other actors to be most beneficial, and for an organisation to learn from others’ best practices.

The governance enhancement can be understood as a learning process for the organisations involved, in which knowledge is exchanged and utilised towards management improvements, and value creation. On this account, Brinkerhoff (2002) developed a partnership evaluation framework intended to examine partnership’s perceived governance impact and actual governance outcomes, implying how the partnership contributes to governance effectiveness, legitimacy and conflict management between partnering organisations.

Another relevant governance enhancement for organisations lies on being transparent and accountable to its stakeholders, partners and society. This can be achieved through sustainability reporting, as organisations might analyse current issues facing their operations, and present how they are responding to such challenges toward more sustainable practices (McIntosh, 2010). A well documented approach for organisations to measure sustainability
achievements was developed by Elkington (1997), named the sustainability Triple Bottom Line (TPL). According to Chapman and Milne (2004), TPL involves incorporating economic, environmental and social performance indicators into an entity’s management, measurement and reporting processes.

Some believe that sustainability should be interpreted as a unifying and guiding principle of social and social-environmental interaction, and should not be split into different categories of measurement (Kohn et al., 1999). Others such as the New Zealand government include cultural aspects in the sustainability TPL, thus classifying it as the Quadruple Bottom Line (QBL). Similarly, Werbach (2009) asserts that true sustainability has four co-equal components, namely, economic, social, environmental and cultural. He describes them as follows:

- **Economic:** This component focuses on helping people and businesses meet their economic needs;
- **Social:** This addresses conditions that affect society as whole, including poverty, violence, injustice, education, public health, and labour and human rights;
- **Environmental:** This is concerned with protecting (and restoring) the Earth with attitudes and actions aiming to control climate change, preserve natural resources availability, and preventing waste;
- **Cultural:** This centres on protecting and valuing diversity through which communities manifest their identity and cultivate traditions across generations.
2.5 SUSTAINABILITY ISSUES AS STRATEGIC DRIVERS FOR ORGANISATIONS

Sustainable development, as discussed in the previous sections, is desirable and beneficial, yet few are able to identify its practical implications (Ruta & Hamilton, 2007). Sustainability has been identified as a megatrend that forces fundamental and persistent shifts on how organisations compete (Lubin & Esty, 2010). This section examines the management practices that organisations might employ in order to address sustainability goals. These include strategic management concerns toward identifying and meeting new market trends, management waves, and mitigating market forces strategically (Drucker, 1989; Porter, 1980).

The sustainable development debate mounted pressure on businesses and political leadership to change towards a more environmentally and socially responsible world. Environmental concerns that supported the sustainable development debate challenged ‘business as usual’ more than any other social movement in the late 20th century (Doyle, 1998). The sustainability challenges currently being faced by organisations need to be seen as an opportunity to augment in order to attain premium levels of effectiveness and competitiveness. Moreover, many of the greatest opportunities for benefiting businesses and society are not being completely understood and addressed by organisations when considering initiatives related to sustainability and corporate citizenship efforts (Porter & Kramer, 2006). Altogether, organisations from different sectors of society need to be able to understand and seize opportunities derived from sustainability challenges (Eweje, 2009).
Of the world’s 100 largest economic entities, 63 are private corporations, not countries (Werbach, 2009). Taking this into account, it is paramount for businesses to take the lead in engaging sustainability initiatives. More often than not, private sectors possess the know-how, financial and technological resources required in order to lead behaviours and actions towards a sustainable global society. At the World Summit for Sustainable Development (WSSD) in Johannesburg 2002, Kofi Annan, the UN Secretary-General, in his ‘Business Day’ speech remarked that “by mobilising the corporate sector it is possible to make significant progress, since it has the finances, the technology and the management to make all this happen” (WSSD, 2002). As discussed previously, although the private sector appears to have the most efficient solutions and resources, there is need to engage more in collaborative efforts through collaborative governance mechanism, such as partnerships. Engaging in such alignment may boost the attainment of sustainable development.

Organisations can target capabilities built up for competitive advantage to contribute to sustainable development goals in ways that go beyond traditional responsibilities to stakeholders (Warhurst, 2001). A number of management practices and tools are directly and indirectly related to implementing sustainability initiatives. Broadly speaking, any management practice and tool that can deliver improved resource management, lower environmental impacts of an organisation’s operations, and deliver value to its stakeholders will help the organisation towards effective operations. Thus, contributing to sustainable development will be a consequence if such effectiveness is supported by ethical concerns, efforts and attitudes (e.g. Desjardins, 2007).
Alongside improving interfaces and implementing collaborative partnerships, there is need for each organisation to improve its internal management practices in order to develop competitive advantages, lower its operational costs, enhance the possibility of developing reputational gains, and maintain its right to operate in the market.

2.5.1 Business Management Practices and Tools

This section focuses on examining the main management practices related to operationalising sustainability efforts and generating benefits from them. These practices comprise operational and strategic management guidelines, resource management, reputational capital, human capital, innovative solutions, and much more. They are presented in the following order: (i) The Natural Step (TNS) Approach; (ii) Supply Chain Management - Value Chain Approach; (iii) Business Process Management; (iv) Environmental Management Systems; (v) Brand and Reputation Management; and (vi) Change Management.

(i) The Natural Step (TNS) Approach

The Natural Step (TNS) is a not-for-profit organisation dedicated to education, advisory work and research on subjects related to implementing sustainable development initiatives (TNS, 2010). The organisation has developed a sustainability theory internationally which is promoted as the TNS Framework, and is focused on orienting society and organisations in general to operate in adherence with the natural environment limitations (Upham, 2000). The author further summaries the goals of the TNS approach, stating that “industrial societies are mining and releasing matter of a quantity and type that the biosphere cannot fully assimilate, and that this cannot continue indefinitely” (p.1).
The TNS organisation has helped major corporations such as Nike and Rio Tinto Alcan to create and implement innovative and sustainable initiatives through the TNS framework approach and related tools such as Life Cycle Assessment (TNS, 2010). The TNS framework is complemented by a number of tools based on strategic sustainable development frameworks. The two main parts of the TNS framework are briefly presented: (a) the natural step funnel, and (b) the four system conditions:

(a) The Natural Step Funnel: This is a metaphor for the awareness of the overall issues related to the consequences of non-sustainable actions, the decline of the ecosphere’s capacity to support our present demands through many actions that cause losses of productivity of forests, cropland and fisheries (Robert, 2000). In other words, the funnel helps visualising the economic, social and environmental pressures that are growing on society as natural resources and ecosystem services diminish and population and consumption also grows (TNS, 2010).

(b) The four system conditions: The framework emphasises the need for a responsible use of the earth’s capabilities, leading to the idea that in an ideal sustainable society, the limitations of nature cannot sustain systematically increasing in aspects such as: concentrations of substances extracted from the earth's crust; concentrations of substances produced by society; degradation by physical means. In addition, in the search for an ideal society, people are not subject to conditions that systematically undermine their capacity to meet their needs.
Along with the TNS framework approach, the management of the supply chains of products and services is a well documented practice related to sustainability efforts. Supply Chain Management is discussed next under the value chain approach.

(ii) Supply Chain Management (SCM) - Value Chain Approach

Supply chain management is an important field of study concerning sustainability management practices of organisations, and even more important is the value chain of an organisation. According to Kaplinsky and Morris (2001), “the value chain comprehends the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use” (p.8). In other words, the value chain depicts all the activities a company engages in while doing business (Porter & Kramer, 2006), from inputs to outputs and wastes.

When considering the points of intersection of private organisations and communities, virtually every activity in a company’s value chain create either positive or negative social consequences on the communities in which it operates (Porter & Kramer, 2006). In his published report, Sustainability Balancing Opportunity and Risk in the Consumer Products Industry, Deloitte (2007) discusses the inputs and outputs of a value chain. According to him, value chains’ inputs and outputs encompass raw natural resources transformed, used and discharged by operational steps and human consumption.
In a global economy, everything that mankind produces, consumes and disposes of undergoes a series of interrelated processes of a value chain. As such, a vital area of discussion related to sustainability efforts focuses on the supply chain management. Supply chain management aims mainly at the inputs of a value chain, which are the management of supplies and the operational interfaces with suppliers. Currently, shifts of modern business management has resulted in such scenario that individual businesses no longer compete as solely autonomous entities, but rather as supply chains (Lambert & Cooper, 2001). The statement indicates how important the supply chain management is for one organisation’s prosperity. During the last two decades, the focus on optimising operations has moved from a specific step or organisation to the entire supply chain, and organisations now tend to monitor their products from initial processing of raw materials to their delivery to the final customer (Linton, Klassen, & Jayaraman, 2007).

Continuous improvements in the supply chain management effectiveness enable organisations to reduce costs and even improve sales (Ballou, 2004). According to Stock and Lambert (2001), supply chain / logistics savings of US$ 0.02 represent the same profit as US$ 1.00 improvement in sales (in a before-tax margin profit of 2%). Improvement in the supply chain management demands well defined strategic alliances and alignment of information flow and decision making processes (Stock & Lambert, 2001).

Global Supply Chain Concerns
Since many companies have their own production plants and outsourced contractors overseas, ethical issues are related to massive multinational corporations producing and
buying products from developing countries which tend to have weaker environmental and labour regulations when compared to developed countries (Eweje, 2009).

Although there are relevant potential gains to be achieved through an effective and optimised supply chain management process, organisations need to be careful about their overseas operations, avoiding scandals related to their suppliers’ management practices, and consequential impacts, if suppliers are practicing neither sustainable, nor ethical operations. And this idea is central to the shared governance argument that organisations and their suppliers need to operate in complete adherence with each other in order to achieve effective competitiveness while maintaining sustainable operations.

In an attempt to approach a sustainable perspective to supply chain management, a report by SustainAbility, the UN Environment Programme, and the UN Global Compact named “Unchaining Value Innovative approaches to sustainable supply”, argues that companies should redefine the goals of supply chain management from creating more value at less cost for the company, to creating more value for all supply chain participants at a lower cost to constrained global resources (SustainAbility, 2008). Many corporate managers have realized that an effective strategy has to begin with suppliers, considering this the best way to adopt better environmental and social management practices and benefit from these practices (Epstein, 2008). Similarly, Seuring, Sarkis, Müller, and Rao (2008) argue that:

Organizations are now held responsible for the environmental and social performance of their suppliers and partners. These pressures are derived from a number of internal and
external sources, including employees and management, socially aware organizations, communities, governments and nongovernmental organizations (p.1).

According to the 2010 United Nations Global Compact web site, incorporating environmental, social and governance considerations into supply chain management can deliver a range of business benefits, such as: (i) better risk management (anticipating risks and spreading them out across different players); (ii) ‘Informal’ or ‘social’ license operating within communities, legal systems and governments that otherwise might be antagonistic; (iii) Reduced costs and enhanced efficiency and productivity; (iv) Improved working conditions that may reduce turnover and improve quality and reliability; (v) Environmental responsibility which improves efficiency and profitability; (vi) Corporate brand and values, protecting and enhancing customer and consumer confidence and loyalty; (vii) Process and product innovation. Empowered suppliers uncover opportunities for developing sustainable products and services; (viii) Examples from leading companies show that good supply chain management can increase shareholder value (UNGC, 2010).

Although many organisations have a strong appreciation of a global society, they cannot forget to map and manage their overseas contractors and suppliers, since brand and reputation management is also an important issue intrinsically related to supply chain management practices. An organisation’s reputation and brand can be damaged by scandals, as “pressures tend to reverberate throughout the supply chain, but especially to those organizations whose brand names may be closest to the public eye such as many consumer-based multinational organizations” (Seuring et al., 2008). Brand and reputation management
practices are further discussed in this chapter. At this point, it may be necessary to briefly discuss scandals related to supply chain management.

In February 2010, Apple Inc., a major technology corporation was involved in a child labour scandal. In a United Kingdom newspaper, *The Telegraph*, there was an article titled “Apple admits using child labour” written by Malcolm Moore. In this article, Apple Inc., allegedly admitted using child labour at outsourced factories that build its computers, iPods and mobile phones (Moore, 2010). A statement in the article reads:

> Apple has been repeatedly criticised for using factories that abuse workers and where conditions are poor. Last week, it emerged that 62 workers at a factory that manufactures products for Apple and Nokia had been poisoned by n-hexane, a toxic chemical that can cause muscular degeneration and blur eyesight. Apple has not commented on the problems at the plant, which is run by Wintek, in the Chinese city of Suzhou (Moore, 2010).

It was also reported in the article that only 61% of Apple's suppliers were following regulations to prevent injuries in the workplace and a mere 57% had the correct environmental permits to operate. In response to the allegation, Apple Inc. maintained that it had required the factories to "perform immediate inspections of their wastewater discharge systems" and that the company had hired an independent environmental consultant to prevent future violations. However, there still appears to be a continued use of such factories by Apple Inc. Rather than blame their weak management standards, it probably felt easier for Apple Inc., to try and exonerate itself by accusing the suppliers who employed
child labour in the first place. However, it should be clear that the responsibility for monitoring overseas suppliers’ operational practices and certifications is a key issue for corporations that operate globally, especially when using outsourced labour. However, little attention has been given to the fact that Apple publishes reports with managerial information concerning its operational improvements and further needed enhancements.

The example of Apple Inc. may indicate that although highly profitable organisations publish reports related to their governance and sustainability practices, many initiatives must be addressed in order to deliver real sustainable operations, and not just good corporate responsibility and sustainability reports. Such scandals reveal that multinational corporations still have room for caution in terms of direct and indirect overseas operations, through consistent supply chain management initiatives. There is need to anticipate issues that can prejudice the company’s reputation and brand as well as their sustainable development efforts.

Another recent case in relation to controversial supply chain management is that of Nestlé, a private major food company. The organisation was criticised for using non-environmentally friendly suppliers in Indonesia in 2010. A non-governmental organisation (NGO) called Greenpeace created a boycott campaign warning consumers about the ingredients used in Nestlé’s chocolate snacks, such as “kit-ka”. Greenpeace (2010) affirmed that Nestlé used palm oil purchased from suppliers that destroy rainforests in Indonesia to grow their plantations.
The cases of Apple and Nestlé may clearly reveal the importance of properly managing the supply chain in order to avoid negative impacts on the organisations’ reputation, brand, overseas operations, and consequent financial losses at the bottom line. Moreover, all the organisations’ past concerted efforts in establishing a sustainability image to society might be jeopardized through such scandals, diminishing societal trust in the company’s global operations.

Waste Management issues in New Zealand and Brazilian cities

In the value chain approach, it is not only the supply part of the value chain that requires a critical analysis. A brief example of unsustainable management occurs in the waste management of the Sao Paulo City, Brazil. 2009 and 2010 indicators reveal that the city of Sao Paulo recycles only 1% of the entire waste generated in the city, which is one of the biggest metropolitan areas of the world, counting almost 22 million people (Bizzotto, Manso & Zanchetta, 2010). The authors further argue that that in a month, 294 thousands of tons of waste are produced in the city, and less than 32 thousand tons are recycled.

Controversially, a new landfill site used for burying waste will be created in 2011 over one of the few natural reserves in Sao Paulo, in order to manage the huge demand for waste management in the city (Capitelli, 2010). The damage that this impending plan can cause the environment is unimaginable. The need for sustainability and collaborative efforts between civil society, public, and private organisations cannot be over-emphasised, especially when income generating opportunities are seemingly misused. Many business opportunities seem to be eroded as a result of the Brazilian waste management regulations.
which do not appear to encourage the active participation of organisations in the waste management part of their value chain.

On the other hand, New Zealand is preparing its strategic waste management infrastructure and goals, taking into account growth perspectives that will face the country’s ability to process waste effectively. The New Zealand’s Ministry for the Environment (MfE) set waste management targets aiming to minimise the country’s methane and carbon emissions. Moreover, the MfE set targets for local authorities and city councils to ensure waste minimisation procedures based on public health, environmental and economic factors (MfE, 2008). Many cities in New Zealand are already benefiting from waste management solutions aiming to address sustainability concerns. Wellington, Rotorua, and New Plymouth have identified commercial usage for around 55% of their wastes, while Auckland and Christchurch are focusing on energy generation through waste management solutions (Goven & Langer, 2009).

Examples of wasted opportunities can be seen in relation to recycling materials, generating energy with final wastes, and generating carbon credit. Moreover, the consequential water and land pollution resulting from the poor waste management systems may imply either a lack of understanding of the negative impact or a complete oversight. The pollution of water and land may mean that more resources should be employed on general activities related to agriculture production, water cleaning, and public health and sanitation systems.
(iii) Business Process Management (BPM)

Another management practice closely related to sustainability concerns is BPM, as it aims to enhance the efficiency and collaboration between different activities and actors in order to optimise resource usage. A business process is a complete, dynamically coordinated set of activities or logically related tasks and activities that are used to transform inputs into outputs. Such tasks and activities are intended to deliver value to internal and external clients of an organisation (Guha & Kettinger, 1993; Strnadl, 2006). Considering the definition of business process, Business Process Management aims at improving business processes interfaces with internal and external clients, thus achieving the greatest value that can be produced at the lowest possible cost in a sustainable way (Handfield & Nichols, 1998).

Implementing business process management systems is an effective way to diminish operational and management complexity of an organisation. Poor processes may result in confusing staff role definitions and unclear accountabilities (Birkinshaw & Heywood, 2010). Process management maps and presents what is done, step by step, in each business process in an organisation, helping to manage the lifecycle of improvement and optimization, in a way that translates directly to operation (Smith & Fingar, 2003). Such statement illustrates the link between business process management and sustainability, once BPM enables the achievement of maximum value by using the minimum amount of resources. Thus, BPM can be described basically as resource management initiative that targets on the improvement of interconnected activities between different areas of an organisation. It enhances the ability of an organisation to generate an integrated view of the “big picture”,
thus facilitating the decision making process and the operationalisation of leaner operations aligned with sustainability goals.

The fact that interfaces with internal and external clients can be improved through effective business process management also enhances the ability of an organisation to interact with different organisations in collaborative partnerships, for example, while it maintains its internal processes well defined and accountable.

(iv) Environmental Management Systems (EMS)

In adherence with the BPM approach and the intrinsic concern on resource management, Environmental Management Systems (EMS) was designed to facilitate operational management of business processes related to environmental concerns. Leading firms that seek to improve their environmental management, specially manufacturing industries, which are more likely to have business practices that impact the environment, have adopted EMS solutions (Handfield et al., 1997). EMS has a holistic approach on the companies’ business processes in order to ensure that every manufacturing step is accomplished with the minimal environmental impact (Hui, Chan & Pun, 2000). In other words, the purpose of an EMS is to develop, implement and manage corporate environmental activities to achieve waste reduction and compliance (Sayre, 1996).

EMS solutions are important for an organisation to deliver more value by using the least possible amount of resources and performing according to regulations and corporate compliance. However, organisations should have a broader perspective than merely meeting regulations and corporate compliance when considering environmental management.
processes. According to Porter and Van der Linde (1995), companies need to focus continuously on adding value to customers. They assert that “instead of clinging to a perspective based on regulatory compliance, companies need to ask questions such as 'what are we wasting' and 'how could we enhance customer value’” (p. 6). In other words, focusing on green solutions is a matter of being lean in order to increase profits and, at the same time, operating responsibly in the physical environment according market regulations and standards.

Recently many environmental certifications and operational management mechanisms were developed. The International Standards Organisation (ISO) released a number of international standards and systems in various organisational performance areas, such as the 1987 ISO 9000 and the 1996 ISO 14000. Although implementing ISO certifications is an expensive process, “many organisations have claimed to have gained competitive and market advantages from the implementation of these standards and systems” (Zutshi & Sohal, 2003, p.2).

Environmental Management Systems is the heart of the ISO 14001 certification process, and it is integrated with operations management (Melnyk, Sroufe, & Calantone, 2003). The authors identify three main types of EMS systems as follows: (i) an informal system developed internally in the company, which does not require formal certifications; (ii) a formal system that does not meet the standards of the ISO 14000 environmental certification series; and (iii) a formal system that meets the standards of ISO 14001 certification (Melnyk et al., 2003). A study has been further developed by the authors, in which the EMS formal system that meets the ISO 14001 standards was found to be the most complete type of EMS
implementation, playing a pivotal role in improving companies’ overall performance. The EMS ISO 14001 enables companies to anticipate new, future regulatory requirements and ensure that the environmental management system (EMS) implemented is sound, as argued by the business consulting company Bearing Point in its 2008 report entitled “Supply Chain Monitor: How mature is the Green Supply Chain”.

