A ‘GREEN’ STRATEGY FOR TRIPLE BOTTOM LINE CORPORATE SUSTAINABILITY: A CASE STUDY OF A MAJOR MANUFACTURER IN THE UAE

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor of Business Administration

By

Abdelmoniem Saeed

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ABSTRACT

A ‘GREEN’ STRATEGY FOR TRIPLE BOTTOM LINE CORPORATE SUSTAINABILITY: A CASE STUDY OF A MAJOR MANUFACTURER IN THE UAE

By

Abdelmoniem Saeed

This thesis research study is of a major manufacturing corporate located in UAE that has been suffering from a business dilemma represented by a dramatic financial decline and a significant deterioration in social and environmental business-related elements. The fundamental cause for this serious business failure is the absence of a corporate sustainability strategy as occurs in numerous examples in developing countries.

Based on this thesis' aim, objectives, hypotheses and questions, the action research (AR) study has adopted a mixed methods research strategy as the most appropriate method for this case study. It incorporates both a quantitative and a qualitative research type in sequential order through a questionnaire survey of change agent employees followed by semi-structured interviews with senior managers of the firm under scrutiny.

The research study's findings prove the study's hypotheses and answer the research questions. This AR study has contributed to the body of knowledge through actionable knowledge presented in developed a ‘green’ strategy for the adoption of triple bottom line corporate sustainability (TBLCS) that should guarantee incorporate economic prosperity, social responsibility and environmental stewardship, and meet stakeholders' ever growing demands and interest in 'green' business. The developed green strategy has five drivers: green transformational
leadership (GTL), green organisational culture, employees’ engagement, learning organisation, and dedicated corporate social responsibility (CSR).

The actionable knowledge has further demonstrated a feasible and practical mechanism for adopting and executing a TBLCS strategy through the proposed business ‘green’ model and a dedicated actionable roadmap that should guarantee the corporate a successful strategic transformational shift to a sustainable green business.

**Keywords**: Corporate sustainability, triple bottom line, green transformational leadership, green culture, employee engagement, learning organisation, CSR, UAE.
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<td>3P</td>
<td>Pollution Prevention Pays</td>
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<td>3Rs</td>
<td>Reduce-Reuse-Recycle</td>
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<td>B Corporation/B corps</td>
<td>Benefit Corporation</td>
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<td>BoK</td>
<td>Body Of Knowledge</td>
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<td>CADM</td>
<td>Comprehensive Action Determination Model</td>
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<td>CC</td>
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<td>Chief Executive Officer</td>
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<td>CG</td>
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<td>CO2</td>
<td>Carbon dioxide</td>
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<td>CS</td>
<td>Corporate Sustainability</td>
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<td>CSEA</td>
<td>Corporate Social Environment Accountability</td>
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<td>CSP</td>
<td>corporate social performance</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>DNA</td>
<td>Deoxyribonucleic Acid</td>
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<td>DOI</td>
<td>Diffusion of Innovation</td>
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<td>EHS</td>
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<td>environmental management systems</td>
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<td>ETL</td>
<td>Eco-Transformational Leader</td>
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<td>EVSL</td>
<td>Eco-Visionary Sustainability Leaders</td>
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<td>FPC</td>
<td>Flexible Purpose Corporations</td>
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<td>GCC</td>
<td>Gulf Cooperation Council</td>
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<td>Global Financial Crisis</td>
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<td>Gross National Product</td>
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<td>Global Reporting Initiative</td>
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<td>Green Transformational Leadership</td>
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<td>Human Resource</td>
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<td>ISP</td>
<td>Integrated Strategic Plan</td>
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<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
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<td>PEB</td>
<td>Pro-Environmental Behaviour</td>
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<td>PEP</td>
<td>Perceived External Prestige</td>
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<td>SBM</td>
<td>Sustainability Business Model</td>
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<td>Siam Cement Group</td>
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<td>SD</td>
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<td>SPSS</td>
<td>Statistical Package of Social Science</td>
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<td>STF</td>
<td>Sustainability Task Force</td>
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<td>TBL</td>
<td>Triple Bottom Line</td>
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<td>TBLS</td>
<td>Triple Bottom Line Sustainability</td>
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<td>TBLC</td>
<td>Triple Bottom Line Corporate Sustainability</td>
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<tr>
<td>TPB</td>
<td>Theory of Planned Behavior</td>
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<tr>
<td>Triple P</td>
<td>People, Planet and Profit</td>
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<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
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<td>UN DESA</td>
<td>United Nations Department of Economic and Social Affairs</td>
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<td>UNEP</td>
<td>United Nations Environment Program</td>
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<tr>
<td>UNGC</td>
<td>United Nations Global Compact</td>
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<tr>
<td>VBN</td>
<td>Value Belief Norm</td>
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<td>WBCSD</td>
<td>World Business Council for Sustainable Development</td>
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<td>WCED</td>
<td>World Commission on Environment and Development</td>
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1 CHAPTER ONE INTRODUCTION

1.1 BACKGROUND

This chapter incorporates the background, a profile of the firm that is the subject of this study, the problem statement, the aim of the study, the objectives of the study, the study's significance and the structure of the thesis.

Sustainability is a core business objective for every organisation, which it aims to achieve and maintain at every point of its lifecycle. With a volatile, dynamic, changing market and global competition, business sustainability has become the focal point of many business people. Corporate sustainability is founded within the economic and profitability domain through maintaining competitiveness. However, an appropriate long-term business sustainability strategy should ensure sustainable profits for shareholders along with meeting the social and environmental interests of the other business stakeholders.

Corporate business sustainability is explained by Elkington (1994) as a triple bottom line that incorporates three business domains, that is, the social, economic and environmental aspects, which take the following abbreviations: TBL, 3BL, and the 3Ps (people, profit and planet).

The adoption of corporate TBL sustainability efficiently and successfully is possible when led by transformational leaders who have a dedicated paradigm, insights, attitude, talent for value creation for the entire business’ stakeholders and who believe that business greening and corporate business sustainability are two faces of the corporate business coin.

A misconceived understanding of business sustainability for many corporates shareholders and leaders especially in developing countries fosters a constant tussle and tug of war between addressing environmental concerns and meeting economic viability (Montabon et al. 2007). Failing to consider and implement an appropriate corporate sustainability strategy leads to a substantial drop in financial performance and negative social and environmental consequences.
This thesis is a case study of a major manufacturing corporate suffering badly from a crisis that evolved as a result of a lack of a corporate sustainability strategy. The study aims to provide ‘Z’, a corporate, with an actionable ‘green’ strategy for triple bottom line corporate sustainability that should guarantee the corporate a successful strategic transformational shift to a sustainable green business.

1.2 **PROFILE OF Z – THE THESIS’ CASE STUDY**

The corporate subjected to this case study is not named but is assigned the letter Z throughout this research paper for the purpose of maintaining its anonymity. Z produces product that has wide diverse uses in almost every branch of life, such as civil construction, aero industry, mobile motor manufacturing, home appliances and electronics manufacturing. Z supplies its high-quality product to 280 customers in 36 countries. This corporate has a functional structural form of a hierarchy.

Z is a major manufacturing firm in the UAE; it is one of the biggest manufacturing corporates in the UAE outside the oil and gas sector. It is one of the key firms that has led the diversification of the UAE’s economy. Z is a considerably big manufacturing corporate with AN US$11 billion turnover, having a workforce of around 3000 employees, around 80% of which are expatriates. Z is considered to be a flagship company within its industry.

Z is a leading manufacturer in the UAE and Gulf Cooperation Council (GCC) region. It contributes significantly to UAE’s Gross National Product. It has wide and diverse stakeholders, which include financial institutions, employees, lenders, suppliers, customers, local community members, insurers and government authorities. However, due to the absence of externally funded non-governmental organisations (NGOs) in the UAE, the local community that is stated as a stakeholder is a diverse collection of people and ethnicities. In general terms, Z has significant economic, social, and environmental impacts on its stakeholders.

Z’s culture is dominated by a mix of normative processes and market cultures, where employees strictly follow the organisational predefined regulations, norms, laid-down policies and guidelines. There is no tolerance for individuals who break
the stringent organisational rules and procedures. Z’s culture is results-oriented, focusing on achievement and efficiency to get the job done and to do it right. It should be noted that the UAE, like other Gulf countries, has no labour unions.

It is difficult to discern an effective organisational learning culture in Z: the link between business process changes and organisational performance is lacking (Skerlavaj et al. 2007). In addition, due to a lack of innovative culture, the organisational learning of Z does not foster opportunities for innovation (Skerlavaj et al. 2010). The sole business vision and mission of Z are focused on revenue maximisation. Social and environmental aspects within the firm’s vision and mission priorities come second.

1.3 PROBLEM STATEMENT

The problem discussed in this thesis study is for a major manufacturer in UAE described as Z. This case study is on a corporate suffering from a business dilemma represented by a dramatic financial deterioration of its economic performance on the one hand, and on the other side, the failure of its social and environmental responsibilities. Lacking an appropriate corporate sustainability strategy is the obvious cause of this serious problematic situation.

Z has strategically built its business solely on an economic basis. When the economy slowed down, Z experienced a significant deterioration in its financial performance. The situation was serious to the extent that it forced Z to dismiss part of its workforce, cut budgets and freeze investment projects. The financial situation has hit everybody in the organisation. Moreover, it shocked Z shareholders and executives. This financial crisis has put a question mark over the validity of Z’s economic-based bottom line sustainability strategy and whether it has a robust corporate business sustainability strategy.

The other part of Z dilemma is its failure to address its related social and environmental impacts that have misaligned ‘it with its stakeholders’ demands and
interests. Z, like many manufacturing firms, particularly in developing countries, has established its business sustainability’s strategy solely on its economic performance and ignored nearly all of its social and environmental responsibilities. Z, for instance, ignores the downside of its business presented in its significant environmental impact on the environment. Z is a manufacturing firm that produces a very high carbon footprint as it emits tremendous quantities of greenhouse gases (GHG), mainly carbon dioxide (CO2), which contribute drastically to global warming and climate change. It emits more than 10 million tons a year as by-product associated with its huge manufacturing processes.

Unfortunately, Z’s shareholders and executives have the misconception that business greening hinders prosperity because it imposes costs, slows down productivity and competitiveness. Instead, they give the utmost priority to financial performance and continue resisting internal and external pressures to adopt green practices into the business (Kearins 2004).

Z executives do not see that climate legislation will be the strongest determining factor for new markets that reward innovators for climate-friendly products and services and penalize laggards (Hoffman 2007). They do not feel a need to embed green practices into their business’ DNA through cultural transformation and undergoing a paradigm shift (Senge 1991). They lack the self-drive to address the firm’s significant social and environmental impacts. The shortage of local stringent environmental legislation, as in most developing countries, contributes to the lack of will of executives to address their firm’s significant environmental impacts.

In short, the problematic and dilemma case of Z represented by the deterioration of the firm’s financial performance and social and environmental impacts is a logical result of adopting an ‘as usual’ business strategy that considers quarterly revenues solely. This compelling business case of Z has inspired this research study to look at actionable knowledge that would amount to an efficient and robust remedy for Z’s burning business issue for now and in the future.
1.4 **AIMS OF THE STUDY**

This thesis study aims to provide Z with an actionable green strategy for triple bottom line corporate sustainability that should guarantee the company a successful strategic transformational shift to a sustainable green business.

1.5 **OBJECTIVES OF THE STUDY**

1- Study and analyse the payoff of adopting a triple bottom line corporate sustainability strategy

2- Develop a corporate sustainability green model that interprets the introduced green strategy for triple bottom line (TBL) corporate sustainability.

3- Develop an actionable roadmap based on the introduced corporate sustainability green model that should enable Z make a strategic transformational shift so that it can sustain its business in a practical, efficient and fruitful way.

1.6 **RATIONALE OF THE STUDY**

The concept of business sustainability has become the fundamental market driving force that has been triggered by customers’, shareholders’ and stakeholders’ interests and demands. Thus, business sustainability has become the prime goal of each and every firm irrespective of its size or nature of its business field. The organisation lacking an appropriate business sustainability strategy faces a disastrous business dilemma such as the firm in this case study. The consequences can be seen in the dramatic decline in financial performance, a significant deterioration in the firm’s social responsibilities and negative environmental impacts.

This research study has shed light on an important tenet that visionary executives and leaders should consider, that is, the notion of ‘green to gold’, that a sound green sustainability business strategy reduces cost and risks, creates tangible and
intangible values and enhances a firm’s economic, social and environmental performance (Metcalf and Benn 2013). This paper demonstrates that environmental and social challenges should be opportunities for leveraging corporate businesses through innovation, value creation and gaining eco-advantage in the marketplace (Esty and Winston 2009). In other words, ‘green’ is a paid-for business phenomenon (Russo and Fouts 1997).

This paper’s findings will help corporates executives to have a sustainability lens to achieve a ‘triple bottom line’ (TBL) that will allow them to operate their firms efficiently and profitably in such; achieving the desirable targeted economic, environmental and social values indefinitely.

This thesis case study emphasises that adoption of the green strategy of triple bottom line corporate sustainability (TBLCS) is governed by green transformational leaders who are the best type of leaders, capable of carrying out a fundamental organisational change shift in line with a corporate’s vision, strategies, culture, organisational learning, people engagement and corporate social responsibilities. This study urges corporate executives to make the transformational shift to corporate sustainability through greening their business. The thesis supports the tenet that leadership is the panacea for the ills facing organisations and societies worldwide.

The significant value of this paper is established through providing corporate executives with a ‘green’ strategy for TBLCS. More importantly, the paper demonstrates a feasible way to adopt the developed strategy and practical ways to execute it in an efficient and fruitful mechanism through the proposed ‘green’ business model and following the developed actionable and detailed roadmap.
1.7 STRUCTURE OF THE THESIS

This thesis is organised into six chapters and four sections, as follows:

Chapter 1 is the introduction that incorporates the general problem statement, the aims of the study, the study’s objectives, the significance of the study and the structure of the thesis.

Chapter 2, the literature review, incorporates an introduction, and sections on corporate governance, corporate sustainability, corporate sustainability in manufacturing firms, triple bottom line performance/sustainability, leadership and corporate sustainability, the learning organisation and sustainability, organisational culture and corporate sustainability, and corporate social responsibility (CSR) and sustainability.

Chapter 3, on the research methodology, incorporates an introduction, research philosophies, research paradigms, research methods, the aims and objectives of the study, the data sources, data collection, data analysis, and the pilot survey.

Chapter 4, the results, provides the analysis the findings, incorporating the introduction, the study survey, the sampling, and the data analysis and interpretation.

Chapter 5, the discussion, provides the conclusions, implications and limitations that incorporate the discussion, conclusions and contributions of the case study research, the limitations of the study, and future areas for research.

Chapter 6 outlines the roadmap for adopting a ‘green’ model of triple bottom line business sustainability by Z.

Appendix A – Tables

Appendix B – Graphs

Appendix C – Participants; survey and management interviews

References
CHAPTER TWO LITERATURE REVIEW

2.1 INTRODUCTION

This chapter incorporates the research topics related to the subject of this thesis study, that is, corporate sustainability in general and triple bottom line corporate sustainability (TBLCS), in particular. The diagram below portrays in brief the research field’s topics.

Figure 1: Triple Bottom Line Sustainability (TBLS) – Research-Related Topics
Sustainability has many definitions; however, Brundtland-Commission, the World Commission on Environment and Development (WCED) 1987, stands as the most widely used one. It defines sustainability as follows: ‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. Sustainable development is the way to achieve economic, social and environmental well-being for today and tomorrow.

Massive technological development has facilitated information and data availability like never before. This reinforces and heightens awareness of the public, governments, organisations and non-governmental organisations about the social and environmental impacts of businesses on societies, communities, individuals, environment, eco-systems and the entire planet. An abundance of technological information has shifted the power from businesses to stakeholders that can convince businesses to look seriously at organisation and business sustainability. Moreover, business practices have become more transparent. Business stakeholders have started applying pressure on businesses so that sustainability has become not the only choice but an absolute necessity for survival (Lueneburger and Goleman 2010).

With ever increased threats to our eco-systems and environment through climate change and global warming, there is a common concept at large in society that economists should address the issues and concerns of sustainability (Baumgartner and Quaas 2009). There are several drivers that motivate organisations and corporates to reinforce their corporate social responsibilities (CSR) and adopt sustainability initiatives and practices, such as customer and consumer satisfaction, societal values, the benefit of being an ethical firm, forceful stakeholder relationships, and firms’ reputations (Lichtenstein et al. 2004).

Beddoe et al. (2009) and Metcalf and Benn (2012) argue that as organisations are dynamic entities, and an interconnected, complex and embedded part of wider economic, environmental, and social systems, achieving sustainability is not a linear equation but a complex phenomenon. Thompson and Cavalieri (2010) argue
that since organisational sustainability has to be implemented within a complex system, corporates and organisations have to smartly navigate this complexity through massive trial and error learning, experience, and acquiring knowledge.

2.2 CORPORATE SUSTAINABILITY

As a vital organisational aspect, corporate business sustainability has drawn the attention and focus of scholars, firms' leadership, management and practitioners. However, addressing business sustainability holistically through its fundamental economic, social, and environmental triple bottom line (TBL) has not got enough of the deserved attention. Although the subject of this study is related to ‘Sustainability’ and ‘Sustainable Development’ in general terms but the paper is deliberately concentrated on ‘Corporate Sustainability’ in specific. The extreme importance of TBL for corporate sustainability in particular is the prime driver that has actuated this paper’s case study subject.

The steadily increase in climate change, global warming, resource scarcity, vulnerable ecosystems and poverty have resulted in the growth in disastrous consequences to human wellbeing and the planet. Corporations are the main contributors to this dilemma and they should be at the forefront to resolving it. Corporations have a big challenge to adopt corporate sustainability so as to conserve human beings’ survival, the planet’s health and other species’ survival. At the same time, corporate sustainability helps to develop and create plenty of work and jobs that assure the dignity and self-fulfilment of people. The critical dilemma is that the values and structures of ‘As Usual’ traditional organisational business are not sustainable and should fundamentally be reshaped so as to attain the sustainability of business, society and the planet (Benn et al. 2014).

Corporates are compelled to incorporate sustainability changes due to external forces represented by the dynamic natural environment, for example, climate change and global warming, globalisation and the information revolution, evolved forms of governmental regulations, new technologies and business models and industry associations, in addition to internal forces for change represented by
stakeholders’ ethical issues with production, process or supply, or the aim of maximising financial savings through waste management and improving energy efficiencies (Benn et al. 2014).

The external forces for changing to sustainable organisational business are:

1. A dynamic natural environment, e.g. climate change and global warming
2. Globalisation and information revolution
3. Evolving forms of regulations – government agencies
4. New technologies and business models
5. Industry associations

Internal forces for change into corporate sustainability are represented by internal stakeholders’ ethical issues with production, process or supply, or the aim to maximise financial savings through waste management and improving energy efficiencies (Benn et al. 2014).

Eccles et al. (2014) have shown how firms that have high corporate sustainability are significantly outperforming their counterparts, both in terms of financial performance and the stock market over the long term. Lo and Sheu (2007) articulated that firms demonstrating corporate sustainability show a strong positive correlation between corporate sustainability and sales growth, high firm value, and higher valuation in terms of financial markets.