By implementing EMS and BPM solutions, organisations can facilitate the achievement of their sustainability goals, which will potentially result in cost reductions, operational improvements and ultimately contribute to reputational gains and related indicators, such as appreciation and trust from the communities where they operate as well as society in general.

(v) Brand and Reputation Management

Consumers seek products, communications, and marketing campaigns that appeal to their senses, touch their hearts, and stimulate their minds, thus brands are first and foremost providers of experience (Schmitt, 1999). Along with overall corporate reputation, brands represent the most important intangible asset for most organizations (Berthon, Opoku, Pitt, & Nel, 2007).

Although reputation and brand are valuable assets to an organisation, such terms do not have the same meaning. A strong brand helps to communicate that the company and what it offers are relevant and uniquely able to meet customer needs. A solid reputation is desirable because all businesses ultimately depend directly or indirectly on the goodwill of governments and communities in which they operate (Etterson & Knowles, 2008). The authors go further and use examples from Nike Inc., and Wal-Mart Stores Inc. Nike was
criticised for sweatshop labour practices in Asian outsourced factories, and Wal-Mart was criticised for discriminatory employment allegations. Both companies focused on brand, but underestimated the importance that customers and communities place on feeling good about the behaviour of an organisation behind its brand, resulting on damaging boycotts of their products (Ettenson & Knowles, 2008).

A recent example is related to the major oil corporation British Petroleum (BP) in 2010. The organisation was highly criticized by global society and the United States government for its oil spill disaster in the Gulf of Mexico. One oil rig named the Deepwater Horizon exploded, gushing enormous amount of oil into the seas of the Gulf of Mexico and threatening wildlife and livelihoods dependent on tourism and fishing (Allen & Bentley, 2010). Incognisant of the extent of natural disaster, the 2010 BP oil spillage is likely to cost BP $23bn, from which more than $9bn will come from reputational damage as a result of the Deepwater Horizon oil spill (Macalister, 2010). This example illustrates how effective practices and guidelines focused on managing maintenance and operational risks could have portrayed a good sustainability image for BP, and not the opposite.

The Nike, Wal-Mart, and BP examples have shown how strategic to an organisation’s sustainability is its brand and reputation management, and also how an organisation may be positively and negatively impacted by its operational management practices. Sustainable development initiatives may present relevant brand and reputation gains to an organisation and at the same time help to develop operational management improvements, leading to better resource management and improvement. At the bottom line, presenting a number of
effective sustainability initiatives to society may enhance a company’s reputation, and consequently improve its brand value.

Brand and reputation management focuses not only on spreading a positive image of the organisation for external stakeholders and investors. More recently, internal marketing campaigns focus on ‘employer attractiveness’, aiming to retain personnel, and attract employees with superior skills and knowledge, which comprises a primary source of competitive advantage for an organisation (Berthon, Ewing, & Hah, 2005). Human capital practices are intrinsically related to sustainability efforts, and are further discussed in the next section.

**(vi) Change Management**

Organisational culture is one of the main challenges related to implementing innovative ideas and new management systems focused on sustainability initiatives. Many studies have focused on how organisations need to learn to transform their organisational culture and operational realities towards sustainability challenges and opportunities. Tew (2005) refers to such learning process as *strategic transformation toward sustainability*, and others view it as *education for sustainable development* (Hopkins & McKeown, 2002; Doppelt, 2003). The process of *organisational learning* is a natural path for companies to respond to both internal and external changes in order to adapt its operational realities to market trends and competitive forces (Argyris & Schon, 1978). The acquisition and sharing of information is crucial in the organisational learning process (Miller, 1996). In addition, the ability of responding faster than other market players to market trends indicates a sustainable competitive advantage of a company (De Geus, 1988).
As a natural consequence of competitive markets, organisations are constantly searching for improved management practices, so that employees are always open to improvements and innovative changes, through which new processes and practices are implemented. It is not easy for an organisation to move away from its current operational routines to employ a new thinking toward sustainability targets. However, engaging in innovative thinking should be naturally considered necessary by organisations. Education, trainings and encouragement from senior executives are required for employees to absorb the sustainability thinking (Doppelt, 2003). On the other hand, sometimes senior executives might need more exposure in order to understand sustainability issues concern and its future implications for the organisations they work for.

The process of organisational learning is crucial for the successful implementation of sustainability thinking in organisations. As argued by Siebenhüner and Arnold (2007):

Implementing sustainable development in corporations, however, necessitates organisational learning. In light of a wide variation in corporate behaviour in accepting these challenges or not, the question arises of when and why companies pursue processes of learning and change to integrate sustainability, what effects these innovations have, and to what extent, and what factors promote or inhibit learning (p.1).

Innovation comes in adherence with organisational learning and change management initiatives. According to the report, ‘Innovation and commercialization 2010’, which was published by the consulting firm Mckinsey, organisations are globally seeking for innovation and growth, however “only 27 percent (of the surveyed organisations) say their
companies are very or extremely effective at making business leaders formally accountable for innovation” (McKinsey, 2010, p.3).

Organisations as whole entities need to constantly learn to adapt to new market trends, new management tools and new corporate philosophies. Thus, keeping employees integrated toward organisational goals is crucial for the success of the entire organisation. According to Nah, Lau, and Kuan (2001), “a culture with shared values and common aims is conducive to success. Organizations should have a strong corporate identity that is open to change… an emphasis on quality, a strong computing ability, and a strong willingness to accept new technology would aid in implementation efforts” (p5).

Employee engagement towards sustainability initiatives can be facilitated by the fact that sustainability provides a fresh conversation for soliciting employee input. Such inputs may engage employees by unleashing their creativity, surfacing and recognizing leadership talent, and driving innovation in the bottom line (Werbach, 2009). In other words, organisations need to enhance employee engagement and motivation, which affects the organisation’s sustainability attainments (Doppelt, 2003). Effective governance structure is required in order to address employee engagement and the employment of successful organisational enhancements supported by leadership and change management programmes. Collaborative partnerships and the increasing relationship between different organisations also need to be established on effective dialogue. As part of the learning process toward sustainability, organisations should be committed to improving their ability to sustain the dialogue with partnering organisations, as if the conversations break down so, too, does the collaboration (Hardy et al, 2006).
Developing sustainability initiatives may demand business processes improvements, new external organisational interfaces and internal interconnections. These kinds of behavioural changes demand leadership management towards effective and definite results. In order to address such challenges, the literature has shown that change management and structured learning processes may be relevant tools for an organisation’s supported operational innovation and success.

2.6 GLOBAL ECONOMIC PARADIGMS AND SUSTAINABLE DEVELOPMENT

This section discusses the adherence between organisations’ understanding of their private outcomes and their economic, environmental and social impacts in society. As examined in the previous sections of this literature review, many aspects have to be taken into consideration when it comes to sustainable development as a universal objective. Isolated efforts employed by an individual organisation can be beneficial to the organisation and its stakeholders, but the results will be limited in the macro economic scenario. Society as a whole needs to align individual into collective goals in order to maximise efforts towards sustainability achievements.

According to Day and Arnold (1998), it is necessary to link effectively the organisational efforts towards a sustainable world with coherent economic indexes that measure the actual contributions made by different actors in the economy as a whole. The authors argue that "that the concept of sustainable development is ill-defined from the perspective of the individual corporation. No individual company can be sustainable within an economic sustainable economic system" (p.23). In other words, sustainability is a system level concept that cannot be addressed by individual organisations (Milne et al., 2004) operating in old
Following this angle of wider efforts toward effective sustainability attainments, there are two central ideas related to global economic standards and practices which will be discussed in this section: They are: (i) The Gross Domestic Product (GDP) calculation method, and the (ii) Externalisation of operational costs.

(i) *Gross Domestic Product (GDP)*

Sustainable development analysis “differs from the standard economics of growth and development by incorporating natural resources as a form of natural capital, defined as the value of the existing stock of natural resources and the environment in general” (Asefa, 2005, p.1). Taking this into account, the current economic standards and indicators used globally should ruminate not only on the economic perspectives of society, but also its environmental and social issues. However, the most common economic index in the world, the Gross Domestic Product (GDP) also known as Gross National Product (GNP) makes no distinction whatsoever between the desirable and the undesirable, or costs and gain (Cobb et al., 1995).

The GDP is used to measure the prosperity of countries and to monitor how well their economies are performing comparing to other countries, but it fails to take into account environmental debits, like pollution or the depletion of the natural capital stock (Welford, 1998). Korten (2001) illustrates Welford’s arguments, when he states that “the costs of cleaning up the Exxon Valdez oil spill on the Alaska coast…counted as net contribution to economic output” (p.46). In other words, the GDP measurement counts positively how intensely society consumes natural resources in its living routines. More recently, the major oil company, British Petroleum (BP), was involved in one of the most damaging oil spills of
all times as previously discussed in the brand and reputation management section. Such oil spill is claimed to be even bigger and more devastating than Exxon Valdez by many media channels such as ABC News, The Telegraph, and so forth.

(ii) Externalisation of Costs

A relevant discussion among different sectors’ interests is related to the cost management structure adopted globally. The globalised market puts indirect pressures on organisations to be competitive against local and international competitors, so that the lowest cost is desirable in order for an organisation to remain in the market. Thus, organisations externalise costs and benefit from the gains generated from their products and services, and the consequence is environmental and social devastation, especially in emerging countries that generally have lower environmental and labour regulations (Eweje, 2009). Again, the balance between private and public interests needs to be well set. Korten (2001) points out that a market without proper regulations “invariably encourages the externalisation of costs because the resulting public costs become private gains” (p.83).

One may say that developing effective policies to business is a matter for public institutions to address, but it is necessary that each party play its role ethically, respecting social and environmental perspectives. In other words, business does not have an obligation to protect the environment over and above what is the required by law; however, it does have a moral obligation to avoid intervening in the political arena in order to defeat or weaken environmental legislation (Bowie, 1990).
Burres (2005) defines this paradigm as the benefit-cost approach. According to this approach, there are ethical outcomes that “consist in maximizing social utility or welfare, defined to equal the sum of benefits less all costs of all actions” (p.219). According to the author, if private net benefits equal social net benefits, then rational individuals automatically maximize the society welfare (Burres, 2005), and this is what this research intends to explore; how balancing forces may be beneficial for all the parties involved.

2.7 CONCLUSION

This chapter outlined the origins of the sustainable development debate. Also, it intrinsically related subjects that cannot be dissociated from global sustainability concerns, e.g. sound management practices, consistent governance structures, and collaborative governance between different organisations and sectors of society. These subjects analysed in this chapter are based on past and current global challenges that need to be addressed by organisations from all the sectors of society. Collaborative efforts between organisations and sectors of society might result in mutually beneficial outcomes. Organisations can explore these outcomes further by adopting management practices focused on improved sustainability targets.
CHAPTER 3

RESEARCH METHOD AND DESIGN

3.1 INTRODUCTION

This chapter presents the research design, method and techniques used for data gathering and analysis. An overview of the research strategy is presented in section 3.2. This is followed by section 3.3, which analyses the research design. Section 3.4 examines the sample size and criteria, while section 3.5 expounds on the techniques employed for data collection. The thematic analysis method is presented in section 3.6. The research validity and limitations of this project are evaluated in section 3.7. And finally, the concluding part of this chapter is presented in section 3.8.

3.2 OVERVIEW OF THE RESEARCH STRATEGY

In order to map out and analyse collaborative efforts and management practices focused on sustainability initiatives, this study aims to focus on organisations of the private, public and civil society from both countries. The choice to interview organisations from different countries demanded a level of flexibility in the way questions were developed, and how interviews were conducted with participants from different organisations. Such variability of characteristics between organisations and sectors was also considered in the way the interview questions were developed. This approach aimed to provide valuable, valid, and reliable attainments with this study.
This research was based on primary information gathered through face-to-face semi-structured interviews. The three pillars of sustainability, namely: economic, environmental, and social aspects were used as guidelines for developing the main topics discussed in the interviews. Secondary data was also considered for complementary information pertinent to specific subjects discussed during the interviews. Such information was gathered from official reports of individual organisations available on their websites.

### 3.3 RESEARCH DESIGN

One of the most broadly discussed topics related to research design concerns the two main types of research methods. These are the quantitative and qualitative approaches which are well documented and used for data collection and analysis by researchers globally. Considering the comprehensive approach of this study, qualitative method was used, as it naturally allows research questions to be more flexible (Babbi, 2007; Berg, 2007; Denzin & Lincoln, 2003; Gavin, 2008; Marshall & Rossman, 2006). Qualitative approach provided the openness needed for understanding perspectives of different organisations onto the research focus (Kelemen & Rumens, 2008), and also provided the flexibility needed in this study, so that it could be polished by the natural evolution of the research process (Royer & Zalowski, 2001).

In adherence to the flexibility sought with the qualitative approach, semi-structured interviews were used in the present study in order to allow for more openness with interviewees. Semi-structured interviews can be understood as a combination of open-ended and closed questions (Gillham, 2000). This type of qualitative interview is based on a set of topics discussed in depth, and not standardized quantitative questions (Babbi, 2007).
In addition, semi-structured interviews provide the rigour and direction of the questions especially developed for this study, while giving a voice to participants to openly discuss about the interview questions. This type of structure allowed insightful information to emerge during the interviews, which enriched the interviewing process by allowing the interviewees a higher level of freedom to explain their thoughts (Babbi, 2007; Horton et al. 2007). Interviewees were allowed to describe their points of view freely, from “why” and “how” questions, which resulted in perspectives of each participant (Blackmon & Maylor, 2005). Thus, it facilitated the acquisition of valuable insights concerning management practices associated with sustainability practices, and collaborative efforts implemented by the participating organisations.

Considering that sustainable development and collaborative partnerships between organisations cannot be separated from the economic environment context, different aspects and themes were approached in this study. Thematic analysis was the method chosen for this study. It enabled analysing and comparing the data collected from organisations interviewed in both countries, resulting in a thematic descriptive and comparative analysis of their strategic management practices, and collaborative partnerships toward sustainable development targets. Thematic analysis is examined further in this chapter.
3.4 SAMPLE SIZE AND CRITERIA

Among the three sectors of society (public, private and civil society), a total of 10 organisations were chosen from both countries to participate in this study. The interviews were carried out in a four month period, which included a period of 2 months in Brazil (July and August of 2010). Considering the assumption that sustainability practices implemented by organisations operating in New Zealand would potentially be benchmark for organisations in Brazil, the type of organisations selected for interview in New Zealand dictated the same type of organisations aimed at in Brazil as well. Seen from this perspective, the New Zealand 2009 gross domestic product (GDP) was analysed in order to identify the economic sectors that contributed the most to the country’s prosperity in that year.

According to the Reserve Bank of New Zealand (RBNZ), sectors such as Agriculture, Energy & Water, and Financial Services presented positive growth range average of 6.73% in that country (see Figure 3.2). Leading organisations that operate in such market sectors were then targeted to participate in the present research. Other organisations from the public and civil society spheres were also interviewed: A significant city council was chosen to be the public organisation to be interviewed in New Zealand, and a global civil society organisation (NGO) was also invited to participate in the present study. As previously discussed, the organisations interviewed in Brazil followed the same criteria adopted for the interviewed organisations in New Zealand. Organisations in Brazil were chosen according to their leadership position in the Brazilian market.
Moreover, the participating organisations were chosen according to their sustainability initiatives, indicated by information collected from on their websites, and other internet sources. Multinational companies operating in each market were also considered in accordance to the following criteria:

1. Relevance of the organisation in each country’s economic, social, and environmental aspects;

2. Leadership image in the economic sector they operate according to information available on the internet (e.g. newspapers, and academic articles);

3. Sound organisational reports including relevant information concerning the organisation’s involvement with local community;

4. Statements indicating strategic focus on sustainability practices;

5. Evidence of environmental certifications and innovative solutions.
According to the selection criteria presented, the participating organisations from New Zealand and Brazil are listed in Table 3.1:

### Table 3.1: Participating Organisations in New Zealand and Brazil

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>ORGANISATION</th>
<th>SECTOR</th>
<th>MARKET</th>
<th>INTERVIEWEE</th>
<th>DATE (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEW ZEALAND</td>
<td>A1</td>
<td>Private</td>
<td>Financial Services</td>
<td>Sustainability Manager</td>
<td>22nd April</td>
</tr>
<tr>
<td>NEW ZEALAND</td>
<td>B1</td>
<td>Government owned / Commercial</td>
<td>Energy Solutions</td>
<td>Sustainability Manager</td>
<td>15th April</td>
</tr>
<tr>
<td></td>
<td>C1</td>
<td>Private</td>
<td>Agricultural products / Biotechnology</td>
<td>Corporate Communications Manager</td>
<td>28th April</td>
</tr>
<tr>
<td></td>
<td>D1</td>
<td>Public</td>
<td>Public Infrastructure &amp; Planning</td>
<td>Sustainability Manager</td>
<td>29th April</td>
</tr>
<tr>
<td></td>
<td>E1</td>
<td>Civil Society (NGO)</td>
<td>Social / Economic/ Environmental/ Development</td>
<td>Project Manager</td>
<td>26th May</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>A2</td>
<td>Private</td>
<td>Financial Services</td>
<td>Corporate Sustainability Manager</td>
<td>5th July</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>B2</td>
<td>Private</td>
<td>Energy Solutions</td>
<td>Sustainability Manager</td>
<td>15th July</td>
</tr>
<tr>
<td>BRAZIL</td>
<td>C2</td>
<td>Private</td>
<td>Agricultural products / Biotechnology</td>
<td>Sustainability Manager</td>
<td>30th July</td>
</tr>
<tr>
<td></td>
<td>D2</td>
<td>Public</td>
<td>Geographic Occupation Programmes</td>
<td>Director General</td>
<td>9th August</td>
</tr>
<tr>
<td></td>
<td>E2</td>
<td>Civil Society (NGO)</td>
<td>Social / Economic/ Environmental/ Development</td>
<td>Institutional Relations Manager</td>
<td>12th August</td>
</tr>
</tbody>
</table>

### 3.5 DATA COLLECTION

In order to understand the efforts and initiatives employed by organisations, the main questions that guided the interviews were divided into the 3 pillars of sustainability (economic, environmental, and social) as illustrated in Figure 3.2. After dividing topics into the 3 pillars of sustainability, semi-structured questions were developed. As a result, dividing the interview topics into 3 main categories helped to optimise the coding process of
the information collected in the interviews with specific codes. Consequently, this process helped to identify initial themes, as will be discussed in detail in the analysis section.

**Figure 3.2: The Three Pillars of Sustainability**

![Three Pillars of Sustainability Diagram](source: Based on Elkington (1997))

As this study grounded on face-to-face interviews with individuals, it followed the seven stages of interviewing studies (Kvale, 1996) namely: (1) **Thematising**: formulating the purpose of the investigation and describing the concept of the topics to be investigated prior to the interview; (2) **Designing**: planning the design of the study and considering the seven stages before the interview starts; (3) **Interviewing**: conducting the interviews with a reflective approach to the knowledge sought; (4) **Transcribing**: transcription from oral speech recorded from the interview to written text; (5) **Analysing**: deciding the correct methods of analysis for the study considering its nature and the topic investigated; (6) **Verifying**: ascertaining the generalisability, reliability, and validity of the interview
findings; and (7) Reporting: communicating the findings of the study and the methods applied.

3.5.1 Communication with Key Sustainability Executives

Key senior level executives responsible for sustainability management in the participating organisations were individually invited to participate in face-to-face interviews based on the main questions developed for this research. In order to gain access to high level managers, the first step taken was to contact them through official channels, as e-mail and telephone.

The participants were advised that each interview would last approximately one hour, indicating the use of their office as a preferred option, and also making room for flexibility (e.g. Brazilian NGO headquartered in the Amazon was interviewed through the telephone). The use of a small voice recorder for the interviews was actualised based on the acceptance or approval of the interviewees.

As mentioned earlier, secondary data was used when required to complement the information gathered through the interviews. The secondary data utilised was based on official reports downloaded from the websites of the organisations. These include sustainability reports, and annual reports. According to Cooper & Schindler (2001), annual reports from organisations are relevant, and can be seen as primary source, as it represents the official perspective of the organisation.
3.6 THEMATIC ANALYSIS

Thematic analysis was used in the data gathering process, and was based on a descriptive research approach. This form of analysis is a process for encoding qualitative information, which may be a list of themes, indicators, and qualifications that are causally related (Boyatzis, 1998). Moreover, it is also understood as a systematic process of categorisation of texts, and identifying relationships among categories and generation of themes (Berg, 2007).

The main strength of thematic analysis is that it enables the use of a wide variety of information in a systematic manner that increases accuracy in understanding and interpreting observations about situations and organisations (Boyatzis, 1998). This well illustrates the intention of this study. Moreover, thematic analysis facilitated the examination of data from scholars and practitioners from different areas of knowledge approached in this study (Boyatzis, 1998), such as strategic management, governance studies, resource management, supply chain management, and social studies. Thus, this method presented the right adherence to this study philosophy, and facilitated the analysis and comparison between different management perspectives from participating organisations from both New Zealand and Brazil.

Reasonable amount of time was employed on planning and conducting semi-structured interviews, and due to the variety of organisations from different sectors of society, and from two different countries, a considerable amount of information was also gathered. Aiming to maximise the outcomes of such valuable information gathered with the interviews, academic research tools such as NVIVO 7 were assessed for the coding and
theme identification processes. However, all the information was transcribed and then consolidated in a Microsoft Excel spread sheet, which presented to be the most suitable tool to identify codes and themes as well as analyse in one single tool, in the case of this study. The excel spread sheet was developed to compile the information gathered at the interviews, and it worked as a reliable database, which made it possible to divide the answers per organisation, category and topic. The spread sheet became an effective tool that facilitated the execution of the phases of the thematic analysis. This aspect will be discussed in the next section.

3.6.1 Phases and Processes of Thematic Analysis

The main phases and processes of thematic analysis, as presented by Braun and Clarke (2006) were followed in this research. Such guidelines developed by the authors were extremely relevant in this research project, and can be seen in Figure 3.4.

![Figure 3.3: The Phases and Processes of Thematic Analysis](image)

Source: Based on Braun & Clarke (2006)
According to Luborsky (1994), themes are “manifest generalised statements by informants about beliefs, attitudes values or sentiments” (p. 195). Taylor and Bogdan (1994) describe themes as units derived from patterns such as recurring activities, conversation topics, and meanings. According to DeSantis and Ugarriza (2000), themes are often used interchangeably with words such as “categories” (2000). The process of theme identification demanded a previous phase - the coding process.

The coding process comprised all the steps of this study, from the literature reviewing process to the analysis of the data gathered. The main codes that guided the analysis of the present study were naturally identified and developed during the research process. They were brought up during the literature reviewing process, interviews, and while coding the data collected. The data gathered in the interviews was revisited many times during the coding process in order to saturate the possibility of identifying possible codes and themes. The coding process developed in the present study is presented in the Figure 3.5:

**Figure 3.4: The Coding Process**
3.7 RESEARCH VALIDITY AND LIMITATIONS

The research objective of the present study relates to the perceptions of academics and management professionals. Thus, using thematic analysis as the research method was a relevant choice, as the research aimed to address appropriate sustainability management themes and interconnected subjects. The focus on valuable and valid results was a permanent concern in the present study (Lincoln, 1995). Thus, validity in this qualitative research project was a focal point during the entire process, following the assertions of Coco (2003), who stated that “the quality of a scientific inquiry is assessed in every stage of the research, from the identification of the research question to the elaboration of the conclusion” (p.65).

In conventional usage, research validity “refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration” (Babbi, 2007; p. 146). In order to ensure the interaction between the information gathered and its analysis, the main insights captured with the interviews were examined in parallel (Morse, Barret, Mayan, Olson, & Spiers, 2002) by revisiting the interviewed organisations’ websites and other online information, such as newspapers and academic articles. This helped to compare and ensure that the results achieved were in complete adherence to the data gathered. However, as any research project, there are personal assumptions and interests that might result in biases which are intrinsically related to the motivation of the project.

3.7.1 Reliability

Measuring reliability is easier than validity (Birley & Moreland, 1998). Reliability refers to the “degree of consistency with which instances are assigned to the same category on
different occasions” (Silverman, 2000; p. 188). In assessing reliability, it implies that the compiled results of a research project can be reached as quickly as possible with the same instrument at different times, which can be reached by the same observer (or different observer simultaneously) by duplicating the process (Drucker-Godard et al., 2001).

Organising the information gathered through interviews carried out with different organisations, and in different countries, demanded the accuracy of the language translation as well as proper documentation of the collected data. The information from organisations interviewed in Brazil was translated from Portuguese to English what may result on slightly different understandings inherent to the language translating process. The replicability of the results could be reached by understanding and assessing the research method, the excel data base, and the findings achieved in this study, thus providing consistency of judgement (Boyatzis, 1998).

3.7.2 Ethical Considerations

In order to conduct interviews for this study, Massey University ethical approval was granted through a low risk framework and all the interviewees were informed accordingly. Every effort was made to protect the participants’ integrity against any unwanted exposure. The contacts with the organisations interviewed were very transparent; issues concerning anonymity and confidentiality were avoided. Even though the research process comprised organisations from two different countries, the interface between the interviewer and interviewees followed the same guidelines in both countries, through respectful, discreet and professional relationship.
All the interviews occurred after clarifying with the interviewees the objectives of the research in a very friendly manner. The objectives concerning the choice for those particular organisations aimed in the study was also presented to the interviewees. The main contact information of the supervisor as well as the researcher of this thesis was made available to the interviewees to allow for any emergency occurrence and the ability of the participants to withdraw at will.

**3.8 CONCLUSION**

In conclusion, the present chapter outlined the research methodology used in the present study. This qualitative exploratory research was supported by semi-structured interviews. This type of interviews allowed participants to comfortably express their perspectives concerning management practices of sustainability initiatives and targets in their organisations, and how collaborative partnerships were undertaken. Thematic analysis was the technique used to analyse the data gathered as it presented to be the most suitable technique to analyse the findings of this type of study. There were efforts dedicated to achieve full validity and reliability of the findings, but there were inherent methodology limitations. The next chapter presents and discusses the main findings of this study.
CHAPTER 4

FINDINGS AND DISCUSSION

4.1 INTRODUCTION

This chapter presents the main findings of this study. The use of semi-structured interviews has been instrumental in generating valuable in-depth information from specific organisations interviewed in New Zealand and Brazil for the purpose of this study. The thematic analysis method utilised corresponds well with the nature of this study, presenting the ideal flexibility to identify, analyse and compare findings compiled from organisations in both countries. Consequently, knowledge is created through the analyses in this study.

Table 4.1 is presented and it comprises the main codes and themes of the analysis process. It is strategically divided into the three pillars of sustainability in order to facilitate the coding process and to ensure that the themes analysed are in strict adherence to the sustainability pillars’ perspective. Most of the codes and themes analysed in the present study emanate from literature review, interviews, and analyses of data gathered, following the examination of the main management practices related to sustainability management efforts.

New themes have emerged during the course of this research, as they naturally emerged during the research process. These are indicated in the table, signifying the main organisations that initiated such themes into the interviewing discussion.
### Chapter 4: Findings and Discussion

#### Table 4.1 Codes and Themes

<table>
<thead>
<tr>
<th>Economic Pillar</th>
<th>Strategic Management</th>
<th>Themes</th>
<th>Authors / Literature Review</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Market Forces &amp; New Management Realities</td>
<td>Drucker (1989); Porter (1990)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brand and Reputation Management</td>
<td>Etenson &amp; Knowles (2008); Berthon, Opoku, Pitt, &amp; Nel (2007)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainability image as source of employee attractiveness</td>
<td>Berthon, Ewing, &amp; Hah (2005)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Customer satisfaction as strategic sustainability driver</td>
<td>Interviewed organisations A1, A2, and B1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sustainability as a risk management driver</td>
<td>Interviewed organisations A1 and A2</td>
<td></td>
</tr>
</tbody>
</table>

| Sustainability Reporting | Annual Reports and Sustainability Reporting | Elkington (1997); Chapman & Milne (2004) |

<table>
<thead>
<tr>
<th>Governance</th>
<th>Executive / Shareholders Pressure Concerning Sustainability Targets</th>
<th>All interviewed organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sustainability Governance Platforms / Sustainability Committees</td>
<td>All interviewed organisations</td>
</tr>
<tr>
<td></td>
<td>Codes of conduct / Ethics</td>
<td>Desjardins (2007); Eweje (2009, 2009a); Egels-Zandén &amp; Sandberg (2010); Epstein (2008); Murphy (2000); Norton (2007)</td>
</tr>
</tbody>
</table>

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<tbody>
<tr>
<td></td>
<td>Sustainability / environmental certifications</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Pillar</th>
<th>Stakeholder collaboration / involvement</th>
<th>All interviewed organisations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>External stakeholder pressures</td>
<td>Banerjee (2000, 2001, 2008); Carlsson &amp; Berkes (2005); Cook &amp; Barclay (2002); Epstein (2008); Eweje (2006); Freeman (1984); Gray (1989); Hardy et al. (2006); Hartman et al. (1999); Huxham et al. (2000); Korten (2001); Millar et al. (2004); Penny et al. (2001); Petschow et al. (2005); Reed &amp; Reed (2009); Senge et al. (2008); Selsky &amp; Parker (2005); Tonn (1999); Waddell &amp; Brown (1997); Werhane et al. (2010); Wu &amp; Eweje (2008)</td>
</tr>
<tr>
<td></td>
<td>Collaborative governance / partnerships, and stakeholder engagement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stakeholder dialogue</td>
<td>Marrewijk (2003); Smith (2010); Cuppen et al. (2010)</td>
</tr>
<tr>
<td></td>
<td>Benefits and limitations of and collaborative partnerships and stakeholder engagement</td>
<td>Dyer &amp; Singh (1998); All interviewed organisations</td>
</tr>
</tbody>
</table>

| Supply Chain Management (SCM) | SCM strategy / Collaborative SCM | Epstein (2008); Kaplinsky & Morris (2001); Lambert & Cooper (2001); Linton et al., (2007); Porter & Kramer (2006); Stock & Lambert (2001); Sustainability (2008); UNGC (2010); |

| Employee Engagement | Participation of employees on sustainability initiatives. | Doppelt (2003); Werbach (2009) |

| Change Management | Organisational learning | Argyris & Schon (1978); De Geus (1988); Miller (1996); Siebenhüner & Arnold (2007); |
|                  | Change of Management Paradigm toward sustainability thinking | Organisations B2 and C2 |
|                  | Education for sustainability | Nah, Lau, and Kuang (2001); Hopkins & McKeown (2002); Doppelt (2003); Tew (2005); |
Results

In order to analyse and compare the information gathered from the different organisations in New Zealand and Brazil, the highlights from each topic of discussion at the interviews are consolidated in a Microsoft Excel spreadsheet, following the structure adopted in the process of coding and identification of themes. The information in the Excel file is divided into the following categories: (i) sustainability pillars (economic, environmental, and social); (ii) theme discussed in the interviews; and (iii) organisation name. Such categorisation facilitated the comparison of the answers given by the participating organisations, and consequently, the achievement of findings that are presented in this chapter.

Following the categorisation scheme of the interview data, the findings are further presented and discussed, according to the three sustainability pillars, and the related topics and themes. Tables and figures consolidate insights provided by the participating organisations from both countries. Organisations are coded alphabetically, referring to the interviewed organisations as: “A” - leading players in the financial services market; “B” - players in the energy solutions market; “C” - organisations that operate in the agricultural solutions (biotechnology) market; “D” - public organisations whose missions aim to enhance the economic and social development in the regions they operate whilst maintaining the environmental integrity of such regions; and finally “E” - NGOs dedicated to the improvement of social, economic and environmental standards of communities in fragile situations. The summary tables comparing insights from companies from both countries are presented after each topic examined. This is followed by the discussion of the main findings.
4.2 ECONOMIC PILLAR

The economic pillar of sustainability focused on the first part of each interview. This included strategic drivers that motivated the participating organisations to employ sustainability initiatives, governance mechanisms, and codes of conduct.

The findings and discussion of the topics analysed under the economic pillar are presented as follows: (4.2.1) Sustainability Initiatives as Strategic Goals; (4.2.2) Annual Reports and Sustainability Reporting; (4.2.3) Executive / Shareholder Pressure Concerning Sustainability Targets; (4.2.4) Sustainability Governance; (4.2.5) Codes of Conduct.

4.2.1 Sustainability Initiatives as Strategic Goals

The first topic discussed with the interviewed organisations concerned the main strategic goals that directed the participants to take sustainability issues into actual initiatives, and how sustainability goals were integrated into strategic guidelines of the companies. Organisations in both countries reported similar inter-connectivity between sustainability issues and their operational bottom line, linking sustainability drivers into their corporate strategy targets through enhanced results and more effective operations. Internal management drivers, such as attracting talented employees, and external drivers, such as mega market trends, and the growing competitiveness in the global economy were mentioned by the participating organisations. Table 4.2 summarises the insights provided by interviewees concerning this topic.
Evident similarities were identified regarding the way organisations in both New Zealand and Brazil understand sustainability issues as strategic drivers for their corporate goals. It could be summed up that all organisations reported the main idea of “being competitive by delivering the best value through the lowest possible level of resource consumption” (Organisation D1). Organisation D1 also provided a good perspective on its sustainability thinking, describing how sustainability should be strategically seen by organisations in general:

Sustainability is around good business sense; it is about operational efficiency, it is about reducing waste, such as materials, resources, and time. It’s about being able to achieve more with less. Actually, corporate sustainability, in essence, is one of the most
misunderstood professions and it should imply simply on doing business in the way it should always be done (Organisation D1).

The link between incorporating sustainability concerns as strategic drivers toward enhanced competitiveness in the market is similar to arguments of Drucker (1989), Mintzberg (1987), and Porter (1980) around competitive strategy for organisations. This includes how organisations need to be able to identify and address new market trends and demands, while mitigating external market forces and internal management paradigms.

**Brand & Reputation Management**

All interviewed organisations mentioned brand and reputation issues as strategic drivers and gains related to employing sustainability initiatives. This includes issues related to sustainability thinking and its link to “image”, “customer satisfaction”, “trust issues”, and “employee attractiveness” of organisations. Some organisations indicated they have realised reputational gains as a consequence of their sustainability image in the market, and effective customer satisfaction attainments. Others reported that they consider brand and reputation as strategic drivers to be addressed by implementing sustainability projects.

Company A1 outlined how customer satisfaction goals could enhance the company’s sustainability targets, arguing that “enhancing customer satisfaction levels is also a goal toward improving our corporate sustainability image in the market” (Organisation A1). The insight provided by organisation A1 is similar to Schmitt’s (1999) assertion, which implies that brands are first and foremost providers of experience. Thus a positive customer
relationship might enhance an organisation’s brand acceptability in the market, which will ultimately generate financial return to the organisation.

In the same vein as company A1, organisation A2 in Brazil also embrace the idea of importance concerning brand management. A2 asserts that “the organisation’s brand is one of the most valuable brands in Brazil, and our sustainability image in the market helps us to maintain this reputational awareness” (Organisation A2). This is similar to Berthon’s et al. (2007) argument that corporate reputation and brands represent the most important intangible asset for most organisations. Furthermore, A2 also presented a perspective of how sustainability goals relate to the organisation’s strategy, stating that:

There are different strategic motivations for us to employ sustainability initiatives; the main one is that sustainability can create long term value creation to the organisation through risk management, optimisation of market opportunities, and the rising perception of brand and reputation value creation (Organisation A2).

Organisation B1 also presented a link between customer satisfaction and the company’s reputation, arguing that “we assume that our customer satisfaction measures would indicate good reputation management” (Organisation B1). Following this idea, organisation C2 explained that “reputational gains are indeed achieved with our sustainability image, but we still do not measure them punctually” (Organisation C2). This example can be expanded to all participants’ perspectives on brand and reputation management. While organisations are aware of the relevance concerning the management of their image in the market, they are not currently measuring it properly. Companies could
focus on measuring properly the image gains associated with sustainability initiatives undertaken.

Organisations D1 and D2 reported similar perspectives concerning reputational issues as strategic drivers that motivated them to employ sustainability initiatives. Their perception of the need for developing a good reputation in the market might facilitate the achievement of their corporate goals. Organisation D1 also highlights the ‘trust issue’ connected with brand and reputation concerns: “the good reputation we’ve built does not allow us to do wrong moves, and reputation is important because of the trust issue concerning our stakeholders. We need to continuously improve our effectiveness and sustainability results” (Organisation D1).

Similarly, organisation D2 in Brazil argued that “the need to present relevant sustainability attainments to local population and government actors resulted in reputational gains to our organisation, as this kind of outcome had never been presented formally to those actors before” (Organisation D2). This revelation presented by D2 exemplifies how it is important for organisations to operate in accordance with their values and missions, as well as integrate them into the strategic bottom line, the rising market demands on sustainability efforts, and consequently, good reputation in the market. Organisation E1 also presented an insight concerning the relevance of reputational issues to the organisation’s financial and operational health, stating that:

If we are going to be an organisation that aims to address mainly social sustainability issues, it is important for our reputation. From a brand perspective, I mean, our brand and
credibility are really important for us. If you seem to be hypocritical there is no proposition for partners to fund the programmes of our organisation (Organisation E1).

Another finding concerning strategic guidelines and sustainability goals constitute the intention of organisations to achieve a good sustainability reputation in the market in order to attract employees. Organisations A1, A2 and B2 revealed that the organisations’ sustainability image and initiatives helped to attract employees with superior skills and knowledge, which comprises a primary source of competitive advantage for an organisation, as argued by Berthon, Ewing, and Hah (2005).

Community Engagement

Other factor commonly associated with strategic guidelines of organisations toward sustainability goals is engagement with community. This includes issues related to “community partnerships” and other interactions with local communities. Organisation A1 affirmed that community engagement is a strategic driver of the organisation’s sustainability targets. They also explained how reputational management efforts were connected to community engagement initiatives, arguing that: “reputational risk was identified in the late 90s as a strategic driver that should be linked to the sustainability goals, and community engagement was also one of the main drivers toward implementing sustainability initiatives and improving the organisation’s reputation” (Organisation A1). Their perception of understanding community engagement as a driver for enhancing brand and reputational gains is in agreement with Ettenson and Knowles’s (2008) arguments about how all businesses ultimately depend directly or indirectly on the goodwill of communities in which they operate. Organisation B1 also identified the relationship with
strategic communities as one of the main strategic drivers of the sustainability guidelines of the organisation by stating that “if we are the biggest employer of a certain community, we need to have a good relationship with that community, and to be honest, the main sustainability driver for the organisation in the beginning was to engage with the community partners” (Organisation B1).

The findings obtained as a result of the theme discussions with the interviewed organisations revealed how organisations in both countries and different sectors of society understood sustainability issues as strategic drivers to their operations. Brand and reputation, community engagement, and employee attractiveness were the main strategic drivers and also gains related to sustainability initiatives implemented by the participating organisations.

4.2.2 Annual Reports and Sustainability Reporting

Organisations were analysed considering sustainability issues and initiatives they publish in annual reports. Most of the interviewed organisations in New Zealand and Brazil affirmed that they publish annual reports that cover the sustainability pillars. Such reports comprise environmental impacts of the organisation’s operations, and the social and economic attainments in communities they operate.

Considering that all the interviewed organisations were chosen as a reference point due to their leadership position in the market in which they operate, it was not surprising that most of them disclosed robust annual reports covering sustainability issues. This is similar to the trend that organisations are employing mechanisms to improve governance systems.
(Aguilera & Cuervo-Cazurra, 2004) and they are aiming to cover the three pillars of sustainability in the corporate reporting processes (Elkington, 1997).

An interesting revelation came from the organisations that operate in the agricultural solutions market. Organisations C1 and C2 revealed that they did not publish local annual reports, and that rather, they published corporate annual reports globally in which the main sustainability achievements of all the offices around the world were disclosed. However, these organisations do not publish annual reports locally in New Zealand (C1), nor in Brazil (C2). Reasons such as “high costs and low perceived benefits generated through local annual reports” (Organisation C1) were cited by such companies. Another motive referred to by both companies for not publishing local reports implied that they “do not have stocks in the local market’s stock exchange chambers, so there is no significant pressure to present results to strategic stakeholders” (Organisation C2).

4.2.3 Shareholder Pressure Concerning Sustainability Targets

The main pressures emanating from shareholders (or executive board) that motivate organisations to adopt sustainability thinking and transform it into actual initiatives were analysed. Management aspects related to corporate sustainability thinking were focused in order to understand how investors and directive boards of organisations aim sustainability goals.

Organisations from New Zealand and Brazil presented similar perspectives in respect to the pressures emanated from directive boards and shareholders. They reported that shareholders’ demands are driving such organisations to be more efficient and
consequently, presenting higher economical return on investment (as summarised in Table 4.3). Moreover, organisations reported efforts focused on developing more effective solutions through “innovative ideas, avoiding redundant business processes, and delivering higher economic, environmental and social values” (Organisation D1).