Savitz (2012) posited that sustainability is a business management approach that assures a sweet spot for firms, where their financial interests coincide with their social and environmental interests. Sustainability protects and grows the resources we have and need today and ensures their availability for the coming generations. It is a transformative business concept that helps firms to reap social and environmental rewards along with financial ones. Firms that defy sustainability principles suffer from terrible setbacks to their business performance. A TBL sustainability strategy ensures that a firm’s financial growth runs in parallel with
meeting its social and environmental interests. The TBL approach can be the key to unlocking business challenges through innovative solutions that create opportunities.

Kunz et al. (2014) and Roca and Searcy (2012) show how there is still confusion regarding the definition and terminology of sustainability and its related domains. Still, different parties like scholars, practitioners, boards of management, shareholders and stakeholders give different definitions for sustainable development, sustainability, environmental sustainability, corporate responsibility, corporate social responsibility and corporate sustainability.

To avoid numerous confusing definitions of sustainable development, Paraschiv et al. (2012) refer to the definition of sustainable development that the United Nations’ Department of Economic and Social Affairs (UN DESA) provided in its report in 1987. The Report of the World Commission on Environment Development (1987) defines sustainable development as: ‘Meeting the needs of the present without compromising the ability of future generations to meet their own needs’. The authors consider this sustainable principle as a balanced interest to the three fundamental sustainability issues of social equity, economic growth and environmental protection, which can be encapsulated in the notion of the triple bottom line. The authors argue that although sustainable development generates risks to organisations in terms of new associated regulations, constraints, limitations and economic pay-off, it creates at the same time new green economy opportunities. It reshapes markets, business models and business competition rules, and introduces new business conduct (Olaru et al. 2009; Dinu 2010, 2011).

Montiel and Delgado-Ceballos (2014) highlight that a gap exists between practitioners and scholars in their insights about corporate sustainability’s theories, definitions and the way to measure it. The authors conclude that the field of corporate sustainability is evolving and new forms of theories, definitions and measurements are suggested.

Stubbs and Cocklin (2008) have developed a ‘sustainability business model’ (SBM). The authors suggest achieving the goal of being sustainable in business;
firms should not aim to supplement, complement or improve their classical business model but transform their businesses to a sustainable model grounded in environmental and social perspectives. The authors posit that executing the successful firm’s business sustainability requires developing cultural capabilities and adopting internal structural changes to meet the firm’s stakeholder interests.

Hörisch et al. (2014) have developed, through their study on ‘Applying Stakeholder Theory in Sustainability Management, Links, Similarities, Dissimilarities, and a Conceptual Framework’, a conceptual framework that reinforces and fosters the application of stakeholder theory to sustainability management. The authors identified three challenges influencing the relationship of stakeholders’ theory and sustainability management: the reinforcement of stakeholders’ particular sustainability interests, crafting sustainability interests mutually to meet those particular interests, and empowering stakeholders as facilitators to support the organisation’s sustainable development and to save the environment. Hörisch and his co-authors recommend three interconnected mechanisms to address those challenges: regulations, education, and creating stakeholders’ sustainability-based value.

Crews (2010) studied the leadership challenges associated with sustainable development. Crews illustrated five interrelated and integrated challenges facing leadership when tackling sustainability initiatives: creating sustainable culture, stakeholders’ engagement, all-inclusive thinking, organisational-oriented learning, measurement, and reporting. The author highlights the importance of developing an open discussion and dialogue involving every stakeholder discussing sustainability-related strategies, initiatives and insights. Moreover, the implementation of sustainability should be supported by sustainability-oriented learning at every organisational level. Crews argued that it is essential for organisational leadership to view organisational sustainability holistically through strategic perspectives.

Iacona (2010) posited that sustainability is more than environmentalism. Real sustainability should be the way we work and live, conserving the resources for our
lives and for the coming generations. The new paradigm of sustainable development shifts the business’ perspectives from generating profits solely for shareholders to a broadened scope of inclusive economic, social and environmental benefits. This is applied to Z’s case, as its executives need to shift their business paradigm to collaborate broadly with the economic, social, and environmental perspectives contained within triple bottom line business sustainability.

CORPORATE GOVERNANCE

Mac and Haney (2012) posited that there is an ever-increasing trend of corporate governance to focus attention on the social and environmental impacts of business operations through measuring and reporting environmental, social and governance (ESG) factors. However, in many cases, shareholders refrain from anchoring their organisations in specific social and environmental accountabilities even it is being included or stated in the mission statements of such organisations. The authors have explored the possibility of developing an alternative corporate form that fits with an effective corporate governance model according to three available traditional corporate forms, that is, benefit corporations (B corps), limited liability corporations (LLCs) and flexible purpose corporations (FPCs). Mac and Haney recommend using flexible purpose corporations (FPCs) as the most appropriate form, in which shareholders have to agree with management and the board on one or more corporate social missions. This, in turn, guarantees small private firms and large public ones that environmental, social and governance (ESG) factors are being considered by the organisation.

Klettner et al. (2014) show how companies that have integrated sustainability development strategies into their core business operations have achieved a good business performance. It was evident for the authors that those companies have developed leadership structures that allow their boards and senior management to be involved in the development, monitoring and implementation of sustainability strategies and measure their effectiveness through financial rewarding matrices.
The authors mark leadership commitment to communicate transparently the results of implementing sustainability strategies to concerned stakeholders. Thus, better corporate governance should drive organisations towards sound sustainability. Klettner et al. (2014) argue that a sustainability strategy should consider three organisational elements: stakeholders’ interests in total and not solely shareholders’ revenue, corporate governance and transparency, and the involvement of leadership and management in the planning and mapping of the firm’s sustainability strategies, which applies to the case of Z.

CORPORATE STRATEGY

It is widely accepted that a well-articulated strategy and strategic vision offers organisations a sustained competitive advantage over those organisations that lack such a vision (Hamel and Prahalad 1989; Prahalad and Bettis 1986). Corporate strategy provides a direction to focus and channel organisational competencies and capabilities towards the effective accomplishment of organisational goals (Westley and Mintzberg 1989). However, it is essential that the strategy of the organisation should be well aligned with internal and external factors for improving organisational effectiveness and performance.

Without effective strategic leadership, the probability that an organisation can achieve superior or even satisfactory performance when confronting the challenges of the global economy will be greatly reduced (Ireland and Hitt 1999).

Research has highlighted that consistencies between business strategy and human resource management (HRM) practices are an important component in the success of the organisation (Kotha and Orne 1989; Miller and Roth 1994). Businesses should combine their competitiveness and HRM strategy to increase their operational performance (Bird and Beechler 1995; Wang and Shyu 2008). The research above discusses the cases where HRM, as in the case of Z, works in isolation of being part of holistic sustainability planning and strategies. In such cases, HRM is left aside when planning and mapping for business sustainable
development. The aforementioned researchers emphasise that HRM should contribute essentially to enhancing and boosting organisational performance, competitiveness and business sustainability.

CORPORATE SUSTAINABILITY IN MANUFACTURING FIRMS

Shrivastava (1995) argues that the environmental issues have become a crucial ground for economic competition. The environmental issues arena has seen a shift in such ecological issues as waste, natural resources usage and pollution from being business’ constraints to becoming, in many business examples, competitive opportunities. The environmental innovative technologies used as competitive tools have shifted the competitive landscape in such a way that industries attain competitive advantage. Such an innovative business approach provides a valued functional management that minimises the ecological impacts of industrial production and enhances organisational performance and competitiveness at the same time.

Pagel and Gobeli (2009) explain that in view of the need to increase the social demands of environmental sustainability, manufacturing firms are having a significant ecological impact in becoming bound and obligated to embrace the strategic importance of environmental management practices to attain competitive advantage. Montabon et al. (2007) explain that though large manufacturing firms recognise that environmental sustainability has implications for their competitive positions, they are unclear about the detailed implementation of environmental management practices as there is a constant tussle between environmental objectives and economic viability.

Rao and Holt (2005) argue that an integrated green supply chain leads to better competitiveness and greater economic performance. However, while the findings look logical and systematic, they are flawed by geographic and sample size constraints, as the study was carried out to supply chain firms in South East Asia only and the sample size did not allow for cross-sectorial comparisons.
Buysse and Verbeke (2003) argue that a diverse set of manufacturing firms’ stakeholders, such as shareholders, customers, local communities, and governmental regulations and legalities, influence the firm’s decision-making processes and their corporate strategic practices. Hofer et al. (2012) posited that those stakeholders’ pressures lead to manufacturing firms adopting environmental management (EM) practices to control and monitor the environmental impact of their operations on the environment. Melnyk et al. (2003) and Montabon et al. (2007) explain that large manufacturing firms should aim to increase their environmental management through effective lean production methods and implementing best practices to reduce internal waste through the life cycle of their products. Kleindorfer et al. (2005) suggested that effective environmental management practices should expand the scope of waste reduction efforts beyond efficiency.

Haanaes et al. (2011) found that resource intensive firms and large manufacturing firms are embracing sustainability management practices for the sake of attaining competitive advantage. The authors noted that a higher percentage of manufacturing/product firms are, more so than service firms, paying greater attention to improving efficiency, conforming to regulations and adopting sustainability management practices. However, as manufacturing firms have a larger environmental footprint, they are operated under the risk of losing their license if they do not adopt environmental regulations.

### 2.3 CORPORATE SUSTAINABILITY AND TRIPLE BOTTOM LINE

**WHAT DOES ‘TRIPLE BOTTOM LINE’ MEAN?**

‘Triple bottom line’ is a business accounting term coined by Elkington in 1994 and is expressed as ‘3BL’, ‘TBL’, 'People, Profit, Planet', 3Ps, and the ‘Three Pillars’. The term contrasts with the traditional and common ‘bottom line’ accounting term that business people used to use to express either profit or loss. Elkington meant
for TBL to advocate the goal of holistic sustainability in businesses in a broader context. This means that firms should be accountable for their social, financial, and environmental performances. The three bottom line accounting measures encompass the term ‘people’ that assesses and evaluates the favourable and fair business practices that firms offer to the employment of disadvantaged citizens and to society’s welfare and disability costs’ reduction in the local community where the firms conduct their business. The term ‘profit’ refers to the economic values created by the firm’s business, while the term ‘planet’ refers to the sustainable environmental measures firms use to address their environmental impacts on the environment and the planet. However, constraints and limitations exist in assessing and measuring tangibly and quantitatively the two accounts of people and planet in the same way business measures the economic account of profit. Thus, the three accounts cannot be measured when combined, but should be evaluated separately. Some authors in recent research papers suggest extending TBL to encompass four pillars, describe as the quadruple bottom line (QBL), where the fourth bottom line stands for culture/purpose, but this is not supported enough as culture is obviously embedded in the social and environmental bottom lines of TBL.

TRIPLE BOTTOM LINE PERSPECTIVES

Norman and MacDonald (2004) have examined critically the integrity of the triple bottom line concept as it is ambiguous, self-contradictory and diverse. The authors argue that if the triple bottom line (TBL) idea is sound, it is not as novel as the corporate social responsibility (CSR) concept, which was introduced and used before the triple bottom line (TBL), has the same meaning as it and does the same function as TBL; moreover, it lacks a definitive measuring tool to measure and assess the social and environmental parameters analogously to the economic bottom line and, further, it is unlikely to devise or formulate such an unquestionable and undisputed methodological tool for measuring social and environmental parameters and indicators.
Norman and MacDonald conclude that the triple bottom line (TBL) is an unhelpful concept that can confuse the concept of corporate social responsibility (CSR). The authors argue that tempering and diminishing the claims of the triple bottom line concept is insufficient to give its paradigm the kiss of life. They argue that TBL can confuse and mislead corporate people and may even hinder corporations from effectively assessing and reporting a mechanism for their social and environmental performance.

However, I agree with Norman and MacDonald's point that TBL might lack a tangible scale for measuring the social and environment performance of the organisation, but CSR lacks such measuring tools as well. In my opinion, TBL has a clear definition within economic, social and environment domains that incorporates social responsibility (CSR). The three elements of the business disciplines, the economic, the social, and the environment, in terms of people, profit and planet, are better defined in TBL than in CSR. It is the responsibility of scholars, practitioners and corporate people to set clear and well defined tangible methodological tools to assess and measure social and environmental indicators and the performance of organisations, such as ISO standards.

Rogers and Ryan (2001) argue that for triple bottom line reporting to be completely effective, the corporate environment needs to be substantially changed. However, for companies that are financially successful, making radical changes might be risky. However, Rogers and Ryan argue that implementing new policies to achieve TBL objectives requires an extensive readjustment of a company's operations (Jackson et al. 2011). The authors have examined the way business has constructed sustainability and the extent to which this offers a pragmatic philosophy to attain success. The authors believe that the current itinerary to achieving sustainability is taking businesses away from meeting the right ecological setup in the future. The authors argue that the notion of the triple bottom line (TBL), as has been portrayed by Elkington (1997, 1999, 2004) and incorporated into the reporting guidelines of corporate sustainability issued by the Global Reporting Initiative (GRI), has taken sustainability away conceptually from being an ecological support to being more focused on market share and corporate
governance. The authors illustrate that the current texts depict sustainability as sustainable development. The authors argue that the notion of TBL in its current portrayed format or logic does not offer an appropriate pragmatic philosophy that can establish a sustainable ecological society in the short run.

Milne and Byrch described TBL, as explained by Elkington (2004), as being a motive for corporations not to focus only on the economic value the firms add, but also on the social and environmental values they add or destroy. The authors agreed with what Adams et al. (2004) described that the timing is perfect for introducing TBL. Also, they agreed with how Henriques and Richardson (2004, 2013) and Heemskerk et al. (2002) described TBL as reinforcing business’ attention to address sustainability issues. However, the authors argued that the concepts of TBL as presented by Elkington and GRI relate primarily to sustainable development and are not focused equally on a sustainable ecological society. The authors argued that sustainability as being introduced by Elkington, Global Reporting Initiative (GRI), and United Nations World Commission on Environment and Development (WCED) have considered human development and humanity are the prime rationale of sustainability at the expense of ecological sustainability as a priority.

Milne and Byrch (2011) argue that GRI and Elkington both strived to work with financial markets that were uncaring about ecological debates arising for social institutions that include business activities. Moreover, GRI and Elkington designed a reporting system or format for corporate sustainability as the TBL one of economic, environmental and social perspectives in a similar financial reporting fashion. The authors illustrate that as yet there are no noticeable or concrete signs of maintaining ecological sustainability as a priority, although there is some hope that such a pragmatic approach will be considered by the United Nations Environment Programme (UNEP) and the Global Reporting Initiative (GRI). Thus, this would hopefully build up slowly a new order where ecological sustainability concurs and harmonizes with TBL concepts.
Milne and Byrch (2011) have considered how the ecological sustainability concept stands alone and is not embedded in environmental sustainability. In my opinion, businesses should consider ecological sustainability as a fundamental component of environmental sustainability. When corporate sustainability and, in particular, triple bottom line corporate sustainability handle sustainability, they do so based on a conceptual perspective that our planet is a large ecosystem where plants and animals are components that require caring about.

In brief, environmental regulations and policies should be of a holistic nature to accommodate the ecological part so as to ensure the conservation of ecological integrity and biological diversity in very clear terms and conditions. Thus, ecologically sustainable development should be conceptually embedded in environmental sustainability and this, obviously, is incorporated in TBL sustainability. Further, environmental sustainability should ensure the conservation of the environment as a whole, which would prevent any kind of irreversible environmental degradation or serious damage to the environment. The objective of environmental sustainability should not be only conserving but the flourishing of diversity and health, and the productivity of the current generation and, equally importantly, future generations'. It is important to keep in mind the social morality of the community and the public is extremely important for influencing governments so as to encourage and reward actions-oriented values that support long-term ecological sustainability benefits over attractive short-term gains or instant revenues.

Savitz (2013) has studied the successful and failed examples of companies and corporates which have adopted triple bottom line performance and sustainability. The author argues that the main way to achieve triple bottom line' success is to generate lasting values for shareholders and stakeholders hand to hand with overlapping mutual interests. Sustainable leadership should have the vision to align the business in a harmonious and balanced way between the three domains of the economic, the social and the environment so as to satisfy all corporate’s stakeholders with the valued sweet spot of business sustainability.
Willard (2002) highlights in his book the seven sustainability strategies that corporates can reap benefits from through adopting the triple bottom line sustainability approach. The author studied corporate performance in seven business cases to see their associated benefits. The author explains that in a turbulent business environment of ever increasing investor requirements, customer demands, employee interests, bank requirements, and legislator conditions, firms’ executives are supposed to consider broadly environmental and social perspectives along with economic aspects to sustain their business. The author states in business pragmatic language, supported quantitatively by an empirical analysis, that achieving a comprehensive benefit is practically possible by adopting triple bottom line principles and approaches. The author emphasises that triple bottom line-oriented corporates should aim to improve productivity, reducing retention and hiring costs and reducing overhead expenses so as to enhance shareholder values and revenues.

Willard (2005) argues that the sustainability concept has been enthusiastically embraced by some corporates, whereas it has been rejected by other segments. The author explains that the first wave of corporates that adopted a sustainability approach did so under government pressure or in a public crisis, or where the founders and shareholders had a passionate drive. The author argues that the next sustainability strategic wave needs other drivers grounded in corporate responsibility and a commitment to society, and these new drivers could probably be stakeholders’ interests and the climate change threat. The smart transformation to new and innovative services and products that add value to business can encourage and motivate executives to buy into the new sustainability wave. The author suggests that the transition to the next sustainability wave should not be at the expense of threatening the status quo of the business, which would lead to corporate resistance and defence. Executives need to buy into a sustainability strategy as a business transformational catalyst rather than as a potential threat to their established business status quo priorities.

Willard (2012) argues that upon implementing triple bottom line sustainability, the firm can enhance its profits within five years depending on the firm’s size and the
kind of industry by 51\% to 81 \% without risking its financial security. The author introduced the triple bottom line indispensable model in a graphical format and an online simulator dashboard on his website, through which executives can upload their data and information into downloadable spreadsheets based on their business assumptions and get back the potential benefits.

Willard (2012) argues that the corporate adopting triple bottom line sustainability strategy is paid back by seven business benefits, as follows:

- Enhance market share and boost the firm’s revenue
- Improve energy cost effectiveness
- Improve waste management
- Improve resources management
- Boost employees’ efficiency and productivity
- Reduce contracting and wear and tear expenses
- Reduce business associated risks

Willard calculates in quantitative ways the potential benefits for big corporates and small ones that adopt or intend to adopt triple bottom line sustainable development. On the other hand, he identifies 14 potential risks to business profitability for those organisations choosing to ignore a sustainability path. Furthermore, the author highlights that corporates which care about environmental and social perspectives recruit and retain distinguished talents better than their peers, as talent mostly looks for organisations with values and ethical norms. Willard (2012) used practical case studies to prove his claim that taking care of the environment and social perspectives reinforce the financial performance of organisations through a triple bottom line strategic approach. He argues that being ‘green’ is a profitable organisational choice. He explains that when an organisation cuts its carbon footprint, it applies a proxy to its energy consumption, saves energy costs and, thus, enhances its profits. Moreover, the green organisation encourages its business with a considerable segment of its consumers, those who appreciate firms with values and ethics.
D’Amato et al. (2009) posit that corporates should adopt strategies by which they can become good corporate citizens through maintaining a triple bottom line performance that incorporates the three key elements of sustainability, people, profit and the planet.