### Table 4.3: Shareholder Pressure Concerning Sustainability Targets

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong> Risk management and corporate governance issues. Investors are increasingly demanding information concerning sustainability initiatives and carbon emission management schemes.</td>
<td><strong>A2</strong> Risk management and strong corporate governance schemes. Expanding microcredit loan products (meeting needs of the market, addressing customer needs continuously).</td>
</tr>
<tr>
<td><strong>B1</strong> Sustainability initiatives are implemented when the business case analysis indicates that there will be financial gains as well.</td>
<td><strong>B2</strong> Research &amp; development programmes focused on developing innovative services and products. Green supply chain (procurement) policies and initiatives (e.g. global green IT, green purchasing policy) and investigating options to buy and generate renewable energy solutions.</td>
</tr>
<tr>
<td><strong>C1</strong> Management board members and main investors are responsible for developing sustainability goals and macro initiatives, so their pressure concerns proper implementation and measurement of sustainability initiatives.</td>
<td><strong>C2</strong> Develop business solutions and products with low carbon emissions. Search for sustainable business processes, which demand applying sustainability thinking and innovative initiatives to products of all the business units.</td>
</tr>
<tr>
<td><strong>D1</strong> The general demands are focused on improving the city’s infrastructure (e.g. waste management service and transportation) and attracting new organisations to the city.</td>
<td><strong>D2</strong> Governmental pressure concerning the development of the State of São Paulo agrarian sector. The main pressure is focused on recuperation of fragile environmental areas (e.g. natural reserves, old farms, occupied areas).</td>
</tr>
<tr>
<td><strong>E1</strong> Operational improvements and organisational awareness. Reputation is focused along with operational effectiveness, in order to be recognised as a NGO that follows its mission, values and integrity. Aligning employee and community expectations with the organisation’s strategic drivers.</td>
<td><strong>E2</strong> Develop the efficiency of the organisation’s processes, to be more effective and achieve higher results while using fewer resources (creating alternative wealth creation channels, protecting environmental integrity, developing alternative production that does not damage the ecological biodiversity of Amazon).</td>
</tr>
</tbody>
</table>

A clear adherence between the strategic sustainability drivers examined previously on item 4.2.1, and the main pressures emanating from shareholders was identified. This is following examined.
Risk Management

Risk management was the most prevalent theme associated with shareholder pressures, especially for financial service organisations in both countries. Risk management relates to issues regarding “strong governance schemes” and “strategic concerns” of organisations. Organisation A1 reported that shareholders are demanding “sound risk management measurements, they want to know how we are mitigating operational risks, especially after the global financial crisis” (Organisation A1). Similarly, company A2 in Brazil revealed that:

Investors are focusing on risk management practices, analysing diligence standards, how the organisation is developing specific market channels to meet rising market demands and trends. Investors also demand the identification of business opportunities related to sustainability efforts internally and to external customers, and enhancing the levels of customer satisfaction (Organisation A2).

The disclosure by financial organisations A1 and A2 indicated that the recent financial crises, such as the America’s Subprime mortgage crisis, and the Greek debit crisis, have dramatically impacted the way investors monitor management indicators of financial institutions. This is similar to the arguments of Stiglitz et al. (1993), Stiglitz (2009), and Brown and Davis (2008) examined in the literature review. As a consequence, investors are aiming to invest their money on companies that present more sustainable operations and have implemented governance schemes toward mapping and avoiding risky operations, while addressing other sustainability issues (Dyllick & Hockerts, 2002).
Organisation A2 also revealed information about the level of maturity of investors’ knowledge around sustainability issues. Now “shareholders have done their home work on understanding what sustainability actually means, and what such term should imply to the strategic and operational management of the organisation in which they invest their money” (Organisation A2). Furthermore, A2 reported how shareholders want to see practical sustainability practices linked to the financial bottom-line of the organisation, stating that “they want the organisation to focus on employing sustainability initiatives that are intrinsically related to the core business of the organisation in order to improve risk management mechanisms” (Organisation A2). Similarly, organisation B1 reported shareholder pressures toward coherent sustainability actions, arguing that “the new corporate strategic guidelines indicate that business objectives have to be in adherence with sustainability goals, so everything we do should have sustainability thinking and measures aligned to it” (Organisation B1).

These findings indicated how shareholders and directive boards are demanding management actions that present a clear connection between operational effectiveness and sustainability concerns. By doing so, organisations increasingly understand how to transform sustainability challenges into opportunities from which organisations can benefit from (Eweje, 2009).

Even though public and civil society organisations do not have, in essence, shareholders, they showed interest in being analysed as any other organisation, using the same effectiveness path of the private organisations. As a corollary, public organisation D2 asserted: “the main pressures coming from government direct us to improve continuously
our results, enhance agrarian projects and the consequent social sustainability we work for attaining in the State of Sao Paulo” (Organisation D2). Organisation E2 also revealed the demand for improved effectiveness as a sustainability driver, arguing that:

The directive board is pressuring the projects to achieve higher results as our mission and value state, so they want us to keep increasing the number of alternative sources of wealth generation to Amazon communities, and at the same time reduce deforestation levels in the forest by developing innovative solutions (Organisation E2).

Another finding concerning shareholders’ demands connected sustainability efforts through the engagement with strategic stakeholders into collaborative partnerships. Organisation B2 reported that shareholders are interested in observing improvements on the way the organisation collaborate with suppliers. B2 stated that “shareholders are demanding the development of suppliers to be our main partners in the sustainability goals. Major retailers are demanding the organisation to develop and meet common sustainability standards with them” (Organisation B2). To this end, organisation C2 also identified the need and the benefits of engaging with strategic stakeholders. C2’s executive board is demanding improved collaborative interfaces with stakeholders, as shareholders want the company to “improve business processes in order to have a more integrative interface with stakeholders, as they are very interested on understanding biotechnology / agricultural solutions, and its implications to sustainable development” (Organisation C2).

The initiatives concerning engagement with stakeholders reported by organisation B2 and C2 related back to the literature review, regarding the need for any organisation to take into
account those who can affect or are affected by its operations (e.g. Banerjee, 2000, 2001, 2008; Cook and Barclay, 2002; Freeman, 1984; Wu & Eweje, 2008; and Werhane et al., 2010). The examinations of collaborative interfaces between different organisations as well as within organisations, with their strategic stakeholders are further discussed in this chapter.

### 4.2.4 Sustainability Governance

Organisations’ structures dedicated to managing sustainability-related initiatives were analysed. This intended to analyse the managerial maturity of organisations concerning managing their sustainability projects. In addition, it also focused on analysing if a well established sustainability governance structure of an individual organisation could facilitate the developing of collaborative partnerships within the organisation and between different organisations.

Organisations in New Zealand and in Brazil reported similar sustainability governance structures in terms of management practices adopted, even though different levels of maturity among the participating organisations were identified. The theme sustainability governance emerged naturally from all the interviewed organisations, relating practices such as “engaging with stakeholders”, and “sustainability committees”. The findings are summarised in Table 4.4:
Chapter 4                                     Findings and Discussion

Table 4.4: Sustainability Governance

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong> The sustainability initiatives are developed and analysed by internal committees and consolidated by the sustainability manager, who reports directly to the CEO of New Zealand operations. There is a sustainability manager and a community engagement manager. All departments are involved in the sustainability governance structure (including global headquarters’ managers).</td>
<td><strong>A2</strong> Sustainability governance structure dedicated to developing and implementing the macro sustainability policy and strategic guidelines in order to involve (motivate, inspire) the employees to follow the macro policy and turn it into detailed rules and initiatives. Sustainability governance includes managerial committee, directive board committee and shareholders board committee. There are two sustainability managers (back office and business areas). Sustainability team reports to the institutional relationships director (who manages the organisation's brand and reputation and relationships with government and other organisations).</td>
</tr>
<tr>
<td><strong>B1</strong> There is a sustainability department which is responsible for developing and measuring effectiveness improvement goals for the entire organisation to implement and follow. There is also a partnership or stakeholder manager focused on managing the direct relationship between the organisation and strategic communities.</td>
<td><strong>B2</strong> Board of management composed of vice presidents and department managers to develop sustainability initiatives.</td>
</tr>
<tr>
<td><strong>C1</strong> Sustainability management is integrated into all levels of the organisation, so that employees are motivated to participate actively in the creation and implementation of sustainability initiatives.</td>
<td><strong>C2</strong> There is a sustainability manager who is responsible for the sustainability committee. Each department in the organisation has one or more key people who participate in the sustainability committee. A partner NGO has a formal chair on the committee board. The Finance Controller consolidates the sustainability committee insights and initiatives along with the sustainability manager.</td>
</tr>
<tr>
<td><strong>D1</strong> Sustainability manager is responsible for all the sustainability initiatives of the organisation, including partnerships, supply chain policies and decisions.</td>
<td><strong>D2</strong> There is a sustainability and strategy board which is composed of three Directors: Wealth Creation; Infrastructure &amp; Environment; Social Development; and Production.</td>
</tr>
<tr>
<td><strong>E1</strong> Environmental Sustainability Group is the main sustainability governance entity in the organisation. It develops sustainability initiatives, such as composting and waste management initiatives, reducing environmental impacts and sourcing local materials.</td>
<td><strong>E2</strong> Sustainability governance is structured in four main areas that manage the projects developed by the organisation: wealth creation; family health development; social aspects; community association development.</td>
</tr>
</tbody>
</table>

All the interviewed organisations reported that their sustainability governance structures are being constantly improved in order to adequately their operational reality to the rising sustainability pressures from society and the market. In addition, organisations in New Zealand and in Brazil are searching for the ideal governance structure to properly identify and address sustainability demands that may impact their operations and also result in business opportunities. Moreover, organisations revealed that relevant “collaborative interfaces within departments of the same organisation and other organisations were achieved through improvements of the sustainability governance structure, breaking invisible walls that organisations generally have” (Organisation D1). The outlines of organisation D1 implied that organisations in general have “invisible walls” that block a
better integration between different areas. The internal discussion around sustainability issues that affected organisation D1 provided the openness for different areas and managers to share efforts, ideas and the governance of the strategic directions of the organisation. Furthermore, D1 described the outcomes achieved with the strategic positioning of sustainability policies in complete adherence with the corporate strategic guidelines, stating that:

Every project developed by any department of the organisation needs to comply with the corporate sustainability policy and guidelines of the company, presenting environmental, social and economic impacts, mitigation plans and resource efficiency targets. If sustainability policies are not covered by the project proposal, there will be no funding for that project (Organisation D1).

By doing so, organisation D1 revealed that it could operationally integrate the corporate sustainability thinking of the company into operational routines and decisions. As a result, it assured the compliance of all the areas of the organisation with its corporate guidelines and policies.

A sound sustainability governance structures was presented by organisation A2. It reported to have an effective sustainability area, formed by sustainability managers dedicated to analysing and meeting the guidelines of globally known sustainability standards and certifications (e.g. Global Reporting Initiative, Down Jones index, ISE index, AA1000). Moreover, sustainability leaders were trained in order to identify and implement sustainability initiatives in their departments and also in cooperative actions with
departments they have more process interfaces. The main goal attained with such sustainability leaders concerned the enhancement of the corporate sustainability span of action within different areas of the organisation. A2 reported that:

Along with the sustainability governance structure, we also have 80 internal sustainability leaders dedicated to spread the sustainability concerns and targets in the company. They also map employees’ operational demands, and motivate them to participate on sustainability discussions related to their areas and other departments to collaboratively identify sustainability opportunities (Organisation A2).

The engagement of employees on sustainability initiatives, as described by organisation A2, is further discussed in this chapter in the employee engagement section.

*Sustainability Committees*

Organisations reported the existence of sustainability committees. Such committees were described as integrative management boards, in which different departments (back-office and business areas) were represented by a leader, which may or may not be the manager of such department. When integrating different departments, such sustainability committees were said to be focused on enabling the debate of employees regarding the development of innovative solutions and initiatives toward addressing sustainability concerns in the organisation, as identified on through market trends.

The insights provided by the interviewees, concerned the formal participation of external entities in such sustainability committees. As an example, organisation C2 reported the
increasing formal participation of a NGO in its sustainability committee, describing that “currently we also have in our sustainability committee the formal position, and participation of one partnering NGO, and we are discussing the inclusion of universities on the committee on the short term (Organisation C2).

This topic revealed a relevant finding specifically with organisations A1 and B1, interviewed in New Zealand. They reported the formal position of managers focused on the direct interface between the organisation and their strategic communities, known as “community engagement manager” (Organisation A1), or “partnerships manager” (Organisation B1). These New Zealand companies indicated the importance of being proactive with strategic stakeholders, and consequently, A1 and B1 might anticipate mid and long terms pressures and market demands more effectively.

Organisations A2, B1, and D1 noted sound sustainability departments dedicated to managing corporate projects related to the three pillars of sustainability. The remaining organisations also identified solid governance mechanisms, which had one focal point - the sustainability manager or institutional relations manager. Sustainability managers were described as individual contributors or consultants who generally do not have a formal team that reports to them. Instead, they are leaders of management committees that discuss and develop sustainability initiatives in adherence to all the departments of the organisation. Moreover, they were said to be responsible for consolidating sustainability demands from the market, and internal demands of the organisation in order to develop, employ and manage sustainability efforts and collaborative interfaces within the organisation and external stakeholders.
All the organisations maintained that their sustainability governance structure, though based on one sustainability manager, is aligned directly or indirectly with the Chief Finance Officer (CFO) of each organisation. This governance structures showed that the financial results achieved with sustainability efforts were analysed in conformity with the financial bottom line of organisation. Thus, economic outcomes derived from sustainability projects were well monitored in accordance with the economic goals of the organisations. Along with the finance area, other departments were reported to be involved in the sustainability governance structure. These included Director of Institutional Relations, Director of Operations, and Project Managers.

Following the main findings accomplished from this topic, a hybrid illustration of the general sustainability governance described by the interviewed organisations is presented in Figure 4.1:
Altogether, while integrating different areas of the organisation to manage sustainability issues, organisations reported to be focusing on developing corporate sustainability guidelines, in which all the areas are responsible for achieving strategic targets and goals. Consequently, organisations portrayed that all employees are responsible for the corporate attainments concerning financial results and sustainability goals. Organisations showed that sustainability ideas can be created and developed by employees of all levels, and such openness helped the organisation to create a positive environment for innovative ideas and
improvements of business processes and synergies within the organisations, such as knowledge exchange between different professionals and departments.

### 4.2.5 Codes of conduct

Organisations’ practices regarding their codes of conduct, and internal policies were examined. This intended to analyse how ethical concerns were addressed by the participating organisations, in order to manage and avoid behaviour that could result in ethical issues.

All interviewed organisations had strict mechanisms, policies and rules in place that all employees had to comply with, such as “on-line compliance assessments, regular trainings and managerial face-to-face assessments” (Organisation C1). The results indicated that organisations were focusing on developing sustainable operations, motivating and monitoring their staff to follow corporate ethical standards and guidelines. By so doing, the reputational and operational risks that could affect the organisations’ bottom-line could likely be avoided. As an example, B2 reported an interesting practice in place that assures ethical behaviour in the company, and at the same time provide discretion to employees to have a voice and report controversial situations, if need be. The organisation revealed they “implemented a global channel called Ethics Line through which employees can quietly report ethical issues experienced in the work environment” (Organisation B2).

Altogether, it was expected that the focused organisations would present sound codes of conduct and ethical frameworks. This finding relates back to the literature, which indicated that companies are identifying the need for developing mechanisms for supporting ethical
concerns and attitudes (Desjardins, 2007). Moreover, this finding also buttresses the points made in literature that organisations have to address ethical issues in adherence to improvements in their governance structures, in order to avoid controversial behaviours and unethical attitudes (Dawson, 2004; Murphy, 2000; Norton, 2007).

4.3 ENVIRONMENTAL PILLAR

The second part of the interviews comprised the environmental pillar of sustainability. This part approached operational initiatives implemented by the participating organisations dedicated to minimise their direct and indirect environmental impacts on the communities they operate, while benefiting economically from such efforts. The topics discussed under the environmental pillar are divided as follows: 4.3.1 Resource management and Innovation; 4.3.2 Business process management (BPM) and sustainability key performance indicators (KPIs); 4.3.3 Sustainability and environmental certifications.

4.3.1 Sustainability initiatives and resource management / innovation

An important concern in this research was analysing whether sustainability initiatives employed by organisations were in adherence with their core businesses, as previously mentioned. The participating organisations were asked about their sustainability initiatives undertaken in office environments, and the plants (when applicable), as all types of organisations impact the environment while operating their daily business routines. This topic focused on analysing how participating organisations were implementing innovative solutions to reduce the use of natural (e.g. water, paper, energy) and operational resources (e.g. low efficiency machinery), while improving operational effectiveness and increasing profitability. The main findings are shown in Table 4.5.
Table 4.5: Sustainability Initiatives and Resource Management / Innovation

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong> Technology improvements toward greener and more effective solutions.</td>
<td><strong>A2</strong> Effective machinery, computers, servers, etc. Usage of rain water systems to cool servers.</td>
</tr>
<tr>
<td>Promotional materials produced with alternative materials, such as recycled paper and organic ink.</td>
<td>The organisation has a thermal energy plant (landfill organic gases for energy generation) to meet office energy demands, and is also profitable by generating carbon credits.</td>
</tr>
<tr>
<td><strong>B1</strong> There is a research and development team focused on developing alternative or renewable energies and improving the recycling initiatives. Also, suppliers work closely with the Facilities Manager to analyse the use of eco-efficient materials that can be adopted by the organisation.</td>
<td><strong>B2</strong> Energy efficiency programmes and product design and research focused on such goals. The organisation's 2012 strategic plan aims to generate 30% of total revenue from &quot;green&quot; products, double investment in green innovations, improve operational energy efficiency by 25% and reduce carbon emissions by 25%.</td>
</tr>
<tr>
<td><strong>C1</strong> Innovative solutions are developed both for the market and internal operations (e.g. energy efficient products and lean production solutions such as waste minimisation projects).</td>
<td><strong>C2</strong> Energy generation through waste management solutions. Product life cycle initiatives in partnership with other players in the market to collaboratively develop waste management solutions.</td>
</tr>
<tr>
<td><strong>D1</strong> Partnerships with suppliers to develop and implement innovative solutions (e.g. implement more effective street lights in the city). There is an entire division in the organisation dedicated to improving water management initiatives (waste and fresh water); general resource management initiatives (e.g. effectiveness of materials employed in construction).</td>
<td><strong>D2</strong> There is a government guideline that aims to prioritise small and medium local businesses that employ sustainability initiatives. Also, buying office materials from an organisation which aims to rehabilitate prisoners by implementing educational and work activities.</td>
</tr>
<tr>
<td><strong>E1</strong> There is on environmental team focused on mapping improvement solutions to manage resource usage during the execution of routine office operations and processes.</td>
<td><strong>E2</strong> Alternative sources of energy (solar) and water usage (rain water capture) are essentially focused.</td>
</tr>
</tbody>
</table>

Similar findings were observed in both New Zealand and Brazil. All the organisations focused on innovative solutions for the optimisation of energy consumption, such as the use of viable sources of alternative energy. The report also revealed that the organisations had as their focal point strategies such as, continuous reduction of office materials (e.g. paper and printers’ ink), and the implementation of water management solutions. The operational structure of dedicated teams and committees were again presented by organisations, indicating the idea of shared governance within the organisation among all the employees and also absorbing external inputs in adherence to environmental goals. Organisation A1 explained that “there are specific management teams focused on identifying innovative solutions dedicated to lower resource usage and add more value to
the organisation simultaneously” (Organisation A1). Simultaneously, organisation B1 declared that “there is a whole team looking at renewable energy and business case analyses in order to determine whether to take sustainability projects to the next level” (Organisation B1).

Organisation B1 also provided another insight concerning the relationship with strategic stakeholders. The company developed strong relationships with suppliers that added value to both organisations, such as encouraging suppliers to implement sustainability solutions that aimed at reducing maintenance costs and environmental impacts for both organisations. B1 revealed that:

Suppliers that are offering environmentally friendly services, innovative solutions, products and ideas are preferable to the organisation, and this type of relationship with suppliers is a trend to be increasingly followed (Organisation B1).

This is similar to UNGC’s (2003) arguments, as examined in the literature review which suggest that partnering actors agree to work together to achieve a common purpose, sharing risks, responsibilities, resources, competencies and benefits. These arguments conjoin with the literature review, which pointed out that collaborative interfaces can constructively enable organisations to explore their differences and search for solutions that go beyond their own limited vision of what is possible (Gray, 1989; 2007; Hartman et al., 1999). The discussion of this topic with interviewees initiated a strong sense of partnering and collaborative governance between organisations concerning supply chain management (SCM) practices. The main findings concerning the collaboration of organisations with
suppliers and SCM issues are further discussed in this chapter. A perspective concerning the continuous search for innovative solutions and the will for improving corporate effectiveness was reported by organisation D1, when it maintained the following:

From our perspective, sustainability is also striving for best practices, and my attitude as sustainability manager has always been that simply working within the confines of the law, and just meeting the regulation requirements is the same as say that we are being just as bad as the regulations will allow us to be (Organisation D1).