HOW THE TRIPLE BOTTOM LINE CAN BE MEASURED

Slaper and Hall (2011) posit that though academics agree on the definition of TBL or 3Ps, the challenge and real trick is how to measure it, as the three domains of 3Ps do not have a common measurement unit. Some scholars advocate monetising the 3Ps while others suggest using an index to eliminate the issue of incompatible units, providing an accepted universal way to evaluate the TBL. The other option is to measure each sustainability dimension alone. However, the shortcoming of this option would be probably users’ metric fatigue because of the multiplying of metrics that are used to measure each sustainability dimension.

One can understand that there is no common accepted agreement or universal standard method to calculate or evaluate TBL as a whole or in separate sustainability domains. However, this particular challenge forms a positive aspect as it provides users with the flexibility to adapt the appropriate measuring index or metric adequate to different business entities or different geographic boundaries, e.g. the city or country at the larger scale. In this case, the adapted measuring methods set by stakeholders and experts would be compatible with related data collection.

Slaper and Hall argue that looking to TBL sustainability measures, the economic measures are straightforward money-related figures, while the environmental sustainability measures incorporate measuring the potential influences of business environmental impacts on natural resources and their viability. Environmental variables should represent measurements of natural resources and reflect potential influences on their viability. This would incorporate the contamination impact of water and air quality, greenhouse gas emissions, material recycling rates, water consumption, energy consumption, pollutant gases and substances,
waste management of hazards, landfill, and material waste management. The social sustainability dimension’s measures incorporate an education level in the local community, equity level, welfare, careers retention, charitable contributions, level of health care and well-being, rate of unemployment, quality of life, per capita violent crimes, relative poverty, and social capital. In brief, the firm’s stakeholders are the right party to determine the appropriate set of TBL sustainability measures applicable to subjected business tasks and activities that would remain flexible and dynamic during changes in business circumstances. The firm’s stakeholders and experts can develop and establish an adaptive genuine progress indicator (GPI) for the firm/entity with business related variables that incorporate social, economic and environmental perspectives converted to monetary units and ultimately presented as a monetary value.

Hubbard (2009) explains that measuring organisational sustainability is difficult as it is not a simple or straightforward formula/ and this process becomes more difficult as its terms and conditions for measuring keep changing while doing this measuring. The author shows that measuring organisation sustainability has become a difficult exercise because the concepts and aspects of sustainability have intensely widened the measurement scope and options, with no consensus on a standard or a commonly agreed reporting framework. Hubbard suggests making sustainable performance measurement as much practical and simple as possible through a conceptual framework of a stakeholder-based sustainable balanced scorecard (SBSC) and a single-measure organisational sustainability performance index (OSPI).

Epstein and Wisner (2001) note that responsible managers of leading companies realise the importance of payoffs of reporting, measuring and managing social and environmental performance. The authors suggest integrating such reporting indicators into an organisational financial drive tool of a reporting and managing system, i.e. a balanced scorecard (BSC) framework. This would profit organisations substantially through cost savings via improving operational efficiencies and enhance potential revenue via boosting corporate image and reputation.
Chapman and Milne (2004) explain that there is a steady increase in the number of New Zealand companies generating TBL reports; however, the lack of mandatory standards or reporting legal requirements in those reports is clear. The authors suggest improving further TBL reporting system and standards.

2.4 CORPORATE SUSTAINABILITY AND LEADERSHIP

The literature has often publicised leadership as a magical universal remedy and panacea for all ills facing organisations and societies worldwide. Do leaders really understand all the complexities inherent in large complex organisations and are they all having solutions to all the problems organisations face? Organisations are complex systems designed to serve certain organisational purposes. The sole purpose of private organisations is profit maximization and achieving better returns on investment for their investors. Can organisations that are driven by the profit maximisation motive reconcile their social and environmental responsibilities and balance their financial, social and environmental goals?

According to Wong and Avery (2008), the only way to transform an organisation is to transform its leaders. The leaders can adopt business sustainability when they themselves adopt sustainable changes to their thinking, values and views. The way to transform a firm goes through transforming its leaders. Transformation sustainability leaders, who embrace sustainable principles and concepts, can appropriately embed sustainable philosophies and practices into process-making decisions and firms’ corporate strategies. Sustainability leaders are the right type of leaders capable of setting corporate sustainability strategies supported by a sustainability culture, shared values, innovation, organisation learning, citizenship and communitarianism. Wong and Avery point out that organisation sustainability should be founded on three elements – sustainable leadership, sustainability culture and sustainability corporate strategies.

Haanaes et al. (2011) articulated that in a business increasingly driven by the sustainability approach, there are two distinct types of sustainability-driven committed management, i.e. embracers and cautious adopters. The authors
consider that embracers are strategic sustainability leaders who consider sustainability is an advantageous business core and competitive edge that requires the introduction of a fundamental organisational behavioural change and to be strategically embedded into the organisation’s operations and processes. Sustainability embracer leaders see sustainability as a value creation and payoff strategy through innovation, process improvements, greater growing opportunities, better performance and associated social and environmental intangible benefits.

On the other hand, the authors explain that cautious adopters are sustainability laggards who look at sustainability cautiously through the lenses of shiny brand-building, reputation leverage, efficiency gains, waste management, regulatory compliance and business risk management.

Haanaes and his co-authors see sustainability embracer leaders as being long-term strategically farsighted rather than sustainability cautious adopters. Embracers believe strongly that sustainable development ensures a competitive edge that supports their firms outperforming their competitors. Embracers recognise that sustainability initiatives help firms gain new customers, new markets, increased profit margins and market share in existing markets more than cautious adopters. Embracers are more enthusiastic about investing substantially in sustainable development initiatives. Sustainability embracer leaders are more capable of developing a business case for pursuing sustainable development initiatives.

Haanaes’ and his co-authors’ concept of how ‘embracers seize advantage’ is much related to this thesis subject. The paper describes perfectly the two types of sustainability-driven management groups, sustainability embracers who are enthusiastic and empowered to develop a business case and invest substantially in executing sustainable development’s initiatives and another types of leader, that is, cautious adopters who adopt sustainable development cautiously and conservatively. Referring to the leadership classification of honeybees by Avery and Bergsteiner (2010), embracers and cautious adopters’ leaders can be considered as sub-categories of honeybees, where embracers are distinguished types of high productive honeybees and cautious adopters are low productive
honeybees. Thus, Haanaes et al. (2011) study did not incorporate a non-sustainable type of locust leader who neither embraces sustainability nor adopts it cautiously. They are just shareholder profitability-driven management.

Metcalf and Benn (2013) argue that organisations that are well connected with their stakeholders and engaged in CSR and citizenship activities within their communities are more successful as they receive the support and loyalty of their stakeholders and gain better corporate reputations. Metcalf and Benn argue that the leaders play an interpretive role in associating and aligning their organisations with economic, environmental and social factors to achieve corporate sustainability. However, achieving corporate sustainability may be beyond the remit of corporate leaders as so many external factors shape and influence sustainability.

Cramer et al. (2004) suggest that CSR/sustainability as a concept signifies a corporation's responsibility towards its stakeholders representing the issues of 'people, planet and profit'. They argue that the literature on CSR/sustainability has largely ignored the role of leaders in adopting and implementing CSR practices (Waldman and Siegel 2008); however, more recently, researchers have studied leadership behaviours that trigger or shape corporate responses (Basu and Palazzo 2008; Waldman et al. 2006).

Metcalf and Benn (2013) suggest that achieving sustainability requires extraordinary leaders who have an ability to read and predict complex situations. Those leaders should be able to engage people and teams in an effective and adaptive way to enable the dynamic organisational change. Those leaders should have traits of intelligent emotions that help problem-solving. Sustainability leaders should be capable of linking their organisation sustainability to the wider complex adaptive systems.

Campbell (2006) argues that early CSR/sustainability messages connecting business to community were communicated by 'far-sighted' business leaders, who were not entirely altruistic. Waldman and Siegel (2008) point out that although there is a dearth of research in this area, the intellectual stimulation competency of
transformational leaders is most associated with the ‘strategic CSR/sustainability being of strategic benefit to the firm. Thus, this supports the hypothesis that transformational leadership is positively correlated with corporate sustainability.

To better understand the reasons why managers may engage in CSR/sustainability, the authors examined the antecedents of managerial values associated with CSR/sustainability in the decision-making of firms located in 15 countries. Finkelstein and Hambrick (1997) argue that adopting CSR/sustainability in organisations is partly due to managerial decisions and discretion. Thus values that managers use to guide their decision-making are critical for gaining insights into CSR/sustainability practices.

CSR/sustainability research has been made difficult as numerous definitions of it are proposed by authors and practitioners. The authors build upon stakeholder theory (Donaldson and Preston 1995) and on the work of McWilliams and Siegel (2001), describing CSR/sustainability as the actions on the part of the firm that meet the needs or goals of an identifiable stakeholder group or a larger societal collective. The authors aim to fill the gap in the literature by researching the managerial values directly relevant to CSR/sustainability actions. As managers are mainly responsible for the decisions made by firms related to CSR/sustainability activities, it is important to study managerial tendencies towards using CSR/sustainability values in their decision-making. Furthermore, the authors, with the help of stakeholder theory, aim to clarify and help in understanding the dimensionality of CSR/sustainability values. According to stakeholder theory, a firm consists of a variety of different constituencies, such as employees, suppliers, customers, shareholders and the broader community (Donaldson and Preston 1995). All the firm's stakeholders have a strategic as well as a moral stake and are guided by their own interests and values. The challenge facing leaders is to enhance the viability of the firm while simultaneously balancing the needs of the various stakeholders.

Strand (2014) explored the evolution on how sustainability emerged during the 21st century in some of the world's largest corporates. Although the results are
inconclusive due to the research dependency on the responses received from the top management team of the surveyed corporates to generate a conclusion or judgment, it gives an indication that sustainability is now a core element that is closely monitored and embedded within these corporates’ structures. The research found that many of these large corporations expanded their top management team to incorporate a post of ‘Chief Sustainability Officer’ that merges corporate sustainability and strategic leadership at the top organisational level. The sustainability leadership responsibilities in many of the surveyed corporations are based on linking environmental KPIs to the corporate social responsibility (CSR). It also emphasises that adopting eco-initiatives and triple bottom line in large corporates need the help of dedicated and qualified leadership teams to ensure the successful attainment of sustainability deliverables.

Hargreaves and Fink (2004) have studied the leadership, characters, traits and behaviours in the education and schooling field to explore the principles of sustainability leadership. The authors posit that sustainability leadership is presented and demonstrated through the way they behave and are interpreted through their approach. The authors suggest seven principles that the leader needs to have to be a sustainability leader, as follows:

1. Generate, build and conserve sustaining learning
2. Safeguard the success so that it lasts over time
3. Sustains and encourage others’ leadership
4. Mitigate issues and concerns related to social righteousness, impartiality and fairness
5. Improve and grow rather than exhaust human resources and diminish material resources through effective resources management
6. Support environmental variety and enhance environmental capacity
7. Seek for the engagement of activists to jointly address environmental issues
LEADERS’ TRAITS – UPPER ECHELONS THEORY

The upper echelons theory introduced by Hambrick and Mason in 1984 suggests that the demographic characters of executives and top managers, and their values, experiences and personal traits, influence strongly their understandings, interpretations and paradigms that consequently impact and influence their decisions and choices. This mechanism obviously affects and influences the firms' strategic choices, priorities and performance. This can be conceptually interpreted in simple language as companies' performance portfolios are just a reflection of their executives and top leaders' direction.

Upper echelons theory argues that the differences in the business strategic approach and decisions of executives and CEOs are related to their personalised and dedicated lenses through which they view the world, business, threats and opportunities based on their differences in values, experiences, traits, personalities, knowledge, experience and attitudes. As per the theory, firms are a reflection of their executives, boards' members and CEOs' personalities and characters. The authors argue that their theory is validated and supported by many scholars. It is comprehensively reviewed by Finkelstein et al. (2009). All of those studies have confirmed the fundamental logic of the theory, which states, in short, if you can understand and comprehend the strategists, you will unambiguously understand and comprehend their strategies.

Park et al. (2014) have studied the environmental behaviours of hotel companies based on upper echelons theory (Hambrick and Mason 1984) and environmental attitudes behaviour theory. The authors conclude those hotels' top managers who perceive potential advantages from adopting environmental management actions encourage environmental behaviours. The authors argue that the positive environmental attitudes of top managers affect constructively and significantly the adoption of environmental management programmes and actions in hotels. Daveri and Parisi (2015) have examined empirically the correlation between the experience of managers and workers and the innovation and productivity of firms. The authors have concluded that for productivity growth, both managers’ and
workers’ experiences matter. The study concludes that the age of managers plays a positive or neutral effect on productivity growth in non-innovative firms but, in contrast, in the case of innovative firms, their ages’ effect has a significant negative impact or influence on the productivity growth of associated firms. This means older managers and board members affect adversely productivity growth in innovative firms. The age factor of managers and board members may affect positively productivity growth in non-innovative firms based on the advantage of their robust experience or, at worst, do not matter.

Sharma (2000) has studied the impact and influence of managerial and leaders’ interpretations of environmental concerns, issues and aspects on the corporate choices made for an environmental strategy. The author notes that environmental strategies vary in general between strict adherence to standard industrial practices and regulations and voluntary environmental preservation actions. The interpretations of managers and leaders is that environmental issues are either threatening factors or opportunities for their businesses. The author also articulates how managerial and leaders’ interpretations of environmental issues are influenced by their firms’ context and identities and their creative capability to address the environmental issues.

**CORPORATE SUSTAINABILITY AND GREEN TRANSFORMATIONAL LEADERSHIP**

One of the most important aspects of leadership is the capability to inspire subordinates’ abilities for innovation and thinking outside of the box. A visionary leader in any area is a person who has the ability and the capability to drive the group towards achieving a vision. Leadership skills play a major role in translating the leader’s vision to the subordinates and obtaining their buy-in to achieve common targets and goals that realise the vision. In such cases, the vision is transformed from being just an idea to being a goal.

Western (2013) argues that an eco-leader who is developing a new business paradigm and is eco-literate is the right type of leader to meet the current ever-
increasing economic, social and environmental challenges. The author argues that the eco-leader understands that short-term economic gains might lead to longer-term consequences, which may have damaging effects on the business itself and the environment. The eco-leader understands that the organisation, community and the planet are inter-dependent constructs. Furthermore, they understand the connectedness of these elements to each other, and, most importantly, know how to achieve sustainability in real terms.

Chen and Chang (2013) have studied the determinants of the development performance of green products. The authors have concluded that green transformational leadership and green dynamic capabilities are drivers of development enhancement for green product performance. Moreover, green creativity partly mediates the positive effect of green capabilities and green leadership in boosting green product performance.

Green and McCann (2011) argue that organisations should work hard to develop and promote managerial ethical behaviour that motivates their subordinates' performance to boost organisational finance in the green economy. The authors conclude that the leadership based on agrarian values is the best-fit type of leadership to lead workers efficiently in the green economy.

Robertson and Barling (2013) have studied the influence of leaders on their employees’ pro-environmental behaviours and their greening impact on organisations. The authors highlight the fact that leaders evoke emotions in followers (Dasborough and Ashkanasy 2002). They argue that transformational leadership and leaders’ pro-environmental behaviours are reflected positively in subordinates through developing and sparking employee passion (Cardon 2008). Employee passion develops positive emotions, which motivates employees to participate in green initiatives and activities, and engage in pro-environmental behaviours reflecting their passion (Vallerand et al. 2007). Robertson and Barling have concluded that specific environmental transformational leadership and leadership environmental norms promote employees’ environmental passion, which in turn promotes employees’ pro-environmental behaviours in workplaces,
contributing significantly to greening their organisational business and achieving environmental sustainability.

Ture and Ganesh (2014) have studied the pro-environmental behaviours of people in the workplace so as to design a framework for them on a psychological and social psychological basis. The authors used value-belief-norm (VBN) theory to establish such a framework. The authors concluded that environmental beliefs and people values activate and mobilise personal social norms that have a big influence on employees’ pro-environmental behaviours. Thus, organisational leadership and management should work on these elements to promote positively the pro-environmental behaviours of people towards moving to green initiatives and practices for the sake of saving energy and reducing waste.

Lülfs and Hahn (2014) aimed to discuss the possible determinants of sustainable behaviours of people in companies using the comprehensive action determination model (CADM) proposed by Klöckner and Blöbaum (2010). The authors recommend corporate leadership to intervene and work constructively on the environmental psychology of people so as to drive positively organisational behaviours, which in turn fosters the sustainable behaviours of people that will ultimately reinforce the goal of corporate sustainability.

Chen et al. (2014) posit that not only does green transformational leadership have a positive impact on green performance, but this positive impact also reflects on two other factors that mediate the process, green mindfulness and green self-efficacy. The authors suggest that corporates intending to improve their green performance should focus on three elements during the process to achieve this result: green transformational leadership, green mindfulness and green self-efficacy.

Green and McCann (2011) argue that the best-fit leadership type for the green economy is agrarian type of leadership, which has the appropriate characteristics, capabilities and traits to lead people better in the green economy. As per the authors, agrarian leaders have the abilities to meet the green economy's
challenges, promote ethical behaviors in followers and subordinates and motivate them to achieve a better performance.

Eccles and Serafeim (2013) state that most companies by now have some elements of a green and sustainable strategy and are making efforts to cut carbon emissions, reduce waste and enhance operational efficiency. However, adopting a piecemeal approach does not add up to a sustainable green strategy. To achieve improved performance in economic, social and environmental dimensions, the corporate green strategy must address the interests of all stakeholders: investors, suppliers, employees, customers, governments, NGOs and society.

LEADERSHIP AND THE GREEN ECONOMY

King and Lenox (2001) carried out an empirical study to examine the correlation between being a green industry and business-associated financial performance. The authors argue that the question of whether it ‘pays to be green’ should be rephrased and rearticulated appropriately to be, ‘When does it pay to be green?’

Logaa and Zailani (2013) note that for Malaysian companies, ‘green productivity’ and green initiatives should not be viewed as just a moral responsibility but should be considered from a business perspective as a strategy for organisational success as it improves product quality, and reduces waste, pollution and business risks.

Esty and Porter (1998) examined the important argument of whether industrial ecology can enhance the firm’s competitiveness. Industrial ecology encourages firms to explore ways of reducing the costs of the production processes within upstream and downstream supply chains through adding value. The authors argue that an industrial ecology enhances the firm’s business competitive edge for two reasons. First, regulatory requirements sometimes do not consider costs when cost of closing loops exceeds benefits; thus, a less clean company may gain financial advantage over less polluting and cleaner companies. Second, industrial ecology emphases consideration of energy and materials that are not necessarily aligned within the firm’s setting with other variables, which contribute to
competitiveness. Esty and Porter conclude that industrial ecology in general terms is a useful tool that helps the firm to improve its resource productivity and utilisation and in turn enhances its competitiveness.

Green leadership is the accumulative approach that combines all aspects of leadership characteristics required to achieve green performance. It is the responsibility of the organisation’s green leadership team to attain sustainability. Organisations must look at the overall holistic gain of the triple bottom line (profit, people and planet) rather than segregating them. Segregation TBL is risky as it may lead to team conflicts within the organisation and create issues while implementing the long-term corporate strategy (Esty and Porter 1998).