This is similar to the arguments of Porter and Van der Linde (1995), examined in the literature review, where the authors asserted that companies need to focus continuously on adding value to customers by enhancing their management practices toward sustainability opportunities.

The continuous search for innovative solutions is one of the main drivers of sustainability initiatives as innovation might result in more value to the organisation and at the same time address sustainability concerns related to effective resource management. The findings attained in this topic also relate back to the literature. Mckinsey (2010) have indicated that organisations worldwide are seeking for innovation as an imperative economic growth driver. Organisations reported a clear connection between innovation and learning organisations, similarly to Werbach’s (2009) and Doppelt’s (2003) arguments examined in the literature review. The findings concerning learning and change management issues in organisations are further discussed in depth in this chapter.
4.3.2 Business Process Management (BPM) and Key Performance Indicators (KPIs)

BPM platforms, such as technology solutions, and structured business process management initiatives were analysed. This also included environmental management systems in order to identify whether organisations were using their business process management platforms to identify sustainability opportunities and implement related environmental actions. Furthermore, the evidence of KPIs to measure and manage sustainability efforts undertaken was analysed. The mains findings are consolidated in the Table 4.6:

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>A2</td>
</tr>
<tr>
<td>There are continuous business process management projects focused on simplification of operational routines, in order to diminish the use of resources and reduce operational costs. KPIs are used to monitor business process effectiveness, carbon emissions and customer satisfaction levels.</td>
<td>Robust business process management IT systems implemented. Strategic KPIs to measure customer satisfaction, service quality levels, and eco-efficiency achievements of the organisation and its suppliers.</td>
</tr>
<tr>
<td>B1</td>
<td>B2</td>
</tr>
<tr>
<td>Business process management initiatives such as 6 SIGMA black belts in plants and offices. KPIs are used to monitor business process effectiveness, such as eco-efficiency attainments.</td>
<td>Business process culture implemented. There are specific KPIs focused on accelerating organisational change toward sustainability goals and improved business performance, such as monitoring the increase of green sources and innovative solutions developed.</td>
</tr>
<tr>
<td>C1</td>
<td>C2</td>
</tr>
<tr>
<td>Business process management platforms, supported by strategic KPIs, such as carbon emissions and organisational efficiency.</td>
<td>Developing sustainable business processes is a strategic goal of the organisation. There are KPIs focused on measuring sustainability and innovative initiatives in the business units of the organisation (e.g. energy efficiency, carbon emission levels).</td>
</tr>
<tr>
<td>D1</td>
<td>D2</td>
</tr>
<tr>
<td>Robust technological solutions dedicated to business process management. KPIs and measurement standards focused on maximising the return on investment of projects and general operations.</td>
<td>Business process culture implemented. There are KPIs for measuring employees’ performance on sustainability targets of the organisation.</td>
</tr>
<tr>
<td>E1</td>
<td>E2</td>
</tr>
<tr>
<td>No BPM system or culture implemented currently. Organisation plans to develop the BPM culture and possibly adopt IT systems in the near future.</td>
<td>Business process culture implemented. There are strategic KPIs dedicated to measuring the sustainability achievements of the organisation (e.g. forest conservation levels, community association achievements).</td>
</tr>
</tbody>
</table>

The findings indicated that organisations in New Zealand and in Brazil are similarly aspiring to achieve operational value through enhancements on their business processes.
Chapter 4                                     Findings and Discussion

The main findings are similar to the literature, as organisations are focusing on improving business processes in order to deliver the greatest value that can be produced at the lowest possible cost in a sustainable way (Handfield & Nichols, 1998). The search for more dynamic and interfaces with internal and external actors are imperative factors for the participating organisations in order to improve their operational realities (Guha & Kettinger, 1993; Strnadl, 2006).

Organisations A1, B1, C1, D1 in New Zealand, and A2 in Brazil reported robust IT systems (e.g. SAP, Foundation Footprint, etc.) and practices dedicated to managing business processes and addressing sustainability concerns. Organisation B1 reported they had “a business process Black Belt / 6 Sigma team dedicated to identifying and implementing business process improvements in the retail department” (Organisation B1). In parallel, D1 attested to how managing business process effectively is essential for the organisation to operate fluently:

Our organisation is such a diverse organisation that there is no chance we could manage everything without robust IT solutions dedicated to manage business processes. Business processes are needed to be continuously improved as the organisation grows and changes in order to be increasingly more effective (Organisation D1).

The remaining organisations reported they had business process platforms framed on cultural aspects, but in the least technological stages. However, the report findings on this topic indicated that organisations are focusing on developing KPIs to monitor their
management processes and organisational targets in adherence to sustainability issues, even when they did not have implemented business process IT solutions.

The findings imply that BPM is becoming increasingly relevant for organisations to identify and implement improvement opportunities in their operational routines. Thus, organisations can reach leaner processes which demand fewer resources, inspire innovative ideas, and generate economic benefits, while addressing environmental and social concerns. This is similar to perspectives of Day and Arnold, (1998), Eweje (2006), Epstein (2008), and Hui et al. (2000) on how organisations should understand sustainability concerns as a source of enhancement opportunities towards operational effectiveness, competitive advantages and enhanced economic results. An illustration concerning synergy and collaborative gains concerning with regards to process management is presented in Figure 4.2.
Concerning sustainability indicators, organisations A1, A2 and B2 acknowledged they follow globally sustainability standards and indicators. An interesting practice affirmed by organisation B2 comprised the use of sustainability standards to manage business process associated to sustainability initiatives. Organisation B2 explained that:

We use Global reporting Initiative (GRI) and Ethos [a Brazilian NGO] indicators in order to implement sustainability BPM guidelines and manage what can be improved internally,
but we do not have a specific IT system dedicated to sustainability processes (Organisation B2).

Furthermore, organisations are increasingly adopting KPIs to manage their sustainability efforts and achievements, indicating that as important as implementing sustainability initiatives, it is to measure the results of such efforts. The KPIs reported by organisations were mainly focused on reducing carbon emissions, operational efficiency, eco-efficiency (e.g. water management attainments), customer and community satisfaction through improved services, and development of products in adherence to sustainability concerns. Organisation B1 described how the organisation improved the monitoring of sustainability targets at the same time as the company’s culture evolved:

We moved from talking just about climate change but we still monitor annually our improvements on electricity consumption, water management achievements, and waste generated in objectives to reuse it order to improve our targets concerning carbon emissions (Organisation B1).

The main sustainability KPIs reported by the participating organisations comprised the following items identified in Table 4.7:
### Table 4.7: Sustainability KPIs

<table>
<thead>
<tr>
<th>Topic</th>
<th>Key Performance Indicator (KPI)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainability standards</strong></td>
<td>• Compliance with global sustainability standards</td>
</tr>
<tr>
<td><strong>Sustainability Reporting</strong></td>
<td>• Increase in relevant facts reported per pillar of sustainability</td>
</tr>
<tr>
<td><strong>Business Process Effectiveness</strong></td>
<td>• Number of business processes aligned with sustainability initiatives (e.g. resource effectiveness measures and IT systems flags in business processes)</td>
</tr>
<tr>
<td><strong>Ecoefficiency</strong></td>
<td>• Carbon emission levels&lt;br&gt;• Use of viable alternative sources&lt;br&gt;Waste management improvements&lt;br&gt;(e.g., use of office materials, raw resources in production plants)&lt;br&gt;• Innovative solutions implemented</td>
</tr>
<tr>
<td><strong>Customer Satisfaction</strong></td>
<td>• Improvement in customer satisfaction levels</td>
</tr>
<tr>
<td><strong>Collaborative Partnerships</strong></td>
<td>• Collaborative initiatives implemented&lt;br&gt;• Sustainability initiatives implemented in departments (synergy gains)&lt;br&gt;• Deliberation of productive insights&lt;br&gt;• Community acceptance and sympathy</td>
</tr>
<tr>
<td><strong>Reputational Improvements</strong></td>
<td>• Brand value and exposition in the market&lt;br&gt;• Mentioned in relevant sustainability rankings&lt;br&gt;• Mentioned in relevant media channels</td>
</tr>
<tr>
<td><strong>Health indicators</strong></td>
<td>• Reportable accidents per plant and per production line</td>
</tr>
<tr>
<td><strong>Economic Bottom-line</strong></td>
<td>• Value added through innovative solutions&lt;br&gt;• Energy efficiency savings&lt;br&gt;• Resource management efficiency</td>
</tr>
</tbody>
</table>

#### 4.3.3 Sustainability and Environmental Certifications

In terms of sustainability standards, organisations were asked about any certifications related to environmental and social attainments. The participation of international or local sustainability indexes (e.g. Dow Jones Sustainability Index, Brazil ISE) as well as standards was considered as well. The main findings are summarised in Table 4.8:
Table 4.8: Sustainability / Environmental Certifications

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Organisation follows its environmental system (EMS) standards. ISO 14001 not implemented.</td>
</tr>
<tr>
<td>A2</td>
<td>The organisation is one of the leaders of the Dow Jones Sustainability Index (DJSI) globally. ISO 14001 implemented in certain business units.</td>
</tr>
<tr>
<td>B1</td>
<td>ISO 14001 implemented in international plants and offices, but not in NZ. Globally, the organisation is listed by DJSI.</td>
</tr>
<tr>
<td>B2</td>
<td>The organisation is listed by the DJSI, and it is well ranked. One of the leaders of the Brazilian Sustainability Index (ISE). ISO 14001 will be adopted by a few business areas in the near future.</td>
</tr>
<tr>
<td>C1</td>
<td>ISO 14001 implemented, and follows ISO 14061 Carbon Footprint Accounting standards.</td>
</tr>
<tr>
<td>C2</td>
<td>Implemented ISO 14001. Supported strategic suppliers to implement ISO 14001.</td>
</tr>
<tr>
<td>D1</td>
<td>No ISO or other environmental certifications.</td>
</tr>
<tr>
<td>D2</td>
<td>ISO 14001 implemented globally and in Brazil.</td>
</tr>
<tr>
<td>E1</td>
<td>No ISO or other environmental certifications.</td>
</tr>
<tr>
<td>E2</td>
<td>Local environmental certifications for punctual projects, No ISO 14001 implemented.</td>
</tr>
</tbody>
</table>

Organisations in New Zealand and in Brazil presented similar practices concerning sustainability and environmental certifications. The findings indicated that organisations implemented environmental management practices aiming for improved resource management solutions and outcomes (Melnyk, Sroufe, & Calantone, 2003).

In both countries, organisations reported environmental initiatives, even resulting in local environmental certifications, such as New Zealand’s Landcare, in the case of organisation A1. Regarding the ISO14001 environmental certification, only 3 organisations reported to have implemented such certification: organisations B2 and C2 in Brazil, and organisation D1 in New Zealand, which also claimed to follow the carbon footprint accounting standards (ISO14061). Moreover, these 3 organisations indicated that they gained competitiveness awareness in the market, in concordance with Zutshi and Sohal’s (2003) arguments examined in the literature review.
Organisations B1 and C1 revealed no intention to implement the ISO14001 certification, and reasonable arguments surfaced. According to B1 and C1, the costs of adopting ISO certifications were too high and unjustifiable to be implemented locally. C1 explained that “global offices and plants of the organisation are ISO14001 certified, so global best practices concerning environmental management were replicated to smaller operations such as the New Zealand office” (Organisation C1). Similarly, Organisation B1 reported that “we have an environmental management system (EMS) implemented, but we choose not to do ISO140001. We are not certified ISO, but we use the ISO framework and concept our environmental systems but we choose not to do the ISO140001” (Organisation B1). The arguments presented by B1 are in conformity with the literature review that identified EMS as the operational heart of the ISO 14001 certification process (Melnyk, Sroufe, & Calantone, 2003).

An interesting practice reported by B2 was that it supported technically and financially strategic suppliers to be ISO14001 certified, indicating a type of collaborative governance between the involved organisations. By doing so, the organisation reached outstanding synergy gains by improving the management process interface with the involved business partners. This example highlighted a strong shared governance practice between organisation B2 and its strategic suppliers.

Although Organisation D2 indicated that it did not have any environmental certification implemented, it reported strong partnerships with environmental NGOs from which it has learned how to improve the outcomes achieved with their environmental initiatives. This is
also in adherence to the best environmental management practices suggested and expected by such NGOs.

4.4 SOCIAL PILLAR
The social pillar of sustainability was covered on the third part of the interviews. This part addressed factors connected to social issues that were focused on by organisations in order to improve their social sustainability achievements. The topics discussed under the social pillar are divided into the following categories: (4.4.1) Pressures from external stakeholders; (4.4.2) Collaborative partnerships and stakeholder engagement; (4.4.3) Benefits and limitations of collaborative partnerships and stakeholder engagement; (4.4.4) Supply Chain Management strategy and sustainability goals; (4.4.5) Participation of employees on sustainability initiatives; and finally (4.4.6) Change Management towards sustainability culture.

4.4.1 Pressures from external stakeholders
External pressures that affect organisations were analysed. This intended to understand how organisations are being pressured by other sector organisations, and how they are dealing with such demands. Figure 4.3 illustrates the main findings:
Figure 4.3: Pressures from External Stakeholders

As observed by previous topics examined, both organisations in New Zealand and Brazil had similar perspectives regarding pressures from external stakeholders. Organisations from the same sectors in both countries reported similar sources of pressures that, along with internal drivers, motivated them to address social sustainability demands in each country. Surprisingly, NGOs identified the government as the main actor pressuring their operations toward sustainability goals. Furthermore, organisations in both countries revealed they were being proactive on addressing sustainability issues.

Altogether, companies explicated similar perspectives on external pressures, indicating market forces and internal strategic goals as the main drivers of sustainability initiatives undertaken. By internally developing guidelines and projects dedicated to addressing sustainability issues, organisations can anticipate many pressures that would come naturally accordingly to market trends. Governmental regulations were also cited as relevant sources of pressure, but they are not strong drivers when compared to their self-defined sustainability goals. As organisation A1 outlined: “We are always taking this leadership
place, so we actually drive pressures internally to improve sustainability standards. But mostly it is our desire to lead” (Organisation A1).

In the same dimension, company A1 provided a perspective about cultural characteristics of New Zealand communities concerning civil society pressures, arguing that: “New Zealand is a very voluntary market. Even the consumer side of it is very limited in terms of pressures” (Organisation A1). Similarily organisation B1 also commented on how the pressures from civil society in New Zealand are limited, stating that:

There are not many pressures from NGOs in New Zealand. They are not as big here as in other places, as New Zealand does not have the same infrastructure and social problems as other countries. An isolated episode happened 2 years ago, when Greenpeace broke into one of the plants of the company. But we explained to them how the entire Auckland city would be affected, so they understood that the organisation was doing everything possible to reduce carbon emissions and it was working the most effective way possible in the current market situation (Organisation B1).

In Brazil, organisations B2, and C2 reported that there are significant pressures from government, especially in relation to increasingly strict environmental regulations (e.g. use of cleaner and safer raw materials and sources), and NGOs. However, both organisations affirmed that the main pressure toward addressing sustainability demands emanated from competitive market forces. Organisation B2 explained how the organisation was transforming pressures from other sectors into collaborative interfaces:
In Brazil, governmental regulations and NGOs are always to be seriously considered, and we have an environmental sustainability manager that works in direct interface with governmental agencies in order to understand what is being discussed in terms of new regulations and how we need to be prepared for them. NGOs also participate in this process as collaborative partners (Organisation B2).

The insights provided by organisation B2 indicated how distinct sectors can align different perspectives and goals, while respecting each other’s mission in its sector of activity. This finding indicated collaborative governance between different sectors, and indicated similarities with the literature concerning benefits of cross-sector partnerships (Selsky & Parker, 2005). Collaborative partnerships are discussed in the next section.

The most significant difference between New Zealand and Brazilian organisations concerning this topic is based on how pressures from civil society organisations are limited in New Zealand, in comparison to Brazil in reality. Organisations that operate in Brazil elucidated that currently, market forces and government guidelines are the strongest sources of pressure, as NGOs and government organisations are increasingly willing to collaborate toward common goals. However, such companies in Brazil also detailed that government, NGOs and other civil society organisations are strong actors, and their perspectives are always considered on strategic actions employed by organisations in Brazil in order to maintain the good relationship with them.
4.4.2 Collaborative Partnerships and Stakeholder Engagement

Organisations were analysed concerning ongoing collaborative partnerships with other organisations. Interactions with strategic stakeholders into sustainability debates and initiatives, the practice of multi-stakeholders meetings, and the use of AA1000 standards were also considered. This intended to analyse how effectively organisations were engaging with external stakeholders through collaborative partnerships. The involvement of employees (internal stakeholders) in sustainability efforts is discussed further in this chapter.

Organisations in New Zealand and Brazil reported collaborative practices with strategic stakeholders, presenting relevant documents and reports about the main collaborative partnerships, and the sustainability results facilitated with such partnerships. The main findings are summarised in Table 4.9:
Table 4.9: Collaborative Partnerships and Stakeholder Engagement

<table>
<thead>
<tr>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong relationships with government institutions, NGOs, and community</td>
<td>There are robust collaborative programs and partnerships with</td>
</tr>
<tr>
<td>consultative councils. The General Manager of the organisation participates</td>
<td>government institutions, NGOs and universities in Brazil and overseas.</td>
</tr>
<tr>
<td>in meetings with representatives of different sectors to analyse social and</td>
<td>Multi-stakeholder panels implemented involving community actors, NGOs,</td>
</tr>
<tr>
<td>environmental demands, market trends, and define collaborative partnerships</td>
<td>government representatives and even suppliers.</td>
</tr>
<tr>
<td>with strategic stakeholders.</td>
<td>Partnerships with universities and NGOs focused on developing</td>
</tr>
<tr>
<td>Long term collaborative partnerships and trusts with local communities</td>
<td>sustainable innovative technologies and solutions.</td>
</tr>
<tr>
<td>where the organisation has plants, and sponsorship programs in the country.</td>
<td>Collaborative partnerships with strategic suppliers. Partnerships</td>
</tr>
<tr>
<td>Funding health projects, tourism projects, educational initiatives</td>
<td>with other private organisations in order to mutually develop suppliers</td>
</tr>
<tr>
<td>and sports competitions in small communities in the country.</td>
<td>in socio-economically fragile regions in Brazil.</td>
</tr>
<tr>
<td></td>
<td>Partnerships with government agencies and ministries, and NGOs.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sponsorship initiatives with universities and communities, such as funding</td>
<td>Collaborative partnerships with government institutions, NGOs, and</td>
</tr>
<tr>
<td>Innovators' prizes, etc.</td>
<td>private organisations in many regions of Brazil dedicated to preserving</td>
</tr>
<tr>
<td></td>
<td>biodiversity and threatened animal species.</td>
</tr>
<tr>
<td>There is a specific department dedicated to partnerships with private</td>
<td>Partnerships with other public institutions and NGOs in order to</td>
</tr>
<tr>
<td>organisations that have business in the city. There are multi-stakeholder</td>
<td>develop operational synergies between different organisations that</td>
</tr>
<tr>
<td>meetings focused on debating demands from community and business leaders.</td>
<td>have similar or common goals.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Collaborative partnerships with local NGOs that help implement the NGO</td>
<td>Partnerships with other NGOs from Brazil and overseas, government</td>
</tr>
<tr>
<td>projects in local communities globally. Partnerships with private</td>
<td>institutions, private organisations from Brazil and overseas, and</td>
</tr>
<tr>
<td>organisations dedicated to develop organic products and build water</td>
<td>research or educational organisations.</td>
</tr>
<tr>
<td>management infrastructure for fragile communities.</td>
<td></td>
</tr>
</tbody>
</table>

All participating organisations in both countries reported ongoing collaborative initiatives with other organisations from the same and distinct sectors of society, comprising consistent partnerships and multi-stakeholder committees. Moreover, organisations shared their views that many issues that arise in the globalised economy are beyond their individual capacity. This is similar to the arguments of Glasbergen (2007), Gray, 1989; 2007), and Trist (1983) examined in the literature review. Organisations from the three sectors of society proactively have identified the need to join forces and listen to other organisations’ points of view, so that they can gather efforts and address common sustainability concerns (Cerin & Karlson, 2002; Armstrong & Stratford, 2004).
In other words, the findings revealed how the benchmark organisations were increasingly engaging with other organisations through collaborative interactions. This is similar to the literature, where different types of partnerships between organisations toward sustainability goals were discussed (Bouwen & Taillieu, 2004; Epstein, 2008; Eweje, 2006; Hartman et al. 1999; Huxham et al., 2000; Korten, 2001; Millar et al., 2004; Penny Bonazzi, & Gee, 2001; Petschow et al., 2005; Reed & Reed, 2009; Selsky & Parker, 2005; Senge et al., 2008; Tonn, 1999; Waddell & Brown, 1997; Warhurst, 2001).