Chen et al. (2014) claimed that consumer behaviour in recent years is moving towards being more conscious of consumer environmental issues; such a move provides a bigger incentive for companies to move towards implementing solid green initiatives. The companies that succeed in green initiative implementations will end up with a market competitive advantage, as their products will be favourable to matching the consumers’ preferences of buying green products. This approach supports the idea of the triple bottom line approach, as the company will be winning on all three fronts.

As more companies around the world in different vertical situations and markets are investing towards transforming their traditional business to a more sustainable green business, this will result in the establishment of a new globally recognised economy, referred to as the green economy. Gradinaru (2012) researched the best practice that forms today’s global green economy which can grow further in future. The author claims that today’s green economy is a result of companies moving towards adopting the triple bottom line approach to overcome the threats of social, economic and environment changes. The research indicated that in some industries, green initiatives have a direct positive impact on profitability, besides people and planet, such as fishing, forestry and agriculture, however, there are many sectors where they depend on the ecosystem to exist, and for these sectors, a green programme implementation should be a core requirement for
sustainability. In such sectors, national and international bodies should support and fund food security and health by maintaining the ecosystem. Additionally, the research indicates the benefits of investing in eco-certificates and labelling in different industries. This has been proven to have a positive impact on customers' orientation towards these products and services, which strengthen the profitability and help for green economy growth. In view of the increased awareness of environmental issues, there is an increased need for sustainability accomplishment to boost ecosystem services such as eco-certifications and labelling.

Bossink (2007) has studied a leadership style that is appropriate for sustainable innovation. The author argues that a leader's interactive style and charismatic, strategic and instrumental leadership influence the process of sustainable innovation through effective information and knowledge exchange. Further, the success of innovative leadership is correlated with its knowledge management.

The literature reveals the importance and vital role leadership plays in enhancing and sustaining organisational business and triple bottom line business, in particular. Scholars basically correlate organisational business growth, business sustainability and triple bottom line sustainability with leadership (Paraschiv et al. 2012; Crews 2010; Savitz 2013; Wong & Avery 2008; Haanaes et al. 2011; Basu & Palazzo 2008; Waldman et al. 2006; Metcalf & Benn 2013; Waldman & Siegel 2008; Strand 2014; Wirtenberg 2012; Kantabutra & Avery 2013).

Hypothesis 1: Green transformational leadership has a positive correlation with TBLCS.

The outcomes to take away from this section are, first, the need to get a transformational sustainability leader to lead the process of organisation transformation away from its 'business as usual' mode to a sustainable mode of business the only way to transform truly an organisation is to transform its leaders. The leaders can adopt business sustainability when they themselves adopt sustainable changes to their thinking, values and views. Thus, the way to transform a firm is by transforming its leaders (Wong and Avery 2008). Second, firms are a reflection of their executives, board members and CEO personalities,
characters and charisma (Hambrick and Mason 1984). Third, the leadership commitment to sustainability influences the external perception of the firm’s reputation, which enhances the firm’s cash flows, market valuation and net income. Fourth, the adopting of eco-initiatives and a triple bottom line in large corporates need dedicated and qualified leadership teams to ensure the successful attainment of sustainability deliverables (Strand 2014). Fifth, the world needs a new breed of leaders, who really believe in the triple bottom line effectiveness and approach and see eco-challenges as opportunities to transform the world economy into a green sustainable economy (Wirtenberg 2012).

2.5 CORPORATE SUSTAINABILITY AND THE LEARNING ORGANISATION

A learning organisation is a firm making use of its experience to alter, modify and change its mindset and behaviours, as applicable. It is more than individual learning; it promotes self-organisation perspectives and supports the organisation too in appropriately and continuously adapting to internal and external changes.

THE LEARNING ORGANISATION AND ORGANISATIONAL LEARNING

Wang and Ahmed (2003) and Örtenblad (2001) saw the need to research the difference between organisational learning and learning organisation. The literature covering this topic reveals that both terminologies have been used in an interchangeable manner (Boje 1994; Hedberg 1981; Levitt and March 1988). The authors articulate the differentiation between both terminologies as the learning organisation being an ideal form of organisation that promotes learning, whereas organisational learning usually reflects the process or activity of learning.

The literature covers the area of organisational learning is rich. It relates the organisational learning to a more complex form of individual learning, and through different interactions that take place during the learning process. This interactions process varies between the interaction of the individuals and their firm, the
interaction of the corporates among themselves, and the interaction of the organisation with its environment (Wang and Ahmed 2003).

Edmondson and Moingeon (1998) attempted to unify the definitions of both organisational learning and the learning organisation or at least to bridge the gaps created by much of the literature covering this topic. Their attempt is mainly aimed at helping the practitioners in the field avoid the limitation of applying the useful knowledge produced by the scholars due to many conflicting definitions created by scholars. In their journey to reaching their proposed definition, they also explored the need of learning for both the individuals and the organisation. The authors stressed the need of learning as a way to ensure a future existence and competitive advantage, whereas the other option of not to learn would result in either losing competitive edge or going obsolete. The authors define organisational learning as a process in which members of the organisation use their learning experience (data) actively to help the organisation adopt a new behaviour driven by the data used.

THE LEARNING ORGANISATION AND CORPORATE STRATEGY

The quality of learning in organisations should take into consideration the administrative and organisational characters that support the process of learning in organisations or else if it permits simple learning (Svetlik et al. 2007).

Learning in an organisation empowers the systematic sharing of available organisation information. In this way, learning in the organisation is a strategy of information administration (Spector and Davidsen 2006). Business organisations have come to a point where either they will start adding up the natural environment into their plans, or else the public will blame them for not contributing to environmental problems (Sandhu 2010). Banerjee (2001) explains that the environment of the business is changing because of enhanced regulations, public environmental policies, public-nourished awareness regarding environmental issues, customers’ pro-environmental conduct, and environmental administration
scales and industrial standards. Banerjee (2002) concludes that there is a rising inclination among business associations defined as coordinated environmentalism calling to take the challenges of the environment into a planning formulations phase. The business associations must count the concerns of the environment of their disparate stakeholders and transform them into imperative actions that, in turn, will improve and recover their environmental performance and improve their relationship with the basic stakeholders. Banerjee suggests that coordinate environmentalism can administer the business association competitive benefit by assigning strategic competence, for instance, continuous innovation, higher learning order and lower costs of resignation.

Siebenhüner and Arnold (2007) have analysed internal and external descriptive factors that affect sustainability-oriented learning and change processes in medium and large-sized companies. The authors note that organisations typically chase learning processes and change to promote business sustainability when personnel and cultural attributes becoming requirements. The authors posit that structural procedures in terms of learning mechanisms or sustainability management instruments are insufficient to construct sustainability-related knowledge successfully. Change agents remain the fundamental influencing pivots in the sustainable development process. The change process gets magnified by change agents through organisation internal networks supported, particularly by participatory traits management and leadership.

Siebenhüner and Arnold concluded that in medium-sized companies, executives’ support has a critical influence on the learning and change process. While in large companies, the fear of losing reputation and public pressure triggers sustainability initiatives through driving learning and change processes. In general terms, training and qualifying people remain the most helpful mechanisms to achieving change and sustainable development in organisations.

Aksoy et al. (2014) examined the impact and influential effect of organisational learning on employee job satisfaction and efficiency and consequently on organisational performance. The authors argue that organisations have
dynamically undertaken thoughtful organisational changes to cope with international development in communications, the market, business, information and technology. Organisations have to attain organisational culture and organisational learning to enable them to adopt a change mandate to maintain their competitive edge and attain business sustainability. The authors argue that organisational learning is fundamentally dependent on organisational culture, which is dependent on organisational beliefs, customs, arts, habits, ethics, approaches and values. The authors concluded that elements of organisational learning and organisational cultures interact and are intertwined with each other in two directional effects, and more importantly that organisational learning and organisational culture both correlate positively with employees’ job satisfaction and efficiency. This, in turn, enhances performance and reinforces the business sustainability.

THE LEARNING ORGANISATION AND TRIPLE BOTTOM LINE CORPORATE SUSTAINABILITY

On the journey to building or transforming an organisation to being a green one, the organisation has to pass through different stages, keeping in mind that what works for one organisation might not work for another; thus organisations should promote learning phenomena to help in achieving this goal. In many corporates, the term ‘using best practice’ is used on a daily basis. One can understand best practice as the accumulation of a learning process of how other organisations or individuals perform the same or a similar task. It also builds on results obtained from similar processes and data gathered from previous experiences or projects.

Another term that is widely used in the corporate world is ‘let’s not reinvent the wheel’. This also indicates the need to start from where others stopped. Braham (1995) explored many aspects and requirements qualifying an organisation to be a learning organisation. The author notes that accumulative and continuous individual learning integrated with outcomes of what individuals do in the
organisation form the requirement of the learning organisation. Braham emphasises the need to avail of information to all individuals within the learning organisation and not restrict the learning process or the material used for a specific individual or group. This approach will help create a holistic view of the company’s business for all individuals and will encourage creativity and innovation, which will lead the company to learn from its people. Obviously, human knowledge grows accumulatively. Hence, adopting the concept of the triple bottom line in the learning organisation requires continuous learning as a mandate for continuous improvement. To create and maintain competitive advantage in the marketplace for the sake of maximising profitability, the organisation essentially needs fundamental factors, most of which refer to learning to assist continuous product and services improvement. Keeping in mind that the only constant aspect in life is change, the need to embed learning into the organisation’s DNA becomes a necessity and inevitable.

Scholars point out in the literature that the learning organisation is a fundamental requirement that organisations need to adopt actively to ensure a successful change process, enhance performance and, more importantly, sustain the business and achieve triple bottom line business sustainability (Jamali 2006; Werbach 2009; Siebenhüner & Arnold 2007; Senge et al. 1999; Molnar & Mulvihill 2003; Cramer 2005; Aksoy et al. 2014).

Hypothesis 2: The learning organisation has a positive correlation with TBL corporate sustainability.

The outcome to take from this section is that the learning organisation is a driver for corporate sustainability (Jamali 2006). Secondly, organisational culture and organisational learning enable organisations to adopt mandate changes to attain competitive edge and business sustainability. Third, organisational learning is fundamentally dependent on organisational culture (Aksoy et al. 2014).
Moran and Tame (2013) have discussed the correlation between employees’ engagement and organisational sustainability. The authors argue that many organisations realise now the effect of employees’ engagement on environmental and social sustainability initiatives that boost organisations’ capabilities to achieve their sustainability objectives and reinforce their business’s bottom lines. This is in line with the survey results (Dunn 2007, cited by Moran and Tame 2013) that 92% of young professionals prefer to work for socially and environmentally committed firms and environmentally friendly organisations. The authors consider employee engagement to be a leading indicator of financial performance (Gallup 2009, cited by Moran and Tame 2013). Hewitt Associates (2010) noted that employee engagement positively correlates with organisations’ commitment to social and environmental aspects. As per Moran and Tame, these facts result in organisations attaching importance to employees’ engagement and pushing it to a sustainability forefront. The authors note that because of increased pressures from customer demands and evolving values based on social and environmental aspects, organisations have started hiring professionals and experts who have sustainable development experience. Organisations have started introducing new organisational posts like chief sustainability officers (CSOs) and sustainability directors (SDs), among other organisational structural sustainability positions.

Moran and Tame (2013) explain the mechanism of the employee engagement process. It starts with building awareness coupled with experimental education and an ownership feeling. This leads to action taking that requires a call to act, which promotes critical thinking and the problem-solving skills of individuals. This, in turn, develops resilient individuals and yields collectively a resilient firm. The authors discuss the individual elements that collectively lead to employees’ engagement. The authors consider awareness as a crucial starting step for employees’ engagement. Awareness aims to generate employees’ motivation that is catalysed powerfully by personal experience, values, education and emotions (Chouinard 2005). Another way to enhance employees’ sustainable development
awareness is listening tours as insightful exercises that involve individuals’ views and inputs through listening to them and probing their concerns, perceptions and ideas. Promoting employees’ awareness about the necessity of implementing sustainable development is quite important, as it encourages their contribution to an organisational sustainability strategy. Employees should effectively contribute to adopting an organisational sustainability strategy through their valuable innovative ideas, practices and initiatives to cut costs, reduce waste, minimise product defects, improve process efficiencies and produce sustainable products. This takes place through business and process mechanisms like effective waste management, eco-efficiency, lean manufacturing and maximising energy efficiency.

Moran and Tame have discussed the second element for instituting employees’ engagement, i.e. ownership and education. The authors posit that individuals, in general, like to learn about sustainability and like to participate and become involved in making it real. The authors point out that 82% of American’ adults believe that leaders and managers need to learn and be familiar more about the environment (University of Wisconsin 2010, cited by Moran and Tame 2013). The relationship between a feeling of ownership and education works in two directions. That is, ownership encourages and catalyses people for education and education promotes ownership too. In addition, awareness and education promotes ownership that leads to intent and action. Cultivating ownership in people and promoting an experimental education provides an environment for organisational change to take place.

Nadler (1995) identifies six conditions for change to take place effectively as follows: hope, effort, trust, positive anxiety, sense of the unknown and a perception of risk. Moran and Tame (2013) argue that an employee taking action does not necessary indicate or mean engagement, as the fundamental difference between a normal acting employee and an engaged employee is motivation. Moreover, an employee taking action requires calling on her/him to act and, further, it requires from them the acquiring of critical thinking and problem-solving skills. The problem-based learning is an appropriate exercise for taking action collectively with other
employees at the level of the organisation for common plans and objectives. The authors posit that engaged employees are vital and fundamental drivers for the organisation to achieve its sustainability.

Glavas (2012) argues that most literature addressing the sustainability topic tackles the issue at a high level rather than researching the mechanisms of achieving sustainability from a practical perspective. The approach that the author suggests is manoeuvring and steering scholars' ideas into practical approaches and methodologies supported by effective employee engagement. The author notes that leaders should understand that employees are each different individuals who are motivated differently. Leaders need innovative ideas to engage the entire organisation in sustainability initiatives through motivating and engaging individual employees. The author notes that there is no specific unified approach that is used by all organisations for all employees that has been proven to be the most effective one to accomplish the desired engagement level. Thus, Glavas did not suggest a particular blanket solution for employee engagement in his study but recommends exploring innovative ways to engage different employees and groups as a critical condition for the successful implementation of sustainability programs.

Lamm et al. (2015) suggest one way to engage employees is through using a sense of accomplishment at work for some employee segments. The sense of accomplishments achieved in different ways, one of which is when individual’s values align with the organisational values and principles. Extending the same concept for employees who are environmental conscious in their private lives would be most probably active way to participate in organisational environmental sustainability programmes and initiatives. Due to the many national and international eco-awareness programmes, individuals, whether they are goods or services consumers or employees, are becoming conscious and selective about organisations who truly implement sustainability programmes. It is the organisation’s overall best interest to place sustainability as one of its main values and key goals to achieve, the reward for which is enhancing profitability by attracting eco-conscious consumers and by improving process efficiency. Engaged employees will not only play a major role in the successful implementation of the
organisation’s plans, but will help improve the company’s productivity and service levels through working hard and efficiently to attain their personal eco targets aligned with the organisation’s values and plans.

Joshi and Sodhi (2011) segregated the engagements drivers applicable for the executive level and those who were non-executives. The results showed that the drivers that encourage executives’ engagement are more centred around career growth, salaries, engagement with the top management team, work-life balance, teamwork environment and, most importantly, challenging opportunities. On the other hand, the non-executive group shares four engagement drivers with the executive group that motivates their engagement; these four drivers are salaries, work life balance, challenging opportunities and the teamwork environment. However, the non-executive group has three different drivers in addition to the aforementioned engagement drivers’ list: acknowledgment and rewards, resting and recreational facilities, and a respectful and appreciative working environment.

Joshi and Sodhi provided a list of recommendations regarding each of the drivers raised by both groups. The authors concluded that if the employees feel that they are part of an organisation that respects them, interacts with them, provides them with opportunities to grow and learn, respects their personal time and provides them with a safe and fair environment, they will be fully and effectively engaged at all levels.

Benn et al. (2015) studied the effect of human resources management (HRM) practices and, in particular, employees’ engagement in corporates’ green and environmental performance. The authors concluded at the end of their qualitative and quantitative study that corporates’ environmental performance is associated directly with active employee engagement and constructive employee attitudes. The authors argue based on their study’s findings that corporates, having embedded environmental sustainability perspectives and green culture into their approaches and strategies, have greater opportunities of effective employee engagement and involvement in executing organisational green initiatives and environmental protection programmes. Moreover, the support and encouragement of corporate leadership of employees participating in green initiatives boosts
employee job satisfaction and improves employee retention and attraction to their firm. This, in turn, reflects positively on corporate performance and contributes constructively to the firm’s business sustainability reinforcement. The authors suggest that sustainability committed employees are more willing to stay with an environmental friendly organisation, particularly when they see themselves engaged with green and environmental sustainable programmes (Milne et al. 2006, as cited in Benn et al. 2015). The qualitative and empirical study’s findings of Benn et al. support the argument that HRM practices that encourage employee engagement in green environmental initiatives help to motivate employees, boosts their job satisfaction, and reduces greatly their turnover rate. This obviously supports the argument that employee engagement is a vital tool that corporate leaders use to reinforce and heighten corporate performance and sustainability.

When an organisation takes a decision to implement a sustainability plan through transforming its business towards a triple bottom line (TBL) sustainability strategy, it needs to incorporate its stakeholders into a macro-level engagement plan and incorporate simultaneously its employees into a micro-level engagement plan. Stakeholder and employee engagement is a crucial pre-requisite for successful execution of a TBL organisation sustainability strategy. The micro-level engagement plan should principally aim to align all organisational departments and employees at all levels through an effective organisational communication system. Mishra et al. (2014) suggest organisations equip line managers with effective communication tools at all levels, considering face-to-face communication to be one of the most effective communication channels and tools. An effective organisational communication system helps to build employee trust with managers, which reflects positively on their devotion, commitment and contribution towards the organisations’ overall goals and objectives.

Berens (2013) suggests that human nature craves the need for individuals to be a part of a larger community. Organisations can use this desire to drive employee engagement through creating a sense of belonging in the individuals to the larger organisation and assure them that every task they accomplish adds value to attaining the bigger organisational goal.
EMPLOYEES’ ENGAGEMENT AND ORGANISATIONAL PERFORMANCE

When discussing the impact of employee engagement, researchers looked at both the employees and the organisation, and while there have been a number of studies conducted around this topic, the literature suggests that there is still a need for further research, as the topic involves many aspects and factors. Suresh et al. (2015) note that there is a direct correlation between employee engagement and employee job satisfaction, productivity, the organisation’s profitability, customer satisfaction, growth and a low attrition rate, and employees' intention to leave organisations.

Remmen and Lorentzen (2000) argue that involving employees from different groups within the organisation serve as a catalyst that will later result in environmental activities in the organisation involving all employees. This approach achieves better environmental results compared to restricting these activities to technical solutions implemented by external experts. This is because organisational teams have better collective understanding of their unique organisation's dynamics, which makes them more capable of tailoring appropriate health and safety solutions.

The literature review reveals the crucial and fundamental role that employee engagement undertakes in supporting organisations to achieve their goals, objective and strategies. The success of business performance is critically dependent on the most vital resource organisations have, i.e., their workforce or manpower. Scholars posit that employee engagement is an essential driver for the successful adoption of a corporate sustainability strategy and, more specifically, triple bottom line business sustainability (Moran & Tame 2013; Benn et al. 2015; Suresh et al. (2015).

Hypothesis 3: Employee engagement has a positive correlation with TBL corporate sustainability.
The outcomes to take from this section are, first, for the efficient adopting of TBLCS, the organisation needs to institute an integrated strategic plan (ISP) and a dedicated sustainability task force (STF) (Moran and Tame 2013). Second, leadership seeking employee engagement in green initiatives boosts employee jobs satisfaction and improves employee retention and attraction to their firm, enhancing corporate performance and business sustainability. Third, corporates, having embedded an environmental sustainability strategy and a green culture, achieve effective employee engagement and involvement in executing organisational green initiatives (Benn et al. 2015). Fourth, employee engagement is positively correlated to employee job satisfaction, productivity, the organisation’s profitability, customer satisfaction, and a reduced desire for employees to leave organisations (Suresh et al. 2015).

2.7 CORPORATE SUSTAINABILITY AND ORGANISATIONAL CULTURE

WHAT IS CULTURE?

Ubius and Alas (2009) defined culture as basic values, interpretations, approaches and hypotheses that shape organisations and society. Denison (1997) defined culture within culture theory as organisation regime and management practices that are the foundation of the organisation’s values and beliefs, which shape individuals’ behaviours and principles. This explains why it considered as the main source that motivates and coordinates employee values, activities, beliefs, social systems and organisational effectiveness.

ORGANISATIONAL CULTURE AND LEADERSHIP

Schein (2010) explains the critical impact and influence of leadership on the failure or success of firms. The author explains the way culture and leadership are vitally intertwined in such a way that leaders have a substantial influence on shaping, creating and framing organisational culture as the foremost and core architects of
culture, and, conversely, the organisational culture shapes and frames leaders too. The author explains that if one of the cultural components or elements becomes dysfunctional, or the organisation seeks development, leaders are supposed to intervene and lead the process of organisational culture change. Schein explains how different levels of culture, ranging from national, traditional macro culture to micro-culture, are at the level of teams and groups. Organisational culture has a complicated nature if the organisation is multinational. In such case, multicultural leadership is required for addressing organisational multicultural challenges.

Belias and Koustelios (2014) examined the critical relationship between employee job satisfaction and organisational culture. Job satisfaction is a reflective function of employees’ insights into their working environment, promotion, earnings opportunities, success criteria and the organisation’s aims and strategies, and the group inter-relationships.

ORGANISATIONAL CULTURE AND GREEN PARADIGM

The classic anthropocentric world view of businesses is typically built on human focal attention and self-interest in exploiting all available resources for economic gain, and this is the root cause of indifference towards the environment and sustainability (Gladwin et al. 1995; Shrivastava 1995). The dominant world view and perception about nature have influenced and shaped individuals and organisations’ beliefs and actions towards the environment. This probably explains the significant indifference in businesses views towards the environmental degradation, which is based on the dominant business belief that profitability should be the most important factor to consider rather than ecological issues and perspectives (Gladwin et al. 1995).

Organisations need to embed the concept of ‘green’ into their businesses’ DNA through adopting green business practices and addressing efficiently their business-related ecological concerns. They need to learn and overcome the anthropocentric institutional influences through cultural transformation and a
paradigm shift towards ‘green’ (Gladwin et al. 1995; Shrivastava 1995; Haugh and Talwar 2010; Starkey and Crane 2003; Waddock and McIntosh 2009).

Hoffman and Ehrenfeld (1998) note that the shift from a profit-driven approach business to a green business paradigm calls for a serious and fundamental shift in the existing worldview of business and brings typical tensions and ideological conflicts to the surface. Therefore, it is important to bring about a fundamental paradigmatic transformation in current management thinking and practices through evidence-based awareness of ecology.

Management theorists highlight that organisational beliefs and values act as barriers to green change and this needs to be addressed through strategic choices (Hrebiniak and Joyce 1984) and transformational leadership (Senge 1991).

Senge and Carstedt (2001) argue that a paradigmatic shift towards the greening of business narratives needs to be linked to normative systems development, which should impact on economic/organisational behaviours. The paradigmatic shift towards green can be only possible when individuals and management reflect a relationship with nature in their world view.

If individuals and organisational management become connected with their true values and adopt a holistic green approach to the business, they can achieve economic benefits as well as address their social and environmental responsibilities (Senge and Carstedt 2001). The literature reports on the empirical evidence through exploring and uncovering a number of reactive and proactive orientations to green business practices and sustainability. Most studies have focused on the operational elements of firms’ sustainability practices, such as eco-efficient strategies for reducing waste, materials and energy or preventing pollution at source via the redesign of particular processes and products (Sharma and Henriques 2005; McWilliams and Siegel 2000; Orlitzky et al. 2003).

Chen (2011) posits that green leadership and green organisational culture have a positive significant correlation with organisational green competitive advantage and green organisational identity.
Sneirson (2009) notes that sustainability meets present needs without trespassing on the upcoming generations’ needs. The author argues that corporates can meet their shareholders’ high revenues interests in line with meeting other stakeholders’ interests. This trade-off can take place through market influence, social models, government laws and corporate laws. The author suggests companies adhere voluntarily to sustainable practices. The author suggests companies adopt the social and environmental model of ‘B Corporation’ certification for ‘Benefit Corporation’. The ‘B Corporation’ or ‘B Certified Corporation’ is characterised by its commitment to addressing social and environmental impacts through considering customers, employees, community, environment, and shareholders’ needs and interests alike. A Certified B Corporation is a certification conferred by the non-profit B Lab on the basis of meeting high social and environmental performance standards, whereas the Benefit Corporation is a legal status conferred by the government.

Hoffman (2007) note that the corporations that take prudent steps to control their carbon footprint to mitigate global warming and climate change will leverage their competitive edge over their peers tomorrow. The author explains that the corporate that has a strong environment conservation commitment has the ability to shift its compass towards new business opportunities. It is a matter of time only when existing markets will be changed and new ones will be created on a green paradigm basis, where there will be winner corporates and loser ones at that time. The author notes that the shape of environmental climate legislation will be the strongest determining factor for markets that reward innovators for climate-friendly products and services and penalise laggards. He suggests that a company that integrates its carbon footprint into a corporate sustainability strategy manages risks and seizes competitive advantage. Hoffman states that the level of external stakeholders’ awareness about climate change-related risks pushes the corporates to develop corporate sustainability strategies that are green paradigm based. The author argues that the corporate shifts planet conservation from being a periphery perspective to one of its prime objectives, attaining internal and external
stakeholders’ respect and trust. This adds valuable gains to its reputation, name and brand.

Esty and Winston (2009) suggest that ‘green to gold’ should be a business strategy that aims to reduce cost and risks. It should also drive revenues and create intangible values. The authors explain in their book, ‘Green to Gold’, how companies, no matter their size, can create value by embedding environmental perspectives into their overall corporate strategies. They suggest executives take on environmental and social challenges as opportunities for innovations, profitability and business success through gaining eco-advantage in the marketplace. Esty and Winston explain that challenges to meet growing external pressures and stakeholders’ interests should be a genuine reason to strive for corporate sustainability. The authors treat innovation as a golden opportunity to address social and environmental challenges and through which corporates can achieve steady growth and sustainability.

Delmas and Pekovic (2013) have studied and shown empirically that employees working in green companies are 16% more productive than those working in conventional firms.

GREEN CULTURE AND SUSTAINABLE LEADERSHIP

Metcalf and Benn (2013) argue that they are the leaders and that leadership plays an interpretive role in understanding and adapting environmental, economic and social perspectives to achieve organisations’ business sustainability.

Wong and Avery (2008) posit that the only way to truly transform an organisation is to transform its leaders. In other words, only sustainability leaders can efficiently achieve business sustainability through cultivating sustainable cultures that systematically generate sustainability strategy. Sustainability leaders are capable of understanding systems thinking (Senge 1990) and understand how their actions affect others in the long term. Thus, they focus not only on the economic, but also on the moral, social and environmental implications of their decisions.
Avery and Bergsteiner (2011) have used the metaphor of honeybees and locusts behaviour in nature and applied it to leaders’ behaviours in real life. The authors built a sustainable leadership approach of 23 leadership principles or practices extracted from scholars’ views and supported by a vast database of outstanding successful firms. The proposed sustainable leadership model aims for creating value for business stakeholders in the long run through firms’ sustainability strategies. The leadership approach proposed by the authors ensures a holistic change that leads to a sustainable development outcome is taken. The targeted sustainable development incorporates the three main domains of business, that is, social, economic and environmental perspectives. Kantabutra and Avery (2013) have tested the 23 practices of the sustainable honeybee’s leadership style that Avery and Bergsteiner proposed (2011). The authors posit that sustainability leadership principles have led to reputation and brand enhancement, boosting the firm’s financial performance, and improving employees’ loyalty and customer satisfaction.

GREEN CULTURE AND CORPORATE SUSTAINABILITY

Heskett and Kotter (1992) have concluded through a large research study that a powerful and influential relationship between corporate and organisational culture and people and organisational performance exists. Denison (1990) argues that organisational performance is dependent on the degree of comprehensive sharing of cultural values.

Shahzad et al. (2012) show that organisational culture has a strong impact on organisation process and employees and organisational performance. The authors argue also that employees who are committed to the organisation’s values and norms are fit to achieve effectively the overall organisation goals.

Saffold (1988) argues that a strong culture is a driving force to improving the performance of employees. It reduces job stress, enhances employees’ self-confidence and their commitment, and improves their ethical behaviour.
Awadh and Saad (2013) argue that organisational culture affects employees’ interrelationships and influences their values and norms. The authors argue that the loyalty of employees relates much to the norms, values, beliefs and knowledge embedded into organisational culture, which also helps to improve employees’ behaviour (Brooks 2009). The authors recommend that leaders and managers boost the performance of their people and their firms, and reinforce their business with competitive advantages through adopting and maintaining a strong and constructive organisational culture.

Dixon-Fowler et al. (2013) have studied the correlation between corporate financial performance (CFP) and corporate environmental performance (CEP). The authors conclude that the firm’s environmental performance has the strongest influence on its financial performance. The authors suggest that a practical and sensible business notion should not be ‘does it pay to be green?’ but, instead, ‘when does it pay to be green?’

Russo and Fouts (1997) have discussed the correlation between economic performance and environmental performance for firms with an environmentally responsible approach. The authors conclude that high industrial growth moderates the positive relationship of corporate financial performance with corporate environmental performance. The authors’ analytical study showed that being ‘green’ is a paid-for phenomenon.

Klassen and Whybark (1999) have studied the extent to which manufacturing performance is influenced by environmental technologies. The authors argue that manufacturing corporates’ management and leadership have come between the hammer and the stand: maintaining business competitiveness and becoming environmentally responsible. The authors posit that to manipulate this challenge, corporate management should develop an environmental technology portfolio based on their resources and their manufacturing strategies. The authors conclude that environmental technology portfolios invested on and adopted by corporates over time impact significantly on their environmental performance and manufacturing performance as well.
Porter and Linde (1995) note that environmental regulations to protect society and the planet are spreading widely, welcomed by some as they support a liveable planet and are pushing hard for implementing environmental regulations for its social benefits, and not welcomed nor accepted by others on the other hand as they are cost-related schemes that adversely impact competitiveness. This typically reflects the predominant understanding of the trade-off: ecology versus the economy to an arm-wrestling match. The authors argue that addressing the trade-off dilemma mechanism of ecology versus the economy should be through innovation that can offset associated environmental costs, and simultaneously enhance productivity and competitiveness. The authors have used the example of a Dutch flower company that has applied successfully the notion of ‘innovating to be competitive’ through the business paradox trade-off of ecology versus the economy. The authors argue that environmental regulations and commitment should be a driver of business competitiveness

Porter and Linde discuss the traditional school of thought and the new one regarding environmental regulations – competitiveness correlation. Traditionally, companies were considered competitive if they had abundant local supplies and had access to the lowest-cost raw materials, energy and labour (Suresh et al. 2015). Today globalisation has made obsolete the notion of comparative advantage. Firms use technologies to offset the disadvantage of the input costs, outsource cheap labour, use alternative raw materials or make use of synthetic materials to address the problem of raw materials shortage. Firms realise now that competitiveness does not come necessarily from resource abundance but practically from enhancing resources productivity, having a more efficient process, and producing products of more value to customers. The new business paradigm for global competitiveness pushes innovation to cope with the consistent increase in technology development speed. Porter and Linde note that the new business paradigm acknowledges the positive and constructive correlation of being pro-environment with competitiveness. Those developing countries that maintain the myth that implementing environmental regulations is too expensive and continue
adhering to traditional resource-wasting techniques and methods will remain uncompetitive.

The literature review reveals the importance of organisational culture and THE vital role that culture plays in supporting the organisation’s vision, mission and goals. Organisational culture is the main source and provider of organisational core values. It helps employees and leadership to achieve, enhance and sustain the business. This is greatly important in the case of adopting pro-environment business and green business. Organisational culture correlates positively with triple bottom line business sustainability (Hoffman 2007; Esty and Winston 2009; Delmas and Pekovic 2013; Chen and Chang 2013; Green and McCann 2011; Robertson and Barling 2013; Dasborough and Ashkanasy 2002; Robertson and Barling 2013; Ture and Ganesh 2014; Lülfs and Hahn 2014; Chen et al. 2014; Wong and Avery 2008; Heskett and Kotter 1992; Saffold 1988; Awadh and Saad 2013).

Hypothesis 4: Organisational green culture has a positive correlation with TBLCS.

The outcomes to take from this section are, first, despite growing concerns, many business leaders still attach greater importance to financial performance and resist the pressures to adopt a green and sustainable mindset (Kearins 2004). This could be due to many reasons, one of them being that a corporate’s wider green strategy will impose costs, slow down productivity and hinders competitiveness, and it is difficult to quantify gains from sustainable practices as compared to financial benefits. However, in making organisations sustainable in the long term, a green vision and sustainability should be the intent of the organisation, which should call for changing the way people think, plan and behave (Wong and Avery 2008).

Second, organisations need to embed ‘green’ into their businesses' DNA through cultural transformation and a paradigm shift towards ‘green’ through organisational strategic choice and transformational leadership (Senge 1991).

Third, environmental legislation will be the strongest determining factor for new markets that reward innovators for climate-friendly products and services and penalise laggards (Hoffman 2007)
Fourth, the notion of ‘green to gold’ should be a business strategy to reduce costs and risks, drive revenues and create tangible and intangible values. Executives should take environmental and social challenges as opportunities for innovation, profitability and business success through maintaining eco-advantage in the marketplace (Esty and Winston 2009). In other words, ‘green’ is a paid-for phenomenon (Russo and Fouts 1997).

Fifth, green transformational leadership and green dynamic capabilities are drivers of sustainable development enhancement and a catalyst for better performance (Chen and Chang 2013).

Sixth, transformational leadership and leaders’ pro-environmental behaviours promote the employee passion, emotions, and motivation to participate and get involved in greening their organisational business and achieving environmental sustainability (Robertson and Barling 2013; Ture and Ganesh 2014).

Seventh, the leaders and leadership play an interpretive role in understanding and adapting environmental, economic and social perspectives to achieve organisations’ business sustainability (Metcalf and Benn 2013).

Eighth, the only way to truly transform an organisation is to transform its leaders. In other words, only sustainability leaders can efficiently achieve business sustainability through cultivating sustainable cultures that systematically generate sustainability strategy (Wong and Avery 2008).

Ninth, organisational culture has a significant positive influence on people performance and organisational performance (Awadh and Saad 2013).

2.8 CORPORATE SUSTAINABILITY AND CORPORATE SOCIAL RESPONSIBILITY

Different stakeholders view and define corporate social responsibility (CSR) differently. The European Commission (2002) defines CSR as a concept whereby companies incorporate voluntarily social and environmental anxieties and issues
into their business affairs, operations and their stakeholders’ interrelationships and interactions.

Margolis and Elfenbein (2008) have studied the links between the social performance of corporates and their financial performance. The authors concluded that the correlation does exist but not strongly enough. They found out that the correlation between corporate behaviour and good financial results is very slight. Corporates’ shareholders should keep in minds that profitability should not be the main or crucial justification or reasoning for CSR activities and initiatives. If a return on investment remains the prime objective of corporates, it is not possible to appreciate or achieve a viable social performance. The authors argue that in cases where society invests exclusively on grounds of merits, doing well is solely the reward sought by corporate leaders.

To achieve real performance growth over the three TBL domains of sustainability, corporates should introduce and establish the global reporting initiative (GRI) as an international standard measurement tool for the triple bottom line (TBL). This would provide a robust sustainability reporting system, ensuring a consistent reporting process for triple bottom line corporate sustainability (TBLCS) through which corporates could assess their performance to improve their productivity, product diligence and quality (Avlonas and Nassos 2013).

Lacona (2010) argues that CSR adoption is a result of the influential role of shareholders, corporates’ own will, legislation and legal obligations. The author argues that adoption of CSR is a payoff practice that benefits societies and improves corporates’ business bottom line.

Dowell et al. (2000) have investigated whether adopting inflexible and strict global environmental standards by corporates forms a competitive asset or a legal responsibility and business burden for corporates and, in particular, for those multinational enterprises (MNEs) that invest mainly in emerging and developing countries’ markets. The authors applied their analysis to U.S. MNEs that implement a single strict global environmental standard. They found out those enterprises have achieved much higher market values compared to those
enterprises that adopt flexible and soft environmental regulations. The authors conclude that developing countries that try to attract foreign direct investment through adopting sloppy and slack environmental regulations attract less competition and low-grade quality MNEs.

Lu et al. (2013) examined the correlation between firm’s corporate social responsibility (CSR) and firms’ performances. The authors concluded that CSR has a positive impact on firms’ performance. They suggest corporates emphasise increasing their CSR quantitative indicators to enhance their efficiencies through improving their employee relationships and interrelationships, guaranteeing human rights and addressing environmental issues.

Hasanudin and Budianto (2013) explored answers to the big question: whether adoption of corporate social responsibility (CSR) influence and affect internal and external stakeholders and whether adopting CSR has an influence and effect on the performance and reputation of organisations. The authors classified corporate CSR into environmental CSR and employees’ CSR. They concluded that environmental CSR and employees’ CSR have a direct positive impact on organisations’ performance and have an indirect positive impact through organisations’ reputations. In other words, corporate reputation mediates the relationship of organisation performance with environmental CSR and employees’ CSR.

Patrizia (2012) acknowledged that shareholders consider business from capitalist perspectives as a source of revenue and value creation for them. The author argued that making a profit should not be the overriding factor to consider but instead firms should consider how they make it also. After many financial catastrophes and some big firms going bankrupted, an increasing number of firms have started talking seriously about CSR, values and business ethics. The author argued that corporates should not consider CSR as an economic burden for their businesses but as an investment that enhances their competitiveness and sustainability. The typical socially responsible firm respects its employees and adopts transparent promotion policies and fair compensations, counterbalancing
stakeholders’ interests’ conflicts and, importantly, considering and caring for the environment. Elevated CSR awareness is evidence of an increasing number of corporates adopting voluntary codes of conduct. One can see that governments and public are steadily applying pressure on and influencing corporates to reinforce and enhance their CSR applications and practices.