Moreover, internal stakeholders (employees) were also being integrated into sustainability discussions and action plans, as reported by the interviewees. This is similar to arguments examined in the literature review (Werhane et al., 2010; Van Marrewijk, 2003) regarding employee engagement toward sustainability goals. The engagement with internal stakeholders and collaborative partnerships with suppliers were consistently described by organisation, and such interactions are further examined in this chapter.

The findings also indicated that the increasing collaborative interfaces between organisations resulted from the natural evolution of companies’ knowledge on sustainability concerns, and how learning from other entities could be beneficial. Organisations revealed their perception of more value creation when developing sound collaborative initiatives instead of punctual philanthropy programs. A significant example was described by organisation B1, which outlined that “we moved from the charity stages of involvement of stakeholders, and jumped into collaborative platforms in which the involved actors share responsibilities and benefits, creating more positive outcomes than before” (Organisation B1). This paradigm evolution described by B1 related back to the
literature review, where the level of integration between partnering actors tended to evolve from charity or philanthropy thinking into collaborative platforms, which enable more value creation (Austin, 2000; Keys, Malnight & van der Graaf, 2009).

Multi-stakeholder Committees

All the organisations interviewed in both countries revealed that strategic stakeholders were becoming increasingly involved in sustainability committees. Practices such as multi-stakeholders boards, councils, and panels were reported by organisations as successful practices undertaken to engage with external actors, leading them to constructively implement collaborative interactions with stakeholders, by providing a positive environment for open dialogue.

Organisation A2 created multi-stakeholder panels whereby the organisation invited stakeholders to debate and present their ideas and demands. According to A2, “this direct dialogue channel with strategic stakeholders has allowed the organisation to deliver more valuable feedbacks to internal and external stakeholders, breaking indirect critics, preconceptions, and complaints” (Organisation A2). Furthermore, when commenting around the significant outcomes achieved with multi-stakeholder panels, A2 revealed how it intended to integrate more stakeholders into the multi-stakeholder panels. As Company A2 described it: “it is expected to improve the level of involvement of stakeholders and market specialists from different sectors, as listening to stakeholders is crucial for identifying strategic directions for the organisation’s operations” (Organisation A2).
In parallel, organisation A1 described how important the collaboration with other sectors, such as public sector and civil society, was being recognised by the company in order to address its sustainability concerns. A1 commented on how its consultative council with community actors functioned, explaining that: “We have huge relationships with the government and community, and we have a community consultative council, in which participates our general manager, and representatives of each sector, including labour unions in order to discuss how we can cooperate with each other” (Organisation A1). Furthermore, they explicated how internal committees were also integrating employees to analyse the sustainability attainments of the organisation concerning the New Zealand’s reality, describing that: “There is also one internal meeting a year to evaluate what we are actually doing to support New Zealand economy and its sustainability targets and concerns” (Organisation A1).

Similar to companies A1 and A2, organisation E2 in Brazil reported how it implemented sustainability committees with strategic stakeholders related directly to the funding and operational management actors of such NGO and community leaders, noting that:

We have quarterly meetings with community leaders of all conservation units, and also meetings that include the management board, employees, and collaborative partners in order to revise attainments and define new goals, improvement projects and punctual actions to be taken in the short term (Organisation E2).

A broader perspective concerning the integration of different actors in multi-stakeholder committees was presented by organisation D1. It reported how different sectors of society
need to understand sustainability issues that go beyond their business and operational perspectives. It also commented on how vandalism might impact the quality of life of an entire city, stating that: “for every one dollar we spend on fixing vandalism, that’s a dollar we are not spending on developing something new to the city, so it is really about the interconnectivity of how a city functions and how different actors need to understand common issues” (Organisation D1).

Clear examples such as this illustrate how important it is for different sectors of society to join forces, map issues concerning the three pillars of sustainability, and jointly address them. Otherwise, all sectors of society are likely going to split the bill anyhow without realising how those resources could have been better employed on constructive initiatives. This is similar to the literature review which analyses the arguments of Selsky and Parker (2005) and Heinelt et al. (2006) concerning how collaborative partnerships between different sectors can be a possible way to jointly address society issues such as economic development, education, and environmental sustainability.

**Stakeholder Engagement and Accountability**

Taking into account how strategically important multi-stakeholder committees were described by the organisations, they were also asked whether formal agendas, protocols and standards were followed, including the AA1000 standards examined in the literature review. The results presented by organisations are summarised in Figure 4.4:
Organisations from both countries presented the same percentage distribution when analysing how formally they were managing such committees through the use of AA1000 standards. Organisations A1 and A2 took the lead on implementing formal stakeholder engagement standards. The remaining organisations presented least developed stages concerning this matter, and reported that they were analysing the AA1000 standards with the likelihood of implementing it in the near future, depending on its popularity and acceptance among different sector organisations.

Organisation A2 emphasised on how important following the AA1000 standards might be one organisation’s right to operate in the market as it enables transparent accountability attainments. It argued that: “some believe that the AA1000 might even address the social right of organisations to operate in a community, and the use of stakeholder engagement standards such as AA1000 will grow globally as leading organisations realize they need to listen to stakeholders demands” (Organisation A2). This is similar to Beckett and Jonker’s (2002) arguments examined in the literature review. According to the authors, “the notion of accountability clearly relates to the provision of information to stakeholders, information
that can be verified to build trust in its value, as the foundation of social, environmental and economic performance” (Beckett & Jonker, 2002, p.3).

4.4.3 Benefits and Limitations of Collaborative Partnerships and Stakeholder Engagement

Organisations from New Zealand and Brazil presented very similar perspectives concerning the limitations and benefits perceived through collaborative partnerships and the increasing engagement with strategic stakeholders. The main limitations reported by the organisations concerned mainly a reduced number of human resources to adequately respond to the demands and insights from internal and external stakeholders. Furthermore, organisations explained that it was not always easy to establish a complete adherence between the organisation’s capabilities and interests, and the demands of stakeholders and partners. This is similar to Banerjee’s (2000, 2001, 2008) arguments that partnering organisations might have opposing agendas and interests that need to be aligned, and organisations interviewed were clearly addressing such gaps.

Altogether, the main benefits reported by the organisations were very relevant and in general lines have consolidated the previous findings in this study. All the organisations in both countries reported that knowledge exchange was one of the main benefits of engaging with stakeholders. This is similar to Dyer and Singh (1998) assertions on benefits of collaboration between stakeholders. Furthermore, organisations mentioned that they perceived reputational gains, and they could anticipate market demands (e.g. competitive forces), project future government regulations, engage with business partners, and manage community pressures through collaborative partnerships.
The main benefits described by the interviewed organisations are similar to Brinkerhoff’s (2002, 2007) arguments that, partnerships contribute to the effectiveness of individual and collaborative governance of companies, the more partnering organisations progress in levels of interaction. Moreover, the legitimacy to operate in the market (Day & Arnold, 1998), and conflict management between partnering organisations are also examined by Brinkerhoff’s (2002, 2007), and these perspectives correlate with the findings achieved in the present study. Table 4.10 consolidates the main findings reached on this topic:
**Table 4.10: Benefits and Limitations of Collaborative Partnerships and Stakeholder Engagement**

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Benefits</th>
<th>Limitations</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong></td>
<td></td>
<td><strong>A2</strong></td>
<td></td>
</tr>
<tr>
<td>Different business units have different interfaces with stakeholders, so it is difficult to filter and prioritize insights that are generated and demanded by stakeholders. Limited resources available for analysing partnership needs and stakeholder demands.</td>
<td>Lower community pressures. Anticipating market and community needs, and governmental regulations.</td>
<td>Validating commitment to the substance of the themes discussed with stakeholders, and the operational reality of the organisation. Engaging the most strategic or relevant stakeholders due to resource limitations.</td>
<td></td>
</tr>
<tr>
<td><strong>B1</strong></td>
<td></td>
<td><strong>B2</strong></td>
<td></td>
</tr>
<tr>
<td>Balancing expectations of stakeholders and actual interests and operational capabilities of the organisation.</td>
<td>Anticipating stakeholder demands and pressures. Improving operational routines with feedbacks and suggestions of stakeholders.</td>
<td>Too many ideas to be addressed concisely. Finding adherence between demands and resources needed to implement related initiatives.</td>
<td>Development of aligned and mutually beneficial business and sustainability solutions. Anticipating government regulations and market demands.</td>
</tr>
<tr>
<td><strong>C1</strong></td>
<td></td>
<td><strong>C2</strong></td>
<td></td>
</tr>
<tr>
<td>Not enough resources to meet so many demands from community, so the organisation focuses on sustainability initiatives and partnerships aligned with the organisation’s strategic guidelines.</td>
<td>Anticipating community and market needs, and ensuring the organisation well regarded by the local community (reputational gains).</td>
<td>The agribusiness sector in general have not yet understood how important it is to an organisation to listen to the perspectives of its strategic stakeholders. The entire sector in Brazil recently started to evolve towards addressing sustainability concerns collaboratively.</td>
<td>Enhancement of the relationship and mutual value creation with strategic suppliers. Joining forces and sharing resources with partners and exchanging strategic knowledge.</td>
</tr>
<tr>
<td><strong>D1</strong></td>
<td></td>
<td><strong>D2</strong></td>
<td></td>
</tr>
<tr>
<td>Human resources are the main limitation concerning stakeholder engagement and collaborative partnerships.</td>
<td>Better understanding of community needs and concerns related to business development and the city’s infrastructure. Engaging with stakeholders helped the organisation to develop more accurate and down-to-earth strategic planning.</td>
<td>Human and technical resources (number of employees, technical knowledge, machinery). Political boundaries from other government institutions that are related to different political parties or interests. Natural dynamics of the public sector in Brazil, such as expense and processes, and excessive bureaucracy in some instances.</td>
<td>Knowledge exchange with collaborative partners, which sum up forces and efforts. Knowledge exchange with professionals from other sectors. Reputational gains generated through exposure to other organisations and sectors of society.</td>
</tr>
<tr>
<td><strong>E1</strong></td>
<td></td>
<td><strong>E2</strong></td>
<td></td>
</tr>
<tr>
<td>Finding adherence between the mission of the organisations and the interests of partners and stakeholders. Local projects depend on the local partner NGOs pace and knowledge to employ the intended initiatives, and sometimes the partners’ pace is not as productive as it could be.</td>
<td>Funding, volunteers and local partnering NGOs help in mapping and employing sustainability initiatives, allowing relevant knowledge exchange gains as well.</td>
<td>Partnering government institutions have political bias that need to be isolated from the organisation’s initiatives in the areas where it operates.</td>
<td>Partnerships allow different organisations to join forces, maximise the use of resources and increase the potential of knowledge creation, and knowledge exchange with other sectors.</td>
</tr>
</tbody>
</table>
Along with the satisfaction of constructively engaging with many distinct stakeholders, organisation A2 reported a valuable perspective concerning collaborative interactions with the academy. A2 developed partnerships with recognised universities from Brazil (e.g. USP, GV) and overseas (e.g. MIT Boston), and reported the main benefits of such partnerships, explaining that “Leading universities are generating valuable sustainability knowledge that even management consulting firms do not seem to have currently (...) universities are creating a very clear link between knowledge creation, academic projects, and innovative practical solutions” (Organisation A2). Company A2 further outlined how beneficial building collaborative partnerships and engaging with strategic stakeholders are, as they “helped the organisation to anticipate market demands and pressures, even though some demands are still reactively addressed, as it is a learning process” (Organisation A2).

Another insight concerning partnerships with universities was provided by organisation E2 in Brazil which revealed strong partnerships developed with universities and consulting organisations. Those actors were invited to assess the current E2’s organisational / operational reality in order to indicate improvement opportunities. This practice helped managers to gain high level management knowledge. Moreover, on such collaborative process, universities and consulting firms could also learn the realities of such NGO, and develop a framework of best practices that could be implemented in other organisations. Thus, a clear knowledge example was provided by organisation A2.

The need for improving dialogue and effectively collaborating with partners was reported by organisation C2. It argued that “organisations of the agribusiness / biotechnology sector in Brazil need to improve the dialogue between them in order to join efforts toward more
aligned sustainability initiatives and debates” (Organisation C2). The arguments of organisation C2 are similar to Hardy et al. (2006) assertion that organisations might have to continuously improve the communication with partnering companies to align or sustain tensions toward common goals.

Furthermore, C2 revealed that many “agribusiness organisations need to understand the need to engage with stakeholders that are not necessarily involved in the productive value chain of each organisation, such as NGOs” (Organisation C2). These assertions indicate that developing collaborative partnerships between agribusiness organisations and stakeholders are crucial for exchanging knowledge and enhancing the participation of the agribusiness sector in Brazil on sustainability initiatives.

Overall, organisations in both New Zealand and Brazil have reported very positive outcomes achieved with ongoing collaborative partnerships. They have also revealed that engaging with stakeholders is a learning process, which requires partnering organisations to develop consistent interfaces among themselves. Moreover, organisations observed that sharing responsibilities and listening to each others’ perspectives could be beneficial, not only to individual organisation but, to society at large. Beside the findings that correspond with the literature review, this topic also revealed management experiences and insights that might benefit other organisations when analysing partnering issues.

4.4.4 Supply Chain Management Strategy and Sustainability Goals

The three pillars of sustainability are clearly inter-connected. In the present study the topic supply chain management (SCM) was chosen to be analysed under the social pillar of
sustainability due to its social implications, even though environmental and economic implications of SCM were discussed as well. This topic’s aim was to analyse whether the participating organisations were implementing sustainability guidelines not only to be followed by their suppliers, but also goals to be achieved in collaborative initiatives with their suppliers. As previously examined, some interviewed organisations showed significant collaborative efforts in partnerships with their strategic suppliers. However, this part of the findings’ discussion focuses specifically on supply chain management initiatives employed by organisations. The main findings are summarised in Table 4.11:

Table 4.11: Supply Chain Management Strategy and Sustainability Goals

<table>
<thead>
<tr>
<th></th>
<th>New Zealand</th>
<th>Brazil</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Suppliers are assessed on many aspects, and 85% of the score is based on sustainability standards they need to meet (e.g. codes of conduct, innovative solutions, and green technologies). Supply chain management is one of the best practices of the organisations, and it is well regarded locally and regionally.</td>
<td>Suppliers are assessed according to SA 8000 standards (Social Accountability 8000) that analyse the human rights, working conditions and other social aspects related to workers.</td>
</tr>
<tr>
<td>B1</td>
<td>Suppliers have to provide sustainability information (in the Request for Proposal RFP forms) such as carbon emissions, sustainability initiatives undertaken, materials used, and employees’ ethical compliance.</td>
<td>Suppliers are required to present sound environmental, social and ethical standards. Suppliers have to match the best practices and standards adopted by the relative market sector. Suppliers are audited by the organisation and external auditors focused on supplier compliance.</td>
</tr>
<tr>
<td>C1</td>
<td>The main suppliers are members of the same organisation but are from other plants and countries. Thus, they are included in the global corporate guideline to be met by suppliers. The organisation focuses on suppliers that present the most resource effective solutions, innovative materials and products.</td>
<td>Suppliers are assessed on their environmental and social aspects. They are seen as business partners, so the main focus is to develop their capabilities to meet sustainability standards aimed at by both parties, and deliver high quality materials and products.</td>
</tr>
<tr>
<td>D1</td>
<td>Suppliers have to meet very strict requirements related to environmental management standards and codes of conduct. Environmental certifications are required, and they have to reach minimum scores concerning their corporate sustainability practices.</td>
<td>Suppliers have to meet governmental procurement guidelines followed by all the public organisations. Suppliers who present evidence of environmentally friendly and socially responsible practices are preferable, and evaluated more highly in the procurement policy.</td>
</tr>
<tr>
<td>E1</td>
<td>The organisation focuses on local and community suppliers which follow local cultural and economic habits and meet social demands.</td>
<td>There are rules that cover mainly legal conformity and local partners and producers are the first choice (when they also have sound environmental and social practices).</td>
</tr>
</tbody>
</table>
Once again organisations interviewed in New Zealand and Brazil presented almost identical outlook on the management practices implemented, even though different levels of maturity of such practices were identified comparing one organisation to another. All the organisations reported SCM practices aiming to address sustainability concerns, such as analysing the environmental and social impacts of their services/products’ value chain related. The concerns around taking into account issues of the entire value chain are similar to the literature. It regards how organisations need to focus on their value chain in order to remain competitive in the market (e.g. Epstein, 2008; Kaplinsky & Morris, 2001; Linton et al., 2007; Porter & Kramer, 2006; Seuring et al., 2008). SCM practices also related to issues such as “product life cycle management”, innovation”, and “resource management”.

Organisation B2 employed strict auditing cycles to analyse how their suppliers are complying with targets regarding environmental sustainability and health standards in their plants. They also pointed out collaborative governance effort with suppliers and other actors related to resource management (e.g. human and materials resources). Furthermore, B2 described how it is pro-actively employing initiatives in order to manage their products’ outputs: “we implemented product life cycle efforts related to managing products disposal, and voluntary collection and recycling services with local communities and recycling stations in Brazil” (Organisation B2). This is similar to Seuring et al.’s (2008) arguments that “organisations are now held responsible for the environmental and social performance of their suppliers and partners. These pressures are derived from a number of internal and external sources, including employees and management, socially aware organisations, communities, governments and nongovernmental organisations” (Seuring et al., 2008, p.1).

Collaborative Supply Chain Management
Organisations highlighted relevant collaborative initiatives concerning their interfaces with suppliers, aiming to develop strategic partnerships and achieve operational synergy gains avoiding value chain issues. As an example, organisation C2 revealed how it was developing their suppliers’ capabilities and also benefiting from such interaction. C2 emphasised the strategic intention of cooperating with suppliers:

Engaging with suppliers is a fantastic initiative, and suppliers are valuing the fact that our organisation is integrating them into the sustainability debate. This is a very positive interface from which both sides are being benefited operationally and economically. We also have been preparing suppliers to meet our sustainability policies and guidelines they will have to comply with in the short term, so our focus is to develop our suppliers’ capabilities and remain as our business partners in the long run. This way we jointly identify market opportunities, and also continuously enhance the quality of our products (Organisation C2).

On the same note, organisation B2 reported another perspective concerning how it is employing collaborative actions into SCM issues of both sides of its value chain (inputs and outputs), as the organisation is a buyer on one side of the chain, and on the other side, it is a seller. According to B2:

Our SCM focus is to develop the capabilities and efficiency of our suppliers, so we work on collaborative bases with them to assure resource management effectiveness, employees’ health and safety standards. Also we have collaborative dialogue with the main buyers to whom we supply our solutions in order to develop consciousness
consumption standards and solutions to be presented to final customers, which also add commercial value to both partnering sides (Organisation B2).

These practices examined relate to Lambert and Cooper’s (2001) arguments that individual businesses no longer compete as solely autonomous entities, but rather as supply chains, which demand well structured strategic alliances (Stock & Lambert, 2001). Taking into account the insights examined regarding SCM initiatives and other related findings, a hybrid illustration concerning the collaboration of organisations, suppliers and retailers/buyers follows (see Figure 4.5):

Figure 4.5: Supply Chain Management - Value Chain Perspective
Organisations E1 and D2 reported how integrating supply chain management into extended sustainability goals is also relevant to broader sustainability concerns, such as integrating local communities into sustainable supply chain initiatives. According to E1: “

We seek for motivating local suppliers and communities to develop innovative solutions that will empower them to produce locally, and not import from somewhere else. So we focus on analysing how our social and environmental programmes are to be economically sustainable and motivate sustainability actions in the community level (Organisation E1).

Another SCM practice grounded on strong social sustainability concerns was presented by organisation D2, which revealed that:

The government is motivating public organisations to develop sustainability initiatives with benchmark penitentiaries that developed relevant integrative social initiatives, such as those where prisoners build office furniture. While buying from these social projects, we assure that many prisoners are using their time to work and learn a profession, and be productive and useful for society as a whole. However, we only buy their products accordingly to their cost, environmental, and quality standards, so they need to constantly improve and focus efforts on being competitive, as any supplier needs to be (Organisation D2).