Waldman and Siegel (2008) noted that the literature on leadership has often touted leadership as a panacea for all ills facing organisations and societies worldwide. The authors argued that the literature on CSR as a practice has largely ignored the role of leaders in adopting and implementing CSR practices. However, researchers recently have started studying leadership behaviours that trigger or shape corporate responses (Basu and Palazzo 2008; Waldman et al. 2006).

Rogers and Hudson (2011) argue that the social, economic and environmental elements of triple bottom line (TBL) sustainability relate synergistically to each other, but that is not the case all the time. The three domains of sustainability can come to trade-offs, tensions and conflict sometimes. This challenge can be addressed by dedicated leadership that conducts a change in thinking, collective efforts by all individuals and making a shift in the firms’ business practices, paradigms and cultures. The authors argue that corporate sustainability would succeed if it was founded on self-determined interests of leadership and individuals and not being a passive reaction to external pressures. The authors posit that sustainability development is being subjected to ‘pull and push’ forces mechanisms. The ‘pull’ forces come from within the firm through its leadership while ‘push’ forces come from the market, the community and governmental regulations. The authors believe that successful triple bottom line (TBL) sustainability should be rooted in the minds and hearts of employees who strongly believe that the green business approach is no longer optional. Rogers and Hudson argued that practitioners should have a kind of leadership that plays a crucial role in implementing a change in organisational thinking and practices that make TBL sustainability development work. The authors posit that the three domains of TBL sustainability can be achieved in harmony through drivers of climate change, environment protection and natural capitalism. They argue that
sustainability leadership should aim to get the three components of TBL in a synergy of a 'Triple-Win' confluence.

Elkington (1994) discussed the way organisations implement a mode of business that guarantees a win-win-win formula. The three domains of business, i.e. organisation, its customers and the environment, should simultaneously benefit through sustainability development. The author argues that to achieve successful sustainability development, leadership should consider their products’ entire life cycle and should meet dynamically the ever-changing needs of customers.

Sharma and Khanna (2014) have empirically studied interrelationships and synergies between CSR, corporate governance (CG) and sustainability. They concluded that there was a very low negative insignificant correlation between CSR and CG. Their study shows a positive low and insignificant correlation between CG and sustainability. Additionally, the study has shown a significant correlation between CSR and sustainability. The authors recommended that CSR and sustainability should be embedded within the firm’s governance practices. Sharma and Khanna suggested corporates form a dedicated sustainability board committee that reports and discloses mandatorily its CSR and sustainability activities in a transparent way. This would boost the quality of available social, economic and environmental information related to the firm’s performance to stakeholders.

Klettner et al. (2014) conducted an empirical study of corporate governance (CG) and corporate responsibility strategies. The study shows a consistent increase in managerial efforts that aim to improve firms’ corporate sustainability. The authors remarked that this change is a managerial shift away from the typical orthodox shareholder dominant understanding of the corporation towards a more tolerant and liberal shareholder value approach. This change incorporates the way stakeholders view corporation business strategies. However, the authors acknowledged the persistence of fundamental tensions as a result of persistent market stress on shareholders’ values.
CSR AND FINANCIAL PERFORMANCE

Flammer (2013b) studied the correlation between implementing CSR by firms and their financial performance. The author concluded that CSR is a valuable resource and that firms will witness positive returns and higher corporate financial performance (CFP) through its adoption. This positive correlation is reflected in an increase in the productivity of people and increased growth in sales. This is basically due to improvement in people satisfaction and better customer consideration of the firm.

Flammer (2013a) examined whether product market competition influences firms’ corporate social responsibility (CSR). The author argued that there is evidence that companies improve their CSR in order to improve employees’ productivity, credit their product quality and differentiate themselves from their competitors.

THE United Nations Global Compact UNGC Annual Review 2010 states that CSR improves a firm’s competitiveness and is critical to its future success.

The tug of war as to who organisations should give greater priority to, shareholders or stakeholders, has resulted in considerable academic research on understanding the relationship between CSR/sustainability and CFP. Margolis et al. (2007) examined the CSR-CFP link and concluded that there is a positive relationship between CSR and CFP. However, the positive correlation is small.

Wang et al. (2015) studied the systematic and quantified correlation between corporate social responsibility (CSR) and corporate financial performance (CFP) through a meta-analytic framework study. The authors concluded the following:

- The overall relationship between CSR and CFP is positive and significant.
- This means that CSR enriches and heightens CFP.
- The study also reveals that the nature of the CSR-CFP relationship is a causal one as CSR leads subsequently to financial performance improvement while the reverse, that is, CFP-CSR is not validated or supported.
This study's result reinforces the conceptual perspectives of stakeholder theory.

The study's finding proves that CSR perspectives and the CSR-CFP relationship in developed countries are more prominent and more visible than in developing countries. This is because the gap in terms of institutional system maturity and market mechanism efficiency is significant between developed and developing countries.

Kim et al. (2010) noted that CSR initiatives reinforce and enhance employee relationships with their firm and boost their feeling of belonging and commitment. The authors concluded that a robust CRS image through sound CSR initiatives, activities and performance provide a strategically competitive edge for those seeking customers’ favourable evaluations and satisfactions. This is in line with other authors like Brown and Dacin (1997), Luo and Bhattacharya (2006) and Sen and Bhattacharya (2001), who share the view of Kim et al. that a company’s CSR image boosts its performance and sustainable development.

Weber (2008) studied the influence of corporate CSR on organisation competitiveness through a business case study. The author argued that investment in CSR strengthens the association of human assets and resources with stakeholders and the environment. CSR adds monetary value to organisations as it enhances cost effectiveness, increases revenue, reduces business risks and reinforces the brand. CSR also adds non-monetary benefits to organisations through securing the organisational ‘Right to Exist’ and ‘License to Operate’, improves customer attraction, satisfaction and retention, eases employee recruitment, boosts employees’ motivation, improves employees’ retention, and reinforces organisation reputation.

Robins (2011) noted that most executives and leaders believe that CSR helps corporates in various domains of their business. In tangible ways, CSR helps to enhance corporates’ sales and profitability. Intangibly, CSR helps corporates through promoting corporates’ image and names in society and market, heightening employees’ satisfaction, attraction and loyalty to their firms, and
encouraging talented candidates to join such valued CSR firms. CSR helps firms in terms of cost effective practices and initiatives, enhances process efficiencies and reduces waste. Moreover, smart and effective CSR helps to include corporates into global distinguished sustainable indexes, e.g. the Dow Jones and FTSE 400, which, in turn, contributes to improving the firm’s stock price, which consequently enhances stock options and their market values. The author noted that meta-analytical studies showed a highly positive correlation between CSR and corporates’ profitability. The relationship between corporate social performance (CSP) and corporate financial performance (CFP) is of a greater degree of certainty (Orlitzky et al. 2003).

Manescu (2010) pointed out in her study that CSR was introduced at the beginning of the last century. The author explained that CSR activities are a compromise between the objectives of both shareholder profit generating theory (Friedman 1970) and stakeholders theory (Freeman 1984). The author argued that CSR objectives do not adversely affect any party but aim to benefit the business, shareholders and stakeholders, although not greatly. Baron et al. (2011) argued that the correlation between CSR/corporate social performance (CSP) and corporate financial performance (CFP) in consumer industries is significantly positive where industrial business is negative.

Scholars highlight the crucial and influential impact of CSR on organisational performance, business sustainability and triple bottom line business sustainability. The authors shed light on the crucial role of CSR. It contributes significantly to performance enhancement, improving business branding and supporting business corporate sustainability (Rogers & Hudson 2011; Elkington 1994; Wang et al. 2015; Kim et al. 2010; Luo & Bhattacharya 2006; Sen & Bhattacharya 2001; Brown & Dacin 1997; Weber 2008; Napal 2013; Keys et al. 2009; Robins 2011; Avlonas & Nassos 2013; LU et al. 2013; Tang et al. 2012; Hasanudin & Budianto 2013). Thus,

Hypothesis 5: Organisational corporate responsibility (CSR) has a positive correlation with TBLCS.
The outcomes from this section are:

First, a sustainability leadership should aim to achieve the three domains of TBLCS in a synergy of ‘Triple-Win’ confluence (Rogers and Hudson 2011).

Second, corporate social responsibility (CSR) has a positive and significant correlation with corporate financial performance (CFP), i.e. CSR enriches and heightens CFP. The CSR-CFP relationship is stronger and more prominent in developed countries than developing countries (Wang et al. 2015). CSR is highly positively correlated with corporates’ profitability and performance (Robins 2011; Tang et al. 2012; Lu et al. 2013).

Third, CSR adds value to organisational monetary as it enhances cost effectiveness, increases revenue and reduces business risks. It also adds non-monetary benefits to organisations through improving customer attraction, satisfaction and retention, eases employee recruitment, boosts employee motivation, improves employee retention and reinforces organisation reputation and branding (Weber 2008). CSR can innovatively meet stakeholders’ needs, reinforcing and enhancing the organisation’s competitiveness (Napal 2013).

Fourth, successful adoption of CSR requires executives to ensure effective employee engagement (Keys et al. 2009).

Fifth, achieving real performance growth over the three TBL domains of sustainability requires corporates to introduce and establish the global reporting initiative (GRI) as an international standard measurement tool for TBL (Avlonas and Nassos 2013).
2.9 HIGHLIGHTS OF THE LITERATURE REVIEW

As the case of Z that is being studied in this paper is centred on corporate sustainability in general and triple bottom line corporate sustainability (TBLCS) in particular, the literature review has focused on business sustainability and related aspects that are compatible with this thesis’ research study.

The following are the main highlights of literature review:

- It reveals that TBL is an appropriate forum of business sustainability as it meets holistically the social, environmental and economic demands of business stakeholders.

- It helps in exploring and defining the main drivers of TBLCS, such as green transformational leadership (GTL), green culture, employees’ engagement, learning organisation and CSR.

- It reveals that GTL is a vital TBLCS’ driver. GTL acts as the motivating force that provides momentum to the firm’s entire business to grow and sustain itself. GTL is the best-fit type for sustainable leadership that can lead firms’ transformational process into sound growth and TBLCS.

- It helps in defining the hypotheses of the thesis.

- It helps in refining the research’s context, objectives and questions. It has enriched my knowledge and understanding and reinforced this research’s outcomes.
CHAPTER THREE RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter incorporates the research’s aim, objectives, hypotheses, methods, sources of data, the data collection, the data analysis, the study’s pilot survey and the outcomes.

The research framework of the study clearly defines the following aspects:

a) Research aim, objectives and hypotheses.
b) Research methods
c) Sources of data
d) Data collection instruments – interviews, questionnaires, etc.
e) Data analysis approach

F) Study’s pilot survey

3.2 AIM OF THIS STUDY

This study aims to provide Z corporation with an actionable green strategy for triple bottom line corporate sustainability that should guarantee the corporate a successful strategic transformational shift to a sustainable green business.

3.3 OBJECTIVES OF THIS STUDY

1. Study and analyse the payoff of adopting a triple bottom line corporate sustainability strategy

2. Develop a green strategy for TBL corporate sustainability that is systematically represented in a corporate strategic green model.
3. Develop an actionable roadmap based on the introduced corporate strategic green model that should enable Z's strategic transformational shift to a green mode and sustain its business in a practical, efficient and fruitful way.

3.4 HYPOTHESES

The literature review has shed light on the influential factors affecting and influencing firms’ corporate sustainability in general and on triple bottom line corporate sustainability (TBLCS) in particular. It was concluded from the literature review that TBLS is significantly influenced by elements or drivers like green transformational leadership, organisational green culture, employees’ engagement, the learning organisation, and corporate social responsibility (CSR). These influential drivers are considered hypothetically as independent variables, while TBLS is considered hypothetically to be a dependent variable. The study’s hypotheses are constructed according to the aforementioned context and aspect.

The diagram outlined in Figure 2 below demonstrates the independent and dependent hypotheses' variables. The quantitative part of this research study aims to ascertain the nature of the correlation among these variables and the degree or level of dependency.

The likely relationships or correlations between the main individual corporate sustainability drivers (independent variables), i.e leadership, organisation culture, employees’ engagement, learning organisation, and CSR and the TBLCS (dependent variable) form the main study’s hypotheses (H1, H6, H10, H12 and H14). However, the research has gone further in studying the likely interrelationships or correlation between each individual driver of TBLCS with other drivers represented in an interrelationship or cross interaction, which are considered as sub-hypotheses. The study’s hypotheses diagram is demonstrated holistically in Figure 2 below.
1. Correlation of green transformational leadership with TBL Corporate Sustainability

Campbell (2006) notes that corporate sustainability is positively correlated with transformational leadership. According to Wong and Avery (2008), the only way to truly transform an organisation is to transform its leaders. Paraschiv et al. (2012) point out that organisations need to have responsible and visionary leaders on board to implement sustainability successfully. Wirtenberg (2012) emphasises the need to have green leaders who really believe in the triple bottom line effectiveness and approach to achieve the best triple bottom line outcome. Chen et al. (2014) posit that not only does green transformational leadership have a positive impact on green performance, but also that this positive impact reflects on two other factors that mediate the process, which are green mindfulness and green self-efficacy. Rogers and Hudson (2011) argue that sustainability leadership should aim to get the three components of TBL in a synergy of ‘triple-win’ confluence. It can be ascertained from the literature review that green transformational leadership has a big positive influence on TBLS. Hence, the hypothesis that needs to be validated is:

H₀: Green transformational leadership does not yet have a positive correlation with TBLCS.

H₁: Green transformational leadership has a positive correlation with TBLCS.

2. Correlation of green transformational leadership with the learning organisation

Amitay et al. (2005) note that the influence of leadership, in general, and transformational leadership, in particular, on the learning organisation/organisational learning is significantly important, crucial and effective. Amy (2008) articulates how leadership has a crucial effect on the effective facilitation of the organisational learning process through promoting and enhancing emotional intelligent communication. The literature review shows that green
transformational leadership has a significant positive effect on the learning organisation. Hence, the hypothesis that needs to be validated is:

H$_0^2$: Green transformational leadership does not have a positive correlation on the learning organisation.

H$_2$: Green transformational leadership has a positive correlation on the learning organisation

3. Correlation of green transformational leadership with employees’ engagement

Benn et al. (2015) note that support and encouragement of corporates’ sustainable leadership for employees to participate in green initiatives boost employees’ job satisfaction and improves their retention and attraction to their firm. Galpin and Lee Whittington (2012) note that leadership at an organisational macro level and at a leader-employee micro level have a significant influence on boosting employees’ engagement, which reinforces and leverages organisational performance, sustainable development, sustainability endeavours and strategies. The literature review shows that green transformational leadership has a significant positive effect on employees’ engagement. Hence the hypothesis that needs to be validated is:

H$_0^3$: Green transformational leadership does not have a positive correlation with employees’ engagement.

H$_3$: Green transformational leadership has a positive correlation with employees’ engagement.

4. Correlation of green transformational leadership with organisational green culture

Schein (2010) explains how the critical impact and influence of leadership leads to the failure or success of firms. The author explains the way culture and leadership are vitally entwined such that leaders have a substantial influence on shaping,
creating and framing organisational culture and vice versa. Leaders are considered to be the foremost and core architects of culture and, at the same time, established culture impacts, frames and, influences leadership. Wong and Avery (2008) note how sustainability leaders can efficiently achieve business sustainability through cultivating sustainable cultures that systematically generate a sustainability strategy. Sustainability leaders are capable of understanding systems thinking (Senge 1990). The literature review shows that green transformational leadership has a significant positive effect on organisational green culture. Hence, the hypothesis that needs to be validated is:

H04: Green transformational leadership does not have a positive correlation with organisational green culture.

H4: Green transformational leadership has a positive correlation with organisational green culture.

5. Correlation of green transformational leadership with CSR

Christensen et al. (2014) show that leadership has a big influential effect on CSR and CS irresponsibility in terms of development, executing and sustaining social activities and behaviours. The literature review shows that green transformational leadership has a significant positive effect on CSR. Hence, the hypothesis that needs to be validated is:

H05: Green transformational leadership does not have a positive correlation with CSR.

H5: Green transformational leadership has a positive correlation with CSR.

6. Correlation of learning organisation with TBLCS

Jamali (2006) posits that the dedicated learning organisation/organisational learning is the link that integrates in an efficient way the triple bottom line components or domains (the economic, social and environmental). Moreover, the learning organisation/organisational learning is a driver for corporate sustainability.
Werbach (2009) posits that organisational learning is an essential tool for supporting organisations in boosting business performance and sustainability in a volatile market and amidst rapid change. The literature review illustrates that the learning organisation has a significant positive influence on TBLS. Hence, the hypothesis that needs to be validated is:

$H_0$: The learning organisation does not have a positive correlation with TBLS.

$H_6$: The learning organisation has a positive correlation with TBLS.

7. Correlation of corporate social responsibility with the learning organisation

Carter (2005) notes that organisational learning and organisation supplier performance act as essential mediating factors between corporate social responsibility (CSR)/purchasing social responsibility (PSR) and performance. CSR/PSR enhances organisational learning, which, in turn, reduces products’ unit costs and improves organisational performance. The literature review shows that CSR has a significant positive influence on the learning organisation. Hence, the hypothesis that needs to be validated is:

$H_0^7$: Corporate social responsibility does not have a positive correlation with the learning organisation.

$H_7$: Corporate social responsibility has a positive correlation with the learning organisation.

8. Correlation of learning organisation with employees’ engagement

Aksoy et al. (2014) SHOW that organisational learning and organisational culture both correlate positively with employees’ job satisfaction, employees’ engagement and efficiency. This in turn enhances organisations’ performances and reinforces their business sustainability. The scholars clearly place learning organisation as a fundamental requirement that organisations need to adopt actively to ensure a successful change process, enhance performance, and, more importantly, sustain the business through effective employee engagement (Jamali 2006; Werbach
The literature review shows that the learning organisation has a significant positive influence on employees’ engagement. Hence, the hypothesis that needs to be validated is:

H₀₈: The learning organisation does not have a positive correlation with employees’ engagement.

H₈: The learning organisation has a positive correlation with employees’ engagement.

9. Correlation between organisational green culture and the learning organisation

Ahmed et al. (1999) note that dedicated organisational culture is the crucial driver for the successful learning organisation and business continuous improvement. The literature review shows that the learning organisation has a significant positive influence on employees’ engagement. Hence, the hypothesis that needs to be validated is:

H₀₉: Organisational green culture does not have a positive correlation with learning organisations.

H₉: Organisational green culture has a positive correlation with learning organisations.

10. Correlation of employees’ engagement with TBLCS

The literature review reveals that the employees’ engagement has a fundamental influence on supporting organisations to achieve their goals, objectives and strategies. Business performance success is critically dependent on the most vital resource that organisations have, i.e. employees. Scholars posit that employee engagement is an essential driver for the successful adoption of sustainable development, corporate sustainability strategy and, more specifically, triple bottom line business sustainability (Moran & Tame 2013; Benn et al. 2015; Suresh et al. 2009; Siebenhüner & Arnold 2007; Senge et al. 1999; Molnar and Mulvihill 2003; Cramer 2005).
The literature review shows that employee engagement has a significant positive effect on TBLCS. Hence, the hypothesis that needs to be validated is:

H$_{010}$: Employees’ engagement does not have a positive correlation with TBLCS.
H$_{10}$: Employees’ engagement has a positive correlation with TBLCS.