Altogether, organisations revealed that SCM management initiatives were implemented in order to monitor and avoid operational and reputational risks, anticipate regulations, develop innovative solutions, and attain operational synergies with partners that ultimately result in enhanced financial returns. Surprisingly, all the organisations maintained that they
still needed to improve their supply chain management practices. They affirmed that SCM practices can be better integrated into sustainability concerns and the strategic management guidelines of the organisations. By continuously improving their SCM practices, organisations sought to enhance reputational management, improve synergies of commercial contracts, as well as improve operational interfaces with strategic partnering suppliers.

4.4.5 Participation of Employees on Sustainability Initiatives

Organisations were asked how employees (internal stakeholders) were being integrated into sustainability efforts of the organisations. The aim of introducing this topic was to analyse how the participating organisations were involving their employees in corporate sustainability guidelines, and also how they were motivating their staff to achieve sustainability targets. The main comparative findings are shown in Table 4.12:
Chapter 4  Findings and Discussion

As an example, organisation B1 in New Zealand reported how employees were involved in debate, and many positive innovative ideas can be developed by employees in different areas. That employee engagement with sustainability initiatives is supported by the freshness of this toward greener practices. These are in accordance with Werbach’s (2009) assertions sustainability projects was facilitated by the positive approach of the sustainability debate where corporate sustainability objectives were commonly sought by the entire organisation.

Employees are encouraged to present innovative ideas to their managers. Employees are assessed in terms of their personal sustainability behaviours and participation in their communities (e.g. external volunteer programs). Internal blogs and magazines dedicated to involving employees in sustainability issues and initiatives developed by the organisation.

All employees are motivated to provide relevant ideas toward resource optimisation initiatives. There are internal projects dedicated to involve employees in sustainability thinking and innovation initiatives.

Internal campaigns focused on motivating employees (through prizes) to participate in resource optimisation initiatives, provide suggestions and ideas that may help enhance the organisation’s sustainability projects and achievements.

There is an internal group which is focused on mapping and implementing sustainability initiatives related to office materials and practices. All staff members are motivated to participate in such initiatives and provide insights into a more cost-effective and a greener organisation.

Table 4.12: Participation of Employees on Sustainability Initiatives

<table>
<thead>
<tr>
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<th>New Zealand</th>
<th>Brazil</th>
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<tr>
<td><strong>A1</strong></td>
<td>All employees are invited to contribute ideas toward sustainability improvements during the ‘corporate strategy reflection’ periodical cycles. The leader of each area is responsible for consolidating the sustainability insights suggested by each area. Internal sustainability publications (e.g. magazines) include initiatives developed by employees. External volunteer programs are also employed by the organisation, and employees from all levels participate.</td>
<td>All the employees are motivated to collaborate with sustainability ideas that can add value to the organisation. There is also e-learning training that provides information concerning sustainability drivers and how employees can help the organisation to create more value regarding its economic, social and environmental aspects. There are also internal sustainability publications and employees are inspired to participate in external volunteer projects.</td>
</tr>
<tr>
<td><strong>B1</strong></td>
<td>Employees are encouraged to present innovative ideas to their managers. Employees are assessed in terms of their personal sustainability behaviours and participation in their communities (e.g. external volunteer programs). Internal blogs and magazines dedicated to involving employees in sustainability issues and initiatives developed by the organisation.</td>
<td>Sustainability is a strategic driver and all the employees are well informed and assessed by their individual actions toward sustainability initiatives. Employees’ performance bonuses consider their sustainability efforts. Corporate communication channels publish sustainability ideas to help employees to behave more cost effectively, and at the same time achieve sustainability goals.</td>
</tr>
<tr>
<td><strong>C1</strong></td>
<td>All employees are motivated to provide relevant ideas toward resource optimisation initiatives. There are internal projects dedicated to involve employees in sustainability thinking and innovation initiatives.</td>
<td>The sustainability committee directly and indirectly involves employees of all the areas, as key managers of each department present sustainability opportunities and ideas observed by their teams.</td>
</tr>
<tr>
<td><strong>D1</strong></td>
<td>Internal campaigns focused on motivating employees (through prizes) to participate in resource optimisation initiatives, provide suggestions and ideas that may help enhance the organisation’s sustainability projects and achievements.</td>
<td>Yes, all the employees are assessed by their targets in adherence to the institution’s strategic goals.</td>
</tr>
<tr>
<td><strong>E1</strong></td>
<td>There is an internal group which is focused on mapping and implementing sustainability initiatives related to office materials and practices. All staff members are motivated to participate in such initiatives and provide insights into a more cost-effective and a greener organisation.</td>
<td>This is innovative in the public sector in Brazil and creates a strong sense of responsibility and efficiency toward sustainability goals.</td>
</tr>
</tbody>
</table>

All organisations in New Zealand and in Brazil claimed that they were integrating their employees through appealing internal initiatives that aimed to provoke a sense of belonging, where corporate sustainability objectives were commonly sought by the entire organisation. Furthermore, organisations indicated that the involvement of employees in strategic sustainability projects was facilitated by the positive approach of the sustainability debate toward greener practices. These are in accordance with Werbach’s (2009) assertions that employee engagement with sustainability initiatives is supported by the freshness of this debate, and many positive innovative ideas can be developed by employees in different areas.

As an example, organisation B1 in New Zealand reported how employees were involved in
sustainability initiatives, and the innovative outcomes achieved. It outlined that: “employees are encouraged to present innovative ideas toward sustainability goals to their managers. Employees are involved in a way that creates a feeling that they are actually contributing to the organisation's sustainability initiatives and economic bottom-line” (Organisation B1).

Similarly, organisation D1 reported a point of view concerning how it motivated employees to engage in sustainability initiatives through a participative approach. D1 described that:

We don’t want employees to come up with sustainability solutions necessarily. We make it very clear to them, as this is really important to us that they understand it. People tend to hold back if they don’t know what to do about it, so we focus on telling employees to show us what is wrong in their operational routines. If they give us an innovative solution as well, it is great. Otherwise, they need to feel like they can talk and communicate internally what can be improved, so we can interactively develop solutions and enhance the organisation’s bottom-line (Organisation D1).

Equally, company A2 identified the need for sustainability thinking to be well assimilated by employees in order to generate effective participation of the entire organisation toward corporate goals. In addition, A2 reported a pertinent perspective concerning how organisations should effectively involve employees based on the learning process it went through:

Employees have to understand what sustainability means, and how the organisation they work for should address current issues they easily see on their daily routines. On clearly understanding what sustainability means to the organisation, employees can more
assertively identify improvement opportunities on their daily routines, such as cutting redundant activities, and consequently add more value to the organisation (Organisation A2).

Similarly, organisation C1 in New Zealand reported a practice of engaging with employees effectively into corporate sustainability goals in order to maximise their participation on sustainability initiatives. C1 described that:

First our organisation mapped the employees’ level of understanding about sustainability issues and how they should be focused by the organisation, which indicated that employees wanted to help the organisation to be more sustainable, but did not know how to do that. So we invited a senior manager from the headquarters to present an overview about how sustainability goals could be achieved through changing small habits for improved resource management results. Such initiative helped the organisation to integrate employees on the corporate sustainability guidelines by showing practical sustainability solutions and opening doors for employees to develop innovative ideas, such as many ongoing initiatives we have currently” (Organisation C1).

Another example of practice towards integrating employees into sustainability projects was presented by company B2 in Brazil. This company found an interesting way to engage their employees in sustainability efforts, arguing that: “employees from different departments are invited to analyse sustainability initiatives before they are actually implemented” (Organisation B2). Thus, the organisation instigates their employees from different areas to critically analyse how sustainability-related campaigns meet their employees’ perceptions
of corporate sustainability target. By so doing, they could suggest improvements and also validate internal campaigns and projects.

In a nutshell, all organisations interviewed in both countries upheld that they used internal channels of communication, such as newspapers, blogs, staff committees, and panels dedicated to engaging employees in sustainability related initiatives. Other ongoing initiatives included running projects, and providing general information, such as educational insights concerning sustainability goals.

4.4.6 Change Management towards Sustainability Culture

As examined in the previous sections, organisations were going through cultural change processes toward implementing solid corporate sustainability targets and projects. Consequently, organisations were asked whether they had implemented change management projects aimed at improving executives’ knowledge about sustainability challenges. They were also asked how the organisation strategically addressed economic, social, and environmental challenges.

The main purpose for this inquiry was to assess: (a) how organisations were sensitising their managers with sustainability concerns; (b) how managers were subsequently motivating the employees; and (c) how the organisation as a whole was addressing current market demands in an innovative way. The main findings from this inquiry are summarised in Table 4.13:
Organisations in New Zealand and in Brazil noted similar management practices concerning cultural changes toward a consistent sustainability culture reflected in their strategic and operational guidelines. This is akin to Nah et al.’s (2001) arguments that an organisational culture with shared values and common aims is conducive to success, facilitating the achievement of a strong corporate identity towards strategic goals (Nah et al., 2001).

Furthermore, organisations remarked that they were implementing specific trainings and change management projects dedicated to equipping their executives with the ability to spontaneously respond to market trends. Also, they commented on providing opportunities...
associated with sustainability issues in order for organisations to efficiently address market demands.

Such learning process reported by the interviewed companies is in relation to Tew’s (2005), and Hopkins and McKeown’s (2002) perspectives concerning the need for strategic transformation such as culture and change management in organisations toward sustainability attainments. These findings are similar to the literature, which found that process of organisational learning is a natural path for companies to respond to internal and external changes in order to adapt its operational realities to market trends and competitive forces (Argyris & Schon, 1978). Furthermore, the acquisition and sharing of information is crucial in the organisational learning process (Miller, 1996) and the ability of responding faster than other market players is a sustainable competitive advantage of a company (De Geus, 1988).

Executives were not the only ones said to be focused on change management related initiatives. Staff at all organisational levels were involved, as a way of achieving cultural alignment among employees. This is similar to Siebenhüner and Arnold’s (2007) assertions concerning how the process of organisational learning is crucial for the successful implementation of sustainability thinking in organisations. As an example, organisation B1 in New Zealand revealed how sustainability thinking and related strategic goals evolved in its corporate culture, arguing that:

Sustainability has just been part of this company but it has been framed differently and it has evolved from climate change to sustainability. In the beginning, senior managers
could not understand that implementing sustainability initiatives was more than planting
trees and avoiding carbon emissions. They needed to understand sustainability
opportunities that could help the organisation to economically prosper in a greener way,
and sustainability goals evolved naturally from climate change concerns to broader
strategic sustainability efforts” (Organisation B1).

In the same vein, organisation C2 indicated that the main challenges in organisations in
general were still related to changing the paradigm of current management frameworks to
the strategic sustainability focus. Thus, professionals and departments have to develop their
natural will to make management and cultural changes toward sustainability goals. C2
described that:

Organisations are interested in implementing sustainability initiatives, and at the same
time they still do not know what they should actually do. So I believe there is a paradigm
changing in all organisations, leading them to insert the sustainability concerns into the
organisational reality, to the business itself, as the main challenge is how to integrate
efforts and how to lead towards organisational change (Organisation C2).

Similarly, company B2 reported how change cultural habits and management practices of
an organisation were challenging processes to sustainability goals. In addition, organisation
B2 revealed a significant perspective concerning how current management paradigms must
be changed in order for sustainability to be really understood and operationally addressed.
B2 stated that:
The understanding of what sustainability means to the business or the organisation is one of the major challenges concerning the implementation of sustainability drivers in the market, so it is needed to change the way of thinking of many executives that are still in the 80s and 90s mentality of philanthropy. I believe that the majority of the main managers need to be well trained to implement sustainability thinking into their business routines. We have important initiatives related to trainings and leadership improvements with important universities in Brazil so that our main managers can get updated on the sustainability debate. This is a cultural change and it is also intrinsically related to the quality processes (Organisation B2).

Concerning organisational learning initiatives toward sustainability thinking, organisation D1 revealed that they were employing practices such as gathering together different managers into sustainability-related workshops and committees. Such practices improved the adherence between different areas and motivated them to join forces to address corporate bottom line targets. These practices highlighted synergy opportunities, and created a mobilisation culture in the organisation that facilitated the interaction and knowledge exchange between areas and also employees. Thus, change management improvements were achieved. D1 reported that:

Change management is part of the nature of what we do. We offer workshops, trainings on corporate sustainability, we organise presentations and committees with different groups and managers. And what we focus most on is training our people to identify what might be wrong, and how our operations could be more sustainable according to our corporate sustainability policy and guidelines (Organisation D1).
The insights provided by organisation D1 are similar to Doppelt’s (2003) perspectives on how education, trainings and encouragement from senior executives are required for employees to absorb the sustainability thinking. Similarly, organisation A1 revealed leadership change projects focused on enhancing all employees’ attitudes toward corporate sustainability goals, leading them to be proactively responsible for their own professional success, and the organisation’s corporate sustainability goals. Organisation A1 described that:

There are a lot of ongoing initiatives concerning leadership training in order to improve the ability of the organisation to build leaders, so that people will actually understand how to interpret sustainability goals and address them. The issue around change management in the company is that it’s hard to articulate so many initiatives going on. There is lot of work on culture developing, aiming to accountability, responsibility, we want to have people working and being responsible for their own career and success. The ability to adapt is necessary to the organisation. The cultural side of the organisation is very important, and there is a lot of work going on to focus the organisations strategy focus on what we want to be in the future (Organisation A1).

Similarly, company A2 revealed that change management projects are relevant and even more effective to the organisation’s bottom line when the employees are not only exposed to trainings but also involved in actual sustainability practical initiatives. According to A2 employees need to be trained on sustainability concerns, and also be able to identify daily opportunities to be more effective:
It is not enough for employees to participate on trainings and self study programs to understand what sustainability means to the organisation. Employees need to understand how their daily routines can be impacted by sustainability concerns and demands, so that they can develop business solutions and services that can truly add value to customers and to the organisation consequently (Organisation A2).

Altogether, organisations reported significant management practices concerning change management efforts. Companies from both countries were recycling their management culture in order to learn how to effectively address sustainability challenges from economic, environmental and social perspectives. They were searching for internal enhanced interfaces within different areas in order to achieve process synergies and knowledge exchange, on what could be understood as internal collaborative partnerships. Organisations were also aiming at absorbing and exchanging management knowledge with external actors, through collaborative partners with other organisations that have adherent sustainability goals.

**4.5 RESEARCH FRAMEWORK REVISITED**

This section revisits the research framework of this study, considering the findings discussed in this chapter. The initial research framework was used to identify relevant issues regarding the sustainable development debate and its links with governance concerns, and related management practices and guidelines of organisations. In addition, the research framework was used to identify the initial codes of this investigation.
Taking into account the findings discussed in this chapter, the research framework is updated, incorporating the management practices, insights and collaborative governance evidence provided by the findings of this study. The research framework revisited (see Figure 4.6) connects the three sectors of society in the macro global market. It also indicates that private, public, and civil society organisations increasingly develop collaborative initiatives toward common sustainability goals. New factors are incorporated in the drivers of the research framework when compared with the initial framework presented in the Introduction, taking into account valuable perspectives resulting from this investigation. Such updates are further discussed in detail, in the future research possibilities section presented in the Chapter Five.

The driver *sustainable development debate* comprises the three pillars of sustainable development (economic, environmental and social issues) and other factors, such as economic standards issues (e.g. GDP, growth x development, externalities), new customer habits and trends (e.g. conscious consumption, green products). The driver *governance issues* involves factors such as corporate governance, collaborative governance, strategic partnerships, sustainability governance (e.g. multi-stakeholder committees and panels) and sustainability certification and standards sought by organisations. The driver *corporate strategic guidelines* incorporates factors such as innovation (e.g. effective and green solutions), resource management initiatives (e.g. supply chain and value chain management, product life cycle management, business process management, environmental management systems), brand and reputation management, risk management, and change management and knowledge exchange. Finally, the *ethical considerations* factor is located centrally in
the research framework, indicating that sustainable development stems from ethical behaviour regarding economic, environmental and social aspects of the global society.

**Figure 4.6: Research Framework Revisited**

4.6 CONCLUSION

In conclusion, this chapter has presented the main findings collated from interviews with organisations in both New Zealand and Brazil. It has also discussed the relevance of the
findings in a management context, relating them back to the literature. Organisations in both countries reported similar perspectives concerning sustainability demands from both the market and strategic stakeholders. Thus, the benchmark organisations reported similar management practices and tools employed towards addressing sustainability targets. Organisations in New Zealand reported a formal arrangement of partnership managers, dedicated to enhancing the relationship between the organisation and strategic communities. However, organisations in both countries revealed similar and relevant initiatives focused on developing long-term collaborative partnerships with different sectors. Operational and reputational gains were commonly reported by the participating organisations when examining the most beneficial outcomes from collaborative efforts with other organisations, and even within the same organisation through improved interfaces between distinct departments. Finally, the research framework has been revisited. It now incorporates the main findings discussed in this chapter as strategic drivers associated with the sustainable development debate, governance issues, and corporate strategic guidelines of companies. In addition, the research framework encompasses future research directions that can be taken from the knowledge obtained in this study.
CHAPTER 5

CONCLUSIONS, IMPLICATIONS, LIMITATIONS, AND DIRECTIONS FOR FUTURE RESEARCH

In this study, an attempt has been made to consider how relevant organisations in New Zealand and in Brazil are addressing sustainability concerns through implementing management practices and collaborative governance initiatives with other companies and within their organisational environment. This attempt intended to analyse if such sustainability and collaborative practices implemented by organisations could address economic, environmental, and social challenges of the 21st century. Two questions guided this study:

1. How do organisations that operate in a developed country, such as New Zealand, address sustainability concerns in comparison with organisations that operate in a developing country, such as Brazil?

2. Can the collaborative governance between organisations support economic, environmental, and social sustainable development goals?

Companies from both countries revealed similar management practices employed to address their internal and external sustainability concerns. They also reported similar perceived benefits and limitations during collaboration with different actors. Market pressures toward greener and more responsible operations equally affected organisations in
both countries, without differentiation in operation between a developed country such as New Zealand, and an emerging country such as Brazil. Competitive forces are demanding organisations to respond effectively to such market pressures in order to guarantee their right to operate in the market (Day & Arnold, 1998). Thus, companies increasingly understand sustainability challenges and demands as opportunities to deliver more value to society and benefit financially from it (Eweje, 2009; Porter & Van der Linde, 1995).

Organisations involved in partnerships are naturally evolving from philanthropic actions toward implementing deeper collaborative governance efforts by engaging with different actors from different sectors. Organisations are increasingly improving their communication channels toward enhanced dialogue and collaboration with internal and external stakeholders, which is also a demand from key shareholders and executives. Such improvements are needed in order to implement beneficial interfaces with other organisations and sectors of society, and also enhance the communication within departments. To this end, organisations are achieving operational synergy gains, reducing resource usage, aligning different departments’ operations, and partnering with external stakeholders toward mutually beneficial goals. Anticipating market demands and trends are also valuable outcomes of collaborative governance practices, as new perspectives from different actors are being incorporated into individual companies’ strategic planning.

In order to maximise the gains of collaborative alliances with external stakeholders, organisations are implementing formal sustainability governance structures. In addition they are involving many external stakeholders, such as NGOs, labour unions, suppliers, and so forth. Organisations are developing collaborative panels and committees in dialogue
forums. This is an effectively way of engaging with a variety of stakeholders and sectors, which opens debating forum on different perspectives. Internal stakeholders and employees are also becoming increasingly involved in sustainability forums. Consequently, organisations benefit from validating sustainability targets and initiatives with inputs provided by strategic stakeholders, while improving their strategic guidelines regarding demands of communities in which they operate. In multi-stakeholder boards, different actors can collaboratively indicate management gaps, and at the same time, present valuable opportunities for partnering actors to evolve towards sustainable operations. Especially in New Zealand, organisations are even implementing formal positions of partnerships and community engagement managers to increase the constructive interface between organisation and strategic civil society stakeholders.

Furthermore, organisations are establishing relevant collaborations with academia, as academics are able to present valuable knowledge toward practical and innovative solutions that many consulting firms are yet unable to offer. Organisations are also following global standards for effectively engaging with strategic stakeholders and maximising the benefits from such integration. Altogether, they are developing sustainability governance structures, and such structures are reporting to top company executives, such as the Chief Financial Officer (CFO) and the Chief Executive Officer (CEO). The purpose for this is to assure coherence between sustainability efforts and the economic bottom-line of organisations.

Supply chain management (SCM) is the main area where collaborative governance initiatives are being undertaken, and can be more apparently observed. SCM is also the clearest management practice to observe social sustainability initiatives. These are mainly
evidenced by health and safety standards developed collaboratively by partnering organisations. Moreover, both sides (organisations and their suppliers) benefit from enhanced management integration, improved risk management outcomes, and consequently, reputational benefits. In parallel, they exchange strategic market and managerial knowledge through innovative solutions and institutional alliances. Organisations are focusing on developing suppliers’ capabilities in order to jointly add more value to customers, and present greener and more responsible operations for society. Moreover, different sectors are debating how to maximise their capabilities of managing critical steps of their value chains, anticipating market trends and demands, by collaborating with public and civil society organisations. Ultimately value chain concerns also result on enhanced environmental management practices in partnership with other organisations and sectors.

The quality of communication and adherence between partnering actors appear to be at its infant stages, as many interests and preconceived ideas are still operational boundaries within organisations and partnering actors. Corporate knowledge and understanding on how sustainability concerns are crucial for long-term viability of organisations, and innovative solutions, are key-factors for organisations to implement effective sustainability efforts. Many organisations and executives still lack the understanding that sustainability concerns are intrinsically connected to the financial bottom-line. This is a changing management paradigm, and many organisations are beginning to recognise the need to incorporate sustainability issues into their strategies (Lubin & Esty, 2010; Siebenhüner & Arnold, 2007). Thus, organisations are starting to focus on change management and learning initiatives in order to create corporate sustainability culture, and strategic guidelines that incorporate sustainability concerns into operational routines. Furthermore,
The results of this study also identified operational limitations concerning such collaborative alliances. Organisations lack enough human resources to effectively collect, analyse and implement outcomes achieved through multi-stakeholder committees, and internal initiatives presented by their employees. Moreover, partnering organisations discover issues while balancing expectations of stakeholders, and their individual interests and operational capabilities. Furthermore, there are clear internal limitations of organisations concerning how their executives and general staff understand the incorporation of sustainability issues into their organisations’ strategic planning and routine operations. This indicates that organisations need to go through learning processes as strategic transformation toward sustainability (Siebenhüner & Arnold, 2007; Tew, 2005).

Altogether, there are structural challenges for organisations of all sectors to address environmental, social and economic concerns through the sustainable development debate, which is a system level concept that cannot be addressed by individual organisations (Milne et al., 2004). The concept of sustainable development can be subjective, directing different sectors of society to interpret and employ it in a way that better suits their perspectives (Penny et al., 2001). Good intentions and economic opportunities drive organisations to implement sustainability initiatives. However, the world’s sustainability challenges might not be met by such initiatives of few leading organisations, as they appear to be superficial in many aspects, especially when analysing initiatives regarding social sustainability. While measuring sustainability initiatives on economic and environmental issues can tangibly be analysed, it is difficult to properly address and measure the social pillar of sustainability, as this study has identified. Meeting “the needs of the present without compromising the ability of future generations to meet their own needs”
(Brundtland, 1987) demands more extensive - and collaborative - actions of different sectors of society, and also changing of consuming habits of global society. Furthermore, a possible concise move towards sustainable development concerns the main economic indicator used in the world, the Gross Domestic Product (GDP). The GDP standard needs to be remodelled in order to incorporate a comprehensive approach integrating the external costs of natural environment impacts, and the social and economic goals of countries in the global economy perspective (Welford, 1998).

The main agent of unsustainable practices in the world seems to regard the habits of consumers around the world. They need to understand how their consuming habits are linked to a number of processes that connect different places in the world. Appreciating sustainable ways of life and products should be the main focus of society, which needs to rethink its consuming habits. Accordingly, society needs to take into account the use of natural and human resources, generation of wastes that are intrinsically related to products and services it uses daily.

5.1 IMPLICATIONS FOR MANAGEMENT

Organisations across all sectors of society need to comprehend sustainability concerns and the opportunities they present. The global market requires organisations to be sustainably competitive in order to remain in the game. Organisations in New Zealand and Brazil presented similar management practices dedicated to achieving sustainability goals. As leading organisations in their countries, they naturally motivate other organisations to follow their best management practices and learn from them how to engage effectively with stakeholders through collaborative efforts. The results of this study might also present
important insights for organisations to implement sustainability projects aiming to map improvement opportunities related to strategic and operational concerns. Thus, sector organisations across the globe might likely benefit from the research findings of this present study, which offers the following considerations:

**Collaboration with Stakeholders**

The findings of this study indicated how collaborative efforts within and between organisations is an increasing trend in which all actors involved perceive benefits. Like any other management practice adopted by organisations, this study also has its limitations. In terms of internal collaborations between departments of an organisation, operational synergy gains seem to be achieved by improving the communication among employees and different areas. Moreover, alignment of projects’ objectives and alignment of expectation among employees of different areas is also a gain to be attained. This collaborative approach enhances internal communications, cutting down redundant activities and consequently leaning organisational processes, indicating a clear link between collaborative platforms and business process enhancements.

Collaborative partnerships with other organisations is also a necessary path to be explored, as companies could obtain knowledge exchange gains, understand market demands from different perspectives, and also be able to effectively anticipate them. Furthermore, organisations can also have operational synergy gains by employing more resources (human, financial, technological) in a project than it could possibly engage in individually. Moreover, collaborative partnerships could lower the distance between different sectors of society. Thus, preconceptions, critiques and misunderstandings could be addressed in a
more constructive way, as open channels may improve the dialogue between managers of different organisations and the understanding of different perspectives might even present business opportunities. The use of well structured committees and panels might improve the achievements of such collaborative interfaces by offering face to face debates that result in clear alignment of possible conflicting perspectives.

**SCM, CRM, BPM, Risk Management and Brand & Reputation Management**

The results of this study also indicated how different management practices are well integrated and can jointly be employed in the sustainability management process. These practices are: Supply Chain Management (SCM), Customer Relationship Management (CRM) towards enhanced customer satisfaction, Business Process Management (BPM), Risk Management; and Brand & Reputation management. Customers and NGOs increasingly analyse how organisations operate locally and abroad. They observe how organisations address environmental and social issues while they achieve economic profitability worldwide. Poor governance schemes can result in risky operations through which a company’s image may suffer major impacts. Consequently, this can also affect economic results. Customers also require high level services and products, and so attaining high satisfaction levels is mandatory for leading organisations. Building effective collaborative interfaces with suppliers and other stakeholders (including customers and employees) improve the way organisations forecast new market demands, and the kind of innovative solutions needed in order to develop internally and cooperatively with their suppliers.
Business process management is a key factor for improving interfaces between different areas and partnering organisations, breaking invisible operational walls, and delivering improved communication and leaner business routines. Ultimately business process management improve the way organisations manage its operational resources, avoiding redundant activities and consequently enhance business results.

**Change Management**

Organisations need to improve the way they communicate with their internal and external stakeholders. Continuous learning and sharing knowledge within the organisation is a key-factor for leading companies to remain effective and competitive in the market. Thus, organisations need to update their current knowledge with upcoming market trends and demands, as managerial knowledge of employees needs to be constantly refined. Organisations also need to focus on adjusting their cultural perspectives toward sustainability goals and incorporate such targets into their strategic planning. Being a ‘sustainable organisation’ has become more than a simple competitive stamp, as customers and other sectors of society have clear demands and expectations concerning how organisations operate in the marketplace. From this point of view, organisations need to incorporate internal and external forces to effectively analyse present and future projections, that is, what they are doing and how they want to be in the future. Coherent alignments between headquarters expectations and local offices realities need to be well addressed by organisations that operate internationally. This allows organisations to have common corporate strategic guidelines, which can also be flexible enough for local offices to adapt their operational realities and address local cultural, environmental and social issues along with improved economic outcomes.
**NGOs and Policymakers**

NGOs practitioners and policymakers could benefit by identifying institutional gaps that demand effective action in order to enhance the dynamism of economic platforms which might benefit their economic regional development. Thus, governments and civil society organisations need to improve their management responsiveness to global market trends and understand collaboration with other sectors as a two-way dialogue and action driver.

**5.2 LIMITATIONS OF THE STUDY**

A limitation of the present study is its generalisability. This investigation considered the New Zealand gross domestic product (GDP) levels from 2009 to define the sampling categories. Thus, applying the knowledge produced with this study might not be ideal for all types of organisations in different countries. This study was based on the assumption that management practices are more related to competitive forces of the market and not necessarily to cultural factors. Thus, cultural differences of New Zealand and Brazil were not analysed in this study.

This study analysed and compared management practices and collaborative partnerships implemented by organisations in New Zealand and in Brazil concerning their sustainability goals. However, no benefit or limitation was measured. As a consequence, the knowledge offered by the interviewed organisations need to be understood as the reality of their true real management practices. Furthermore, future research could also look into specific factors that affect partnering organisations of a specific collaborative governance body. The elaboration of comparative analyses concerning the relationships between partnering
organisations in detail could involve more reliable results concerning the benefits and limitations of collaborative platforms. Directions for future research are discussed next.

5.3 DIRECTIONS FOR FUTURE RESEARCH

Organisations are diverse, individual, and complex entities that have their own realities and propositions for value creation. As any research study, the present project could not analyse and encompass all the factors organisations should consider toward implementing effective management practices and collaborative platforms toward sustainability goals. Future research is needed to address the gaps that were not covered in this study.

From the perspective of strategic management drivers, further research could benefit academics and management professionals by presenting an ideal balanced scorecard to measure sustainability achievements related to the bottom-line economic results of organisations. Moreover, future research could focus on developing key performance indicators to measure accurately risk management attainments resulting from sustainability initiatives. Subsequently, organisations could effectively measure the consistency between risk management gains and sustainability efforts.

Concerning how the sustainable development debate evolves globally, further research on the implications of the sustainability concerns in the management realities of organisations is needed. Organisations might benefit from it by identifying how they should get updated on new sustainability demands, thus developing effective strategic guidelines towards meeting upcoming sustainability trends.
From the perspective of the effective measurement of value creation through sustainability efforts, organisations could benefit from further research by presenting specific market benchmarks and key performance indicators concerning brand and reputation outcomes. A new research study on specific measurement for measuring value added to a company through their collaborative efforts could also benefit organisations’ prosperity.

A further analysis on how sustainability governance structures are evolving in different sector organisations is needed in order to measure the pace at which those organisations are evolving. This could consequently represent more effective interactions between organisations. Moreover, future research could help analyse the functioning of a specific collaborative partnership and elucidate on how organisations should focus on prompt management practices that are closely related to their operational scenario. Further examination on specific collaborative partnerships could indicate critical and practical constraints and benefits to partnering organisations. This approach could even determine the effectiveness of multi-stakeholder panels and committees, and also indicate their valuable best practices.

Concerning ethical conduct issues, future research could analyse how ethical codes of conduct could be developed in conformity with sustainability concerns of the organisations and market demands regarding accountability frameworks.

Furthermore, future research could focus on the final steps of value chains and examine how organisations are implementing solutions toward managing their direct and indirect wastes after (e.g. cell phones, computer batteries, used water, light bulbs, etc.). As
organisations focus on supply chain in order to avoid reputational damages, the new wave of sustainability concerns will possibly be based strongly on waste management.

From the perspective of global consumption habits (conscious consumption) and their impacts on sustainability practices of organisations, further research could indicate how the final consumer preferences are reflecting on strategies of organisations toward greener, social and more environmentally responsible products.

Future research could also formulate how business process management technologies facilitate the mapping and implementation of sustainability efforts. Analysing business process management tools and dashboards (e.g. ARIS toolset) could indicate which technological tools are being adopted to effectively incorporate sustainability goals into operational routines. Business process management could design routine tasks that are in complete cohesion with strategic guidelines of the company, in the most operational end of management practices.
REFERENCES


DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research, 22*(3), 351-372.


APPENDIX A

GREENING MASSEY UNIVERSITY COMPUTER LABORATORIES AND LIBRARY

The Master in Management program motivated me to identify improvement opportunities concerning resource consumption in Massey University’s library and postgraduate laboratories (Albany campus). Currently, as at 2010, the library and postgraduate laboratories produce an enormous waste of printing paper due to its printing process, which requires one sheet of paper to be printed out along with any printed document. Consequently, paper, printer ink, and electricity are being wasted on the Albany campus, and potentially on other Massey University campuses. This implicates in unnecessary consumption of natural resources involved in the production of paper, electricity and ink (such as trees and water). In addition, Massey University spends money on such waste, which ultimately results in more expensive services for students. I developed a project which was presented to the IT Manager of Albany campus and further presented to the Palmerston North IT managers. The main slides of such proposal are presented as follows:
INTRODUCTION

ACCORDING TO REDUCE.ORG:

- Over 40% of wood pulp goes toward the production of paper world widely.

- It takes more than 1½ cup of water to make ONE SHEET of paper. (Typical soda can)

- Reducing paper use reduces greenhouse gases: 40 reams of paper is like 1.5 acres of pine forest absorbing carbon for a year.

CREATING PAPER REQUIRES A LARGE AMOUNT OF TREES, WATER, AND ENERGY!

THIS SHOULD BE REASON ENOUGH TO START SAVING PAPER!

IT IS EVEN BETTER WHEN YOU CAN REDUCE OPERATIONAL COSTS AT THE SAME TIME!
AGENDA

THE CURRENT SCENARIO – PAPER USAGE AT MASSEY’S LABORATORIES

WHAT CAN BE CHANGED

BENEFITS

OPERATIONAL IMPLICATIONS

PILOT PROJECT - ROADMAP

THE CURRENT SCENARIO – PAPER USAGE AT MASSEY’S LABORATORIES

- Currently Massey University Students print a considerable amount of documents in all the university’s laboratories and library.

- When printing a document, the system presents the current account balance status of the student, and how much he/she will be charged by printing the document required to print.

- It does not matter if the document is made of only one page. One status paper will be printed out along with the document required anyways. Such status paper is discharged by most of the students (a close observation of 30 minutes presented almost 100% discharges)
## THE CURRENT SCENARIO – PAPER USAGE – MASSEY’S STAFF

**Current Stats source:** Pharos Printing System Statistics

<table>
<thead>
<tr>
<th>Campus</th>
<th>Jobs</th>
<th>Sheets</th>
<th>Pages</th>
<th>Expenses (NZD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total since 2005</td>
<td>11,142,054</td>
<td>67,935,183</td>
<td>58,927,036</td>
<td>$269,996.60</td>
</tr>
<tr>
<td><strong>Staff</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Consumption per year</td>
<td>2,228,410.80</td>
<td>13,587,036.60</td>
<td>11,785,407.20</td>
<td>$53,999.32</td>
</tr>
</tbody>
</table>


## THE CURRENT SCENARIO – PAPER USAGE – STUDENTS’ LABORATORIES

**Current Stats source:** Pharos Printing System Statistics

<table>
<thead>
<tr>
<th>Campus</th>
<th>Jobs</th>
<th>Sheets</th>
<th>Pages</th>
<th>Amount Charged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since February 2003</td>
<td>2,976,975</td>
<td>15,052,367</td>
<td>15,086,757</td>
<td>$1,010,676.68</td>
</tr>
<tr>
<td><strong>Albany</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Consumption per year</td>
<td>425,567.86</td>
<td>2,150,338.14</td>
<td>2,155,251.00</td>
<td>$144,382.38</td>
</tr>
</tbody>
</table>

This means that 425,567.86 sheets of paper were wasted in Albany Campus per year! = 852 reams of 500 papers per year

<table>
<thead>
<tr>
<th>Campus</th>
<th>Jobs</th>
<th>Sheets</th>
<th>Pages</th>
<th>Amount Charged</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Student Labs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Since February 2003</td>
<td>9,552,840</td>
<td>41,205,904</td>
<td>40,937,970</td>
<td>$2,825,079.22</td>
</tr>
<tr>
<td><strong>All Labs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Consumption per year</td>
<td>1,364,692.43</td>
<td>5,886,557.71</td>
<td>5,848,281.43</td>
<td>$403,582.75</td>
</tr>
</tbody>
</table>

This means that 9,552,840 sheets of paper were wasted in Massey Campuses! = 2,730 reams of 500 papers
Appendices

WHAT CAN BE CHANGED – HOW?

- Understand the students’ real need for the “status papers”
- Employ a pilot project in which it could be measured the students need for the “account balance status sheet of paper”
- Every time a student needs to print a file, the Massey system would ask two options to the student:
  
  ![Image of printer notification]
  
  Would you like to have a status sheet printed along?  
  Please consider your environmental responsibility, think twice before you print or copy!
  1. No, I already know my account balance
  2. Yes

- The pilot project would be carried out through 30 consecutive days. If the number of students who required the status paper is higher than 10%, then the sheet of paper should be maintained. Below 10%, then the “status paper” should be cancelled.

BENEFITS

<table>
<thead>
<tr>
<th>Operational</th>
<th>Financial</th>
<th>Environmental</th>
<th>Reputation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labs &amp; Library employees will be less demanded</td>
<td>Relevant annual savings in paper supplies</td>
<td>Less paper consumption means less natural</td>
<td>Students will realise the green efforts</td>
</tr>
<tr>
<td>to change paper supplies in the printer machines,</td>
<td></td>
<td>resources wasting (water, trees, etc.)</td>
<td>Massey University will play a more</td>
</tr>
<tr>
<td>maximising their hour value</td>
<td></td>
<td></td>
<td>environmentally responsible role in the</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Less printer ink will be consumed</td>
<td>The saved money can be used to improve</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relevant annual savings in ink supplies</td>
<td>other areas of the campuses or merely</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>be considered operational effectiveness</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>in the financial balance.</td>
</tr>
</tbody>
</table>

THE BENEFITS ARE ALIGNED WITH THE VICE CHANCELLOR’S 2020 STRATEGY: MASSEY UNIVERSITY SHOULD BE A LEADER IN SUSTAINABILITY
Appendices

BENEFITS (Annual – excluding staff consumption of paper)

<table>
<thead>
<tr>
<th></th>
<th>Financial</th>
<th>Environmental</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALBANY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Savings</td>
<td>$ 4,300.00</td>
<td>149,000 litres of water</td>
</tr>
<tr>
<td>Ink Savings</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>FTE Savings</td>
<td>To be calculated</td>
<td>32 acres of pines</td>
</tr>
<tr>
<td><strong>ALL CAMPUSSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paper Savings</td>
<td>$ 13,650.00</td>
<td>478,000 litres of water</td>
</tr>
<tr>
<td>Ink Savings</td>
<td>To be calculated</td>
<td></td>
</tr>
<tr>
<td>FTE Savings</td>
<td>To be calculated</td>
<td>102 acres of pines</td>
</tr>
</tbody>
</table>

Annual Estimations
* Ream OfficeMax retail Price = 5.00 NZD
** 0.350 litre of water per sheet of paper
*** 40 Reams = 1.9 Acres of Pines

PROJECT ROADMAP

<table>
<thead>
<tr>
<th>Planing</th>
<th>Map IT Requirements</th>
<th>Implement Pilot Project</th>
<th>Measure Results and next steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Collect paper consumption levels in the different laboratories (and Library)</td>
<td>1. Map IT system’s constraints</td>
<td>1. Define the pilot project facility to be focused</td>
<td>1. Measure paper usage in the lab / library</td>
</tr>
<tr>
<td>2. Evaluate the percentage of status paper discharged daily</td>
<td>2. Schedule and execute IT system changes</td>
<td>2. Run tests</td>
<td>2. Identify amount of paper saved and other related benefits</td>
</tr>
<tr>
<td>3. Involve IT leaders and laboratories supervisors</td>
<td></td>
<td>3. Implement project</td>
<td>3. Identify replicability of results to other laboratories</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 week</th>
<th>1 week</th>
<th>1 week</th>
<th>2 weeks</th>
</tr>
</thead>
</table>
APPENDIX B

Letter of Approval from Human Ethics Committee - Low risk notification

10 March 2010

Marcelo Laquimia
548 Albany Highway
ALBANY

Dear Marcelo

Re: Shared Governance towards Sustainable Development

Thank you for your Low Risk Notification which was received on 8 March 2010.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

The low risk notification for this project is valid for a maximum of three years.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University’s Human Ethics Committees.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University’s Insurance Officer.

A reminder to include the following statement on all public documents:

“This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University’s Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor John O’Neill, Director (Research Ethics), telephone 06 350 5249, e-mail humanethics@massey.ac.nz”.

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University’s Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

John G O’Neill (Professor)
Chair, Human Ethics Chairs’ Committee and
Director (Research Ethics)

cc Dr Gabriel Eweje
Department of Management
Albany

Assoc Prof Tim Bentley, HoD
Department of Management
Albany