11. Correlation of organisational green culture with employees’ engagement

Bellou (2010) states that organisational culture has a vital influence on employees’ job satisfaction and, in turn, their engagement. The author shows that organisational cultural traits act as amplifiers for employees’ enthusiasm for their jobs that reflects positively and constructively on the overall job satisfaction of the employees, which enhances their engagement and performance, and boosts business competitiveness. The literature review shows that organisational green culture has a significant positive influence on employees’ engagement. Hence, the hypothesis that needs to be validated is:

H$_{011}$: Organisational green culture does not have a positive correlation with employees’ engagement.
H$_{11}$: Organisational green culture has a positive correlation with employees’ engagement.

12. Correlation of organisational green culture with TBLCS

The literature review reveals the importance of organisational culture and the vital role that culture plays in supporting the organisational vision, mission and goals. Organisational culture is the main source and provider of organisational core values and ethics. It helps employees and leadership to achieve, enhance and sustain the business. This is very important when adopting pro-environmental business and green business. Organisational culture correlates positively with triple bottom line business sustainability (Hoffman 2007; Esty and Winston 2009; Delmas and Pekovic 2013; Chen and Chang 2013; Green and McCann 2011;
Robertson and Barling 2013; Dasborough and Ashkanasy 2002; Robertson and Barling 2013; Ture and Ganesh 2014; Lülfs and Hahn 2014; Chen et al. 2014; Wong and Avery 2008; Heskett and Kotter 1992; Saffold 1988; Awadh and Saad 2013). The literature review shows that organisational green culture has a significant positive influence on TBLCS. Hence, the hypothesis that needs to be validated is:

H₀₁₂: Organisational green culture does not have a positive correlation with TBLCS.
H₁₁₂: Organisational green culture has a positive correlation with TBLCS.

13. Correlation of corporate social responsibility with organisational green culture

Babiak and Trendafilova (2011) show that CSR and environmental responsibility act as motives and drivers for the efficient adoption of green culture and green environmental management practices. The literature review shows that CSR has a significant positive influence on organisational green culture. Hence, the hypothesis that needs to be validated is:

H₀₁₃: Corporate social responsibility does not have a positive correlation with organisational green culture.
H₁₁₃: Corporate social responsibility has a positive correlation with organisational green culture.

14. Correlation of corporate social sustainability with TBLCS

The scholars across the literature review highlight the crucial and influential impact of CSR on organisational performance, sustainable development and TBLCS. The literature reveals the crucial role CSR has on organisational performance enhancement, improving business branding and supporting business corporate sustainability (Rogers & Hudson 2011; Elkington 1994; Wang et al. 2015; Kim et al. 2010; Luo & Bhattacharya 2006; Sen & Bhattacharya 2001; Brown & Dacin
1997; Weber 2008; Napal 2013; Keys et al. 2009; Robins 2011; Avlonas & Nassos 2013; LU et al. 2013; Tang et al. 2012; Hasanudin & Budianto 2013). The literature review shows that CSR has a significant positive influence on TBLCS. Hence, the hypothesis that needs to be validated is:

\( H_{014} \): Corporate social sustainability does not have a positive correlation with TBLCS.

\( H_{14} \): Corporate social sustainability has a positive correlation with TBLCS.

15. Correlation of CSR with employees’ engagement

Tang et al. (2012) show that efficient CSR has a significant positive impact on corporate financial performance (CFP) through enhancing employees’ engagement. The literature review shows that CSR has a significant positive influence on employees’ engagement. Hence, the hypothesis that needs to be validated is:

\( H_{015} \): Corporate social sustainability does not have a positive correlation with employees’ engagement.

\( H_{15} \): Corporate social sustainability has a positive correlation with employees’ engagement.
3.5 RESEARCH METHODS

Pole (2007) shows that currently there are three categories of researchers: those who work in the social and behavioural fields, are quantitatively oriented and search for conclusions deductively through empirical approaches and statistical analysis. The second category is those who are qualitatively oriented and search for phenomena inductively. They rely more on subjective constructions of reality. The third category is mixed-methodology researchers.
Teddle and Tashakkori (2003) argue that mixed methodologists are neither traditionally quantitative nor revolutionary qualitative researchers. Those researchers believe pragmatically that there are multiple realities shaped by individualism. They answer research questions through combining, blending and complementing quantitative and qualitative methods in various ways, in parallel, concurrently or in sequential order.

Research in the social sciences and organisational studies is evolving (Creswell 1994). Developments in the field of research have resulted in a re-examination of the quantitative and qualitative debate as mixed methods research has come of age. To include only quantitative and qualitative methods falls short of the major approaches being used today in the social and human sciences. The debate today is less about quantitative versus qualitative and more about how research practices lie somewhere on a continuum between the two (Newman and Benz, 1998).

3.5.1 QUANTITATIVE RESEARCH METHOD

Johnson and Onwuegbuzie (2004) show that quantitative research is a deductive type methodology. It is based on reasonable, empirical and rational logic, where the researcher adopts ‘top-down’ logic to test particular hypotheses or theories through the collection and analysis of numerical data.

Terrell (2012) shows that quantitative research that is based on the positivist paradigm has historically been the cornerstone of social science research. Sticklers, purists and conservatives pursue researchers to eliminate research biases and to keep emotionally neutral, uninvolved and detached from the studies’ objects, and to justify empirically their hypotheses (Johnson and Onwuegbuzie 2004). The data gathered for quantitative methods are objective and accurate based on standardised collected methods that can be replicated and analysed using statistical procedures (Pole 2007).

The quantitative approach is a hard data-driven approach which primarily investigates and develops new knowledge through cause and effect thinking,
reductions to specific variables and hypotheses and questions, use of measurement and observation, and the testing of theories. Through the use of instruments such as experiments and surveys, researchers collect data on predetermined instruments that yield statistical data. The quantitative approach is recommended when the problem is to identify factors that influence an outcome or to understand the best predictors of outcomes (Creswell 2013). According to Bielefeld (2006), quantitative research is typically designed to test a theory composed of variables, and uses numbers to measure it, and statistical procedures to analyse it to determine whether the predictive generalisations of the theory are truly valid.

The quantitative approach adopted for this study is driven by a positivistic paradigm that has been predominantly used in management and leadership research (Alvesson and Deetz 2000; Alvesson and Willmott 2003).

3.5.2 QUALITATIVE RESEARCH METHOD

The qualitative approach is one in which the researcher often makes knowledge claims based primarily on meanings, derived from individual experiences that are socially and historically constructed. The purpose is to develop a theory or pattern. By using research strategies, such as narratives, phenomenology, ethnographies, grounded theory, or case studies, the researcher collects open-ended emerging data with the primary intent of developing themes from the data to build a theory. If a concept has been little researched or when there is a need to better understand the concept or phenomenon and the factors surrounding it, then it merits adopting a qualitative approach. Furthermore, when researchers are not clear about the important variables to examine in such cases, the exploratory qualitative research is ideal (Morse 1991).

Frankel and Devers (2000) show that qualitative research is an inductive type of research, having a ‘bottom-up’ methodology. The researcher in this type of research generates research subjects' hypotheses gathered from related available information. The data is collected by the researcher through observation and
interviews. The researcher at end of the qualitative research produces a narrative report by incorporating themes or patterns developed from the collected data and information.

Qualitative research focuses more on descriptive understanding than providing generalised insights. The typical examples of qualitative research embrace historical ethnography and case study research. The authors show that mixed-method research can provide a more generalised understanding that can launch and reinforce particular action.

Qualitative traditionalists and classicists support interpretivism and the constructivist paradigm. They claim that this type of research is value bound as the time and free generalisations of the context are neither wanted nor likely. It is almost impossible to differentiate completely between causes and effects or, in other words, it is not possible to separate the knower from the known as the subjective knower is solely the reality source. This logic flows from the specific to the general (Johnson & Onwuegbuzie 2004). The data gathered through qualitative research is considered to be less reliable and accurate (Pole 2007).

3.5.3 MIXED RESEARCH METHOD

Relying on only one type of quantitative or qualitative data creates a ‘uni-research’ mode that limits and threatens the development and advancement of the social and behavioural sciences that researchers should use, integrate and complement to develop ‘bi-researchers’ through mixed research method (Onwuegbuzie 2000c). Onwuegbuzie and Leech (2005) show that mono-method research, either quantitative or qualitative, is the biggest threat to the development and advancement of the social and behavioral sciences. Often, using a uni-research or mono-research method does not meet research stakeholders’ expectations. The author posits that researchers should adopt mixed research methods combining both quantitative and qualitative methods that help to develop pragmatic research.

Caracelli and Greene (1993) show that mixed methods evaluate the landscape of evaluation research. The authors explain that the researcher integrates
appropriately the four data analysis strategies during the analysis process of mixed research of data transformation, typology development, extreme case analysis and data consolidation/merging. The concept is to incorporate qualitative data into quantitative analyses and vice versa in such a way as to help better understand research aspects and better research evaluation.

Johnson and Onwuegbuzie (2004) argue that mixed-method research is a typical complement to the traditional mono-method of qualitative and quantitative research; it combines concepts, techniques, methods and approaches of quantitative and qualitative research into a single study. Mixed-method research represents philosophically a shift to the third research paradigm, i.e. a pragmatic paradigm that moves beyond the battles over method. Its inquiry logic incorporates induction logic to find out patterns, deduction logic for testing hypotheses and theories, and abduction logic to uncover and capture the best explanations set for a better understanding of research results. The authors show that mixed-method research has two designs: mixed-model designs and mixed-method designs. The key strength of mixed methods research is its methodological diversity, heterogeneity, scope extensiveness and range of eclecticism that create the mixed-method research’s superiority over mono-method traditional research.

Leech and Onwuegbuzie (2009) argue that mixed methods research embraces data collecting, analysing and interpreting both quantitative and qualitative data in a single research study. Onwuegbuzie and Leech (2004) show that mixed methods analyses enhance the interpretation of quantitative and qualitative significant findings and that it represents a gold standard for study.

Onwuegbuzie and Leech (2005) argue that quantitative and qualitative paradigms are categorically incompatible and cannot be mixed. The authors state that mono-method research (quantitative and qualitative) is the biggest threat to the development and advancement of the social sciences; however, separating their individual paradigms, they can be utilised within their merits and drawbacks’ constraints to meet the needs of particular research questions. Greene et al.
(1989) show that mixed-method research has five purposes: triangulation, complementarity, development, initiation and expansion.

Teddlie and Tashakkori (2006) show that mixed-method has four research designs: sequential, concurrent, conversion and fully integrated design. Doyle et al. (2009) show that the pragmatic philosophical logic mixed methods allow the use of a variety of methodologies to answer research questions that are difficult to address by a single mono-research method.

Because the paradigms of quantitative and qualitative research do not follow the same philosophical phenomena, their mono-methods approach cannot be combined with cross-triangulation or validation processes; but they can be ideally combined and integrated into mixed method research to complement each other. This, in turn, gives the mixed research design better research reliability (Sale et al. 2002).

3.6 WHY THE MIXED RESEARCH METHOD IS THE APPROPRIATE CHOICE FOR THIS STUDY

The mixed-methods research approach was selected for this thesis as it combines qualitative and quantitative approaches and paradigms into a pragmatist paradigm where it does not matter whether it is a philosophical or methodological approach as long as it is compatible with the nature of the research problem under study (Tashakkori & Teddlie 2008).

The mixed methods concept with its pragmatic paradigm approach answers the study’s complex research questions. The qualitative contexts have provided an insightful understanding of the survey results, and the statistical analysis has provided an appropriate assessment of the interviews’ response patterns (Driscoll et al. 2007).

This study is constructed around combining the quantitative research of the positivistic paradigm and rational logic represented empirically in numerical survey data applied to a sample of Z’s employees and non-managerial staff and inductive
type of research, i.e. qualitative research represented in semi-structured interviews based primarily on meanings derived from individual senior managers’ experiences built around the interpretivist and constructivist paradigm.

The mixed method research mechanism adopted in this study has followed a sequential explanatory approach, where the quantitative phase was followed by a qualitative phase of equal priority. The collection and analysis of quantitative data are followed by collection and analysis of qualitative data and ends with an analysis of the integrated data. The study’s quantitative results are explained and understood better by the study’s qualitative section through Z’s managerial staff interviews. The sequential explanatory strategy was advantageous because it was straightforward, distinct, went through clear stages and is easier to designate and define than concurrent strategies. However, it is quite time consuming (Terrell 2012).

The qualitative part of this research represented in the interviews conducted with senior managerial staff of Z has allowed for a better understanding of the study’s relationships and the dependent and independent variables. Moreover, this enabled the influence of the social context to the quantitative aspects (Shah and Corley 2006). Probing opinions and views from the senior managers have enriched my way of looking into the studied case through an inductive lens that emphasises individual meanings (Creswell 2009).

Combining qualitative and quantitative research methodologies in this study through a mixed research strategy has demonstrated the research pragmatic paradigm that helped much to produce generalisable, accurate and practical outcomes in inherently complex management research. Applying a mixed research method represented by senior managers’ interviews and employees/ non-managerial staff questionnaire surveys have allowed pragmatic consideration of the study’s associated social and behavioural aspects. Incorporating qualitative data into quantitative analyses and vice versa helped greatly in achieving a better understanding of the research aspects and improved research evaluation (Caracelli and Greene 1993). Analyses of the study’s quantitative and qualitative
data have enriched and boosted the interpretation of the findings through the mixed methods being carried out in the study (Onwuegbuzie and Leech 2004).

The mixed research methodology selected for this study is a best-fit research methodological strategy, through which the opinions, views and insights of senior managers of Z provided the answers of ‘why’ and ‘how’ to the ‘what’ of the survey feedback of Z’s employees. The meanings derived from the insights of Z senior managers through their interviews have explained and answered the feedback and statistical outcomes of the employees’ survey in a logical way. The two parts of the research methodology in this study have complemented each other in efficiently producing the study’s findings and outcomes.

The mixed method research design was chosen and adopted for this thesis research based on certain philosophical assumptions and the nature of the study’s questions. This research approach leverages the accuracy and rigour of the study’s findings and outcomes that helped attain the research stakeholders’ trust and satisfaction. The values added through implementing mixed research strategies in this study have far outweighed the extra time spent and the efforts exerted and, ultimately, have leveraged the study’s pragmatic outcomes.

3.7 DATA SOURCES

The primary data of this research study have been collected through a quantitative survey and qualitative interviews, while the secondary data were collected from the literature review. The primary data of was collected through surveying key personnel working in positions where they make a significant contribution to one or more of the triple bottom line sustainability goals. Furthermore, semi-structured interviews were conducted with senior managerial staff across the Z firm to ascertain their views on the subject of the study.
3.8 **STUDY SURVEY DESIGN**

A customised questionnaire was designed with an exploratory nature to fit the purpose of this case study so as to explore the views and opinions of participants in major areas of green leadership, organisational green culture, employee engagement, the learning organisation, CSR and triple bottom sustainability. The questionnaire incorporates the demographic background of participants. The survey aims also to explore the correlations between those major perspective areas of thoughts, if any.

The firm subjected to this case study is referred to by the letter Z throughout the thesis for the purpose of anonymity.

The questionnaire survey has provided an important part of the study’s primary data. The questionnaire survey was made available to a random sample of volunteer participants from different areas and different occupations representing the workforce of Z. Hence, the material collected through this survey is subjective in nature. The survey technique is built on the ‘Likert’ design of questions. Each question has five optional answers, ranging between number 1 for strongly disagree, number 2 for disagree, number 3 for neutral, number 4 for agree and number 5 for strongly agree.

To simplify the presentation of the findings the five Likert answers were grouped into three categories. This means the ‘strongly agrees’ and ‘agrees’ answers were clubbed together under the ‘Agree’ category. The answers to number three of the Likert scale were considered by default as ‘Neutral’. The answers of the ‘disagrees’ and ‘strongly disagrees’ were clubbed together for sake of simplicity under the ‘Disagree’ category.

The primary data and information collected from the study survey have been subjected to a descriptive analysis using the Statistics Package for Social Science (SPSS), while the primary data and information collected from the senior management interviews were subjected to a perspective analysis.
3.9 SURVEY SAMPLING

The study sample consisted of 204 participants in total, which is equivalent to 7% of the workforce of the Z (see Table 1 Demographic Distribution of the Study Participants – Appendix A). The participants were selected on a voluntary basis. They were selected in such a way as to represent non-managerial employees who were not contributing directly to the company’s performance and sustainability. The following aspects were considered for the selection criteria for the study sample:

- The sample of participants covered diverse areas of the company. It covered the production department, the process control department, the services department, IT and the technical/maintenance department.
- The study sample considered the comparative weight of the respective departments’ workforces.
- The survey sample was devised to be balanced and well representative of ‘Z’.

3.10 DATA COLLECTION

DATA COLLECTION PROTOCOL

For sake of fair, transparent and rigorous data collection; the following familiarization and protocols has been followed in questionnaire survey and senior managers’ interviews both.

In each survey’s gathering / interview session, the participants were familiarized with the following points:

➢ The purpose of the questionnaire survey / interview
➢ The philosophy of the questionnaire survey / interview.
➢ The terms of confidentiality, that is, who would get access to the participants’ answers, how the answers would be analysed, how the
answers would be reported, and how the results would be shared with participants.

- The content of the survey questionnaire sheet / interview format
- The format of the interview; being an open-ended questions type of interview.
- The need to sign individually the informed consent form.
- The participants' information sheet.
- The format of the questionnaire, what type of survey it is; the 'Likert' nature of the questionnaire.
- How long the questionnaire / interview would likely take.
- How to get in touch with researcher in case anyone wanted to.

- The participants were explained the protocol of the survey / interview as follows:
  1. Participation in the survey / interview was absolutely voluntary. The participants could refuse to participate in the entire questionnaire or in any part of it.
  2. The information the participant provided in the survey / interview should be confidential and the survey / interview's participants would be fully anonymous.
  3. The questionnaire / interview does not ask for any personal identifying information, such as the participant's name, employee number, grade, designation or address.
  4. The participants had the full right to not answer questions they did not wish to answer.
  5. After analysing the questionnaire / interview data, the researcher is committed to destroy the questionnaire / interview sheets.
6. There is no any foreseeable risk that was anticipated from participating in this exercise.

7. There are no direct benefits to participants from participating in this exercise. However, the gain would be the personal feeling of reward from helping as an active agent contributing to the environment and conservation, societal benefits and economic revenue enhancement through the adoption of triple bottom line corporate sustainability.

8. No service of any kind the participant is entitled to would be lost or jeopardised if the participant chose not to participate in the study.

9. Everyone noted that Z is a symbol used to identify anonymously the participants’ firm in the survey / interview.

10. To avoid any possibility of bias due to the possible influence of the researcher, the survey’s participants would be left alone, unsupervised during questionnaire’s sessions.

11. Explained how to get in touch with researcher’s afterwards.

12. Asked the interviewees a written permission to quote their comments and answers.

**QUANTITATIVE DATA COLLECTED FROM QUESTIONNAIRE SURVEY**

The survey and interviews form the key tool to gather the primary data for this study. It is planned that a total of 200 participants would participate in the survey and around 10 senior managers would be interviewed. However, the actual number of questionnaire respondents came to 204 in total. The questionnaire survey was of a cross-sectional type and took place using a paper-and-pencil approach. The questionnaire surveys were administered personally. The survey participants were divided into groups of 25 to 30 participants in each session. The surveying exercises took place in 90-minute sessions in the conference rooms of the respective departments.
QUALITATIVE DATA COLLECTED FROM SENIOR MANAGERS’ INTERVIEWS

I selected 10 senior managers of Zamong those who accepted voluntarily to participate in this research study. The senior managers were selected from Z management and across different divisions of the firm. To make the interview session comfortable for the interviewees, I carried out the interviews at the interviewees’ offices, on their ‘home-turf’, where they were psychologically at ease. So, it was a door-to-door type of personal interview survey.

To maximise the outcome value of the interviews, I considered some interviewing tips as set out below:

- Ask one question only at a time. Avoid combining multiple questions at a time.
- Remain as neutral as possible.
- Avoid altering interviewees' responses through not showing any visible emotional reactions to interviewees’ responses.
- Maintain non-committal body language to encourage and stimulate and bring out freely interviewees’ responses to the interview questions.
- Help interviewees with a free flow of responses but focus on the questions.
- Phrase the interview’s questions in a way to maintain an open-ended interviewee response to questions.
- Let the interviewee use their own vocabulary and phrasing when answering and do not put my own vocabulary in the interviewee’s mouth.
- Use a neutral tone while questioning the interviewees.
- Avoid condemnatory phrasing and wording or suggestive language.
- Ask clear and concise questions; avoid puzzling and confusing questions.
- Use appropriate and relevant questions.
3.11 DATA ANALYSIS

The quantitative data gathered from the surveys was analysed using Excel and the Statistical Package for the Social Science (SPSS). Descriptive statistics have been summarised to capture the characteristics of the participants. Other inferential statistics were conducted, such as a t-test, ANOVA and a Pearson Correlation test to measure the correlation between effective organisational aspects and corporate sustainability. For all the tests, the level of statistical significance was set at $p \leq 0.05$. The qualitative primary data collected from the top management interviews were subjected to a perspective analysis.

3.12 PILOT SURVEY

Van Teijlingen and Hundley (2001) have explained the pilot survey to be a mini or feasibility exercise for a full-scale survey of academic research study. The authors explain that the main rationale for conducting a pilot survey is as follows:

- Checking the appropriateness of the research instruments
- Gauging the full scale of the survey’s feasibility.
- Judging the workability of the research protocol.
- Helping to institute effective sampling size and technique.
- Helping to recognise a full-size survey related to the logistical and resourcing requirements.
- Helping to collect and analyse preliminary and pre-test data.
- Evaluating the technique proposed to analyse survey data.
- Helping to devise the appropriate research questions.

Prior to executing the main questionnaire survey and management interviews, a pilot questionnaire survey and a pilot management interview were carried out. The pilot survey was executed in two forms, a questionnaire survey of 20 participants
and two semi-structured interviews with senior managers. The survey questionnaire participants and managers interviewees were selected from the same targeted sample of the main research study. The regular ethical steps of the regular survey and interviews were carried out through providing a ‘participant information sheet’ and seeking a ‘participant consent form’ from participants prior to conducting the survey and interviews. The semi-structured interviews conducted with the two senior managers were carried out to discover qualitative information that would supplement and complement the quantitative data obtained from the questionnaire survey sample of 20 participants.

THE OUTCOMES OF THE STUDY’S PILOT SURVEY

The pilot survey was a beneficial tool that helped to provide the appropriate groundwork for the research study. It was like a vanguard study of the main research work. It helped me to identify questions that it did not make sense to participants and, thus, helped avoid biased answers. It also helped me to identify the questionnaire’s flaws that I could appropriately amend for the full-scale study’s survey. I reshaped the CSR questions from a binary question format to a Likert-type questions. As a result of the pilot test, I filtered and trimmed the questionnaire from 65 questions in the pilot survey to 41 questions in the fully scaled questionnaire survey. Furthermore, it helped me to fine tune the questions for the management interview. It was a revelation to apply the ‘KISS’ principle, which stands for ‘Keep It Short and Simple’, into the questionnaire to make the questions simple, concise and easy to answer. More importantly, it helped me in testing the validity and reliability of the questionnaire and for the better understanding of how to execute the full survey and interviews.

The next chapter incorporates the survey data analysis and interpretation, the demographic structure of the participants, the interpretation and analysis of the survey feedback, the research study hypotheses’ validation and analysis, and the analysis of Z’s senior management interviewees’ insights.
CHAPTER FOUR RESULTS AND ANALYSIS

4.1 **INTRODUCTION**

This chapter covers the following sections: the design of the study survey, the way the study survey was sampled, the demographic structure of the survey’s participants, the interpretation and analysis of the survey feedback, and the analysis of the senior management interviews. The chapter incorporates also the validation analysis of the study’s hypotheses.

4.2 **ANALYSIS AND INTERPRETATION OF THE SURVEY DATA**

Study Data Internal Reliability:

The overall study survey’s data was subjected to a reliability test, which shows that Chornbach’s Alpha was 0.933, assuring a high level of confidence and reliability in the survey data, the parameters’ correlations, the interrelationships, and the related findings that are detailed in the following sections.

**DEMOGRAPHIC DISTRIBUTION OF THE SURVEY PARTICIPANTS**

The participants of the study sample varied on the basis of the departments, the education background and the experience (see Table 1 Demographic Distribution of the Study Participants, Table 2 Distribution of the study participants based on their educational level and Table 3 Distribution of Years of Experience of the Study Participants – Appendix A).

**INTERPRETATION AND ANALYSIS OF THE STUDY’S SURVEY – GREEN CULTURE FEEDBACK**

Green culture – survey participants’ feedback (Table 4 Participants’ Survey Feedback Regarding Organisational Green Culture – Appendix A)
The participants’ feedback regarding green culture indicates that Z does not have a clear green vision, lacks a business green paradigm and lacks principally the context of green culture. The vital problem seems to be with Z’s leaders themselves, as they seem to have neither clear plans to control the significant environmental impact of the firm nor a strategic approach to provide practical ways to address such a huge impact on the environment and the planet and, at the same time, enhance the firm’s performance and business sustainability.

INTERPRETATION AND ANALYSIS OF THE STUDY SURVEY – EMPLOYEES’ ENGAGEMENT FEEDBACK

Employees’ engagement – the survey participants’ feedback (see Appendix A) os presented in these points:

The participants’ feedback regarding employees’ engagement indicates employees’ disengagement from Z rather than good engagement. This should draw the attention of Z’s leaders to promote their ‘know how’ techniques and approaches to enhance their employees’ engagement effectively.

- About 51% of total participants expressed their intention to leave the company in the next two years, which is a serious sign that indicates a low level of employee morale, motivation, satisfactions, loyalty and ownership. It probably indicates a critically low level of employees’ engagement. This feedback is a mismatch with the favourable salaries and compensation that Z offers to its employees. Thus, such feedback should be a revelation for the company to analyse crucially and seriously each factor that probably discourages half of the workforce to continue working with the firm (see Figure 21 Results of whether the employees will continue to work for ‘Z’ firm for next two years – Appendix B).
INTERPRETATION AND ANALYSIS OF THE STUDY SURVEY – LEARNING

ORGANISATION FEEDBACK

Learning organisation – Survey feedback (See Table 6 Participants’ Survey Feedback Regarding Learning – Appendix A) IS presented in the points below:

The participants’ feedback regarding the learning organisation indicates that Z lacks the essence of the learning organisation that should act as a catalyst for organisational change and business development. It seems that people contain themselves within their boxes and do not look broadly outside their premises, which indicates that Z works globally but thinks locally. The crucial problem lies in Z leaders’ attitudes being unreceptive and inactive, which hinder seriously the entire organisational learning process, blocks people passion and desire to learn and innovate, impacts negatively the organisational opportunities for change and hinders organisational sustainable development.

INTERPRETATION AND ANALYSIS OF THE STUDY SURVEY – CSR

FEEDBACK

CSR – Survey participants’ feedback (See Table 7 Participants’ Survey Feedback Regarding ‘Z’ Company CSR – Appendix A):

The feedback of the majority of the survey participants (72.5%) revealed that those participants did not see enough evidence that Z had clear policies for CSR. They did not agree that the CSR of Z addresses the social and environmental impacts of the firm. They did not see that Z’s CSR supports the ‘greening’ of the firm’s business. The participants did not agree that Z’s CSR supports the firm’s business sustainability or the organisation performance either.

The participants’ feedback regarding CSR indicates a serious deficiency in Z’s CSR policies, practices and strategy. This phenomenon doubtlessly affects negatively organisation reputation, human resources management, organisational performance, sustainable development, and triple bottom-line corporate sustainability in particular.
INTERPRETATION AND ANALYSIS OF THE STUDY’S SURVEY – TBLCS

FEEDBACK

TBLCS – Survey participants’ feedback (See Table 8 Participants’ Survey Feedback Regarding ‘Z’ Company TBLCS – Appendix A) are presented in the points below:

Economic Sustainability – Feedback:

In general, the feedback of the survey’s participants regarding economic sustainability shows that Z is in a comfortable economic zone. It achieves regular annual growth in its turnover, attains its annual financial objectives and has specific economic sustainability key performance indicators (KPIs).

Social Sustainability Feedback

The participants’ feedback regarding organisational social responsibilities are indicative of a deficient social management in terms of policies, activities and strategy.

Environmental Sustainability Feedbacks

The participants’ feedback regarding the organisation’s environmental responsibilities are a sign that Z has serious deficiencies in its environmental management policies and strategy. As GHG and, in particular, carbon dioxide (CO2) are the main contributors to climate change and global warming, which threaten seriously the entire planet, human wellbeing and the coming generations. It is shocking to see Z lacks an important vision and strategy to control its huge greenhouse gas emissions. As one of the major contributors to environmental pollution, it emits more than 10 tons of GHG/year; it is a more serious situation that it lacks the necessary mitigating strategy to address such disastrous effects on the global environment and the entire planet.

However, Z has environmental key performance indicators (KPIs) focusing basically on controlling and mitigating the low-level environmental impacts into local and regional areas, such as hydrogen fluoride and sulphur dioxide pollutant
gases, but, unfortunately, it ignores pollutant gases like carbon dioxide and other greenhouse gases that harm the globe through their warming effects. The crucial problem lies with Z’s leaders who lack the farsighted consideration of Z global environmental impacts and, more seriously, they lack the commitment to address such impacts.

4.3 VALIDATION AND ANALYSIS OF THE RESEARCH STUDY’S HYPOTHESES

This section examines the validation of the study hypotheses and associated analysis based on the survey participants’ views, opinions and feedback. This incorporates the fundamental TBLCS drivers, i.e. green leadership, organisational green culture, employees’ engagement, learning organisation and CSR.

The following is a validation analysis of the study’s hypotheses

1. H₀: Green transformational leadership does not have a positive correlation with TBLCS.

   H₁: Green transformational leadership has a positive correlation with TBLCS.

The correlation statistical result shows that Green Transformational Leadership has a positive significant correlation with TBLCS (Correlation = 0.698; p<0.05). Hence, the NULL hypothesis is rejected and the alternative hypotheses accepted (See Table 12 Correlation between Green Transformational Leadership and TBLCS – Appendix A and Figure 7 Correlation of Green/Eco Transformational Leadership with TBLCS – Appendix B).

2. H₀₂: Green transformational leadership does not have a positive correlation with the learning organisation.
H2: Green transformational leadership has a positive correlation with the learning organisation

The correlation analysis shows that green transformational leadership has a positive and significant correlation with the learning organisation (Correlation = 0.867, p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. This means that green transformational leaders influence learning organisation a great deal and are capable of enhancing and reinforcing it significantly (See Table 13 Correlation between Green Transformational Leadership and Learning – Appendix A and Figure 8 Correlation of Green/Eco Transformational Leadership with Learning – Appendix B).

H03: Green transformational leadership does not have a positive correlation with employees’ engagement.

H3: Green transformational leadership has a positive correlation with employees’ engagement.

The statistical analysis shows that green transformational leadership has a significant positive correlation with employees’ engagement (Correlation=0.870, p<0.05). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. This high positive correlation means that green transformational leaders have a big constructive influence on employees’ engagement. This vital advantage allows them to greatly leverage employees’ engagement and involvement into organisational change for greening the organisation business and efficiently achieving the organisational TBLS (See Table 14 Correlation between Green Transformational Leadership and Employee Engagement – Appendix A and Figure 9 Correlation of Green /Eco Transformational Leadership with Employee Engagement – Appendix B).

3. H04: Green transformational leadership does not have a positive correlation with organisational green culture.
**H4**: Green transformational leadership has a positive correlation with organisational green culture.

The analysis result shows that green transformational leadership has a positive significant correlation with organisational green culture (*Correlation*=0.668, *p*<0.05). Thus, the null hypothesis is rejected and the alternative hypotheses accepted. This significant correlation value means that green transformational leaders have strong capabilities to influence and shape the organisational culture towards ‘greening’. This, in turn, consolidates the performance of the firm in a balanced and effective way towards comprehensive corporate sustainability, i.e. TBLS (See – Table 15 Correlation between Green Transformational Leadership and Organisational Green Culture – Appendix A and Figure 10 Correlation of Green Transformational Leadership with Organisational Green Culture – Appendix B)

4. **H05**: Green transformational leadership does not have a positive correlation with CSR.

**H5**: Green transformational leadership has a positive correlation with CSR.

The correlation result shows a significant positive correlation between green transformational leadership and corporate social responsibility (*Correlation* = 0.822; *p*<0.05). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. This obviously means that Green transformational leaders have a big influence on the firm’s CSR strategy, policies and applications. This means there is a good opportunity for leaders to adopt constructively a CSR strategy that supports the firm’s performance and people’s wellbeing, and contributes effectively to environmental and planetary conservation (see Table 16 Correlation between Green Transformational Leadership and CSR – Appendix A and Figure 11 Correlation of Green/Eco Transformational Leadership with CSR – Appendix B)
5. H₀₆: The learning organisation does not have a positive correlation with TBLCS.

H₀₆: The learning organisation has a positive correlation with TBLCS.

The results show that there is a positive and significant correlation between the learning organisation and TBLCS (Correlation = 0.460, p<0.05). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted. This means that learning organisation reinforces corporate sustainability in general and triple bottom line sustainability (TBLCS) in particular (see Table 17 Correlation between Learning Organisation and TBLCS – Appendix A and Figure 12 Correlation of Learning Organisation with TBLCS – Appendix B).

6. H₀₇: Corporate social responsibility does not have a positive correlation with the learning organisation.

H₀₇: Corporate social responsibility has a positive correlation with the learning organisation.

The statistical analysis shows that there is a significant positive correlation between a corporate’s social responsibility (CSR) and the learning organisation (Correlation = -0.564; p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that CSR has a considerable influence on the learning organisation through which CSR strategy and policies enhance and promote it, which consequently should contribute to performance enhancement (see Table 18 Correlation between CSR and Learning – Appendix A, and Figure 13 Correlation of CSR with Learning – Appendix B).

7. H₀₈: The learning organisation does not have a positive correlation with employees’ engagement.
H₈: The learning organisation has a positive correlation with employees’ engagement

The statistical correlation value shows that there is a positive significant correlation between the learning organisation and employee engagement (Correlation = 0.677; p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that enhancing the learning organisation should improve employees’ engagement (See Table 19 Correlation between Learning Organisation and Employee Engagement – Appendix A and Figure 14 Correlation of Learning Organisation with Employees’ Engagement – Appendix B).

8. H₀₉: Organisational green culture does not have a positive correlation with the learning organisation.

H₉: Organisational green culture has a positive correlation with the learning organisation.

The correlation value shown in the table above demonstrates a positive significant correlation between the organisation’s green culture and the learning organisation (Correlation = 0.554; p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that a strong organisation green culture enhances the learning organisation, which, in turn, contributes to performance improvement for the benefit of the firm (see Table 20 Correlation between Organisational Green Culture and Learning – Appendix A and Figure 15 Correlations of Organisational Green Culture with Learning – Appendix B).

9. H₀₁₀: Employees’ engagement does not have a positive correlation with TBLCS.

H₁₀: Employees’ engagement has a positive correlation with TBLCS.

The correlation results show that there is a positive significant correlation between employees’ engagement and TBLCS (Correlation=0.547; p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that
strong employee engagement should reinforce TBLCS (see Table 21 Correlation between Employee Engagement and TBLCS – Appendix A and Figure 16 Correlations of Employees’ Engagement with TBLCS – Appendix B).

10. $H_{011}$: Organisational green culture does not have a positive correlation with employees’ engagement.

$H_{11}$: Organisational green culture has a positive correlation with employees’ engagement.

The correlation result shows that there is a positive correlation between organisational green culture and employees’ engagement ($\text{Correlation}=0.323; p<0.05$). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that organisational green culture has a positive influence on employees’ engagement, i.e. a strong green culture should enhance employees’ engagement, which, in turn, should enhance organisational change and improve the firm’s performance (see Table 22 Correlation between Organisation Green Culture and Employee Engagement – Appendix A and Figure 17 Correlations of Organisational Green Culture with Employees’ Engagement – Appendix B).

11. $H_{012}$: Organisational green culture does not have a positive correlation with TBLCS.

$H_{12}$: Organisational green culture has a positive correlation with TBLCS.

The correlation table shows that there is a positive correlation between organisational green culture and TBLCS ($\text{Correlation}=0.460; p<0.05$). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that a strong organisational green culture should reinforce TBLCS (See Table 23 Correlation between Organisation Green Culture and TBLCS – Appendix A and Figure 18 Correlations of Organisational Green Culture with TBLCS – Appendix B).
12. H_{13}: Corporate social responsibility does not have a positive correlation with organisational green culture.

H_{13}: Corporate social responsibility has a positive correlation with organisational green culture.

The correlation result shows that there is strong positive correlation between CSR and organisational green culture (Correlation= 0.527; p<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This result means that strong CSR reinforces a firm’s green culture, which, in turn, should contribute to improving the firm’s performance and TBLS (see Table 24 Correlation between CSR and Green Culture – Appendix A and Figure 19 Correlations of CSR with Organisational Green Culture – Appendix B).

13. H_{14}: Corporate social sustainability does not have a positive correlation with TBLCS.

H_{14}: Corporate social sustainability has a positive correlation with TBLCS.

The correlation result shows that CSR has quite a significant positive correlation with TBLCS (Correlation= 0.820; p=0.00<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that CSR strategy and policies have a big influence on the firm’s TBLCS. In other words, the firm can boost its performance and TBLCS through a dedicated and sustainability-oriented CSR (see Table 25 Correlation between CSR and TBLCS – Appendix A and Figure 20 Correlations of CSR with TBLCS – Appendix B).

14. H_{15}: Corporate social sustainability does not have a positive correlation with employees’ engagement.

H_{15}: Corporate social sustainability has a positive correlation with employees’ engagement.
The correlation result shows that CSR has quite a significant positive correlation with employees' engagement (Correlation = 0.637; p = 0.00<0.05). Thus, the null hypothesis is rejected and the alternative hypothesis accepted. This means that CSR strategy, policies, practices and events have a big influence on employees' engagement. Hence, effective, dedicated and sustainability-oriented CSR can be an efficient tool for enhancing and boosting employees' engagement and involvement for the betterment of the organisation and its performance (see Table 26 Correlation between CSR and Employees' Engagement).

4.4 ANALYSIS OF Z’s SENIOR MANAGEMENT INTERVIEWEES’ INSIGHTS

This section incorporates the key findings from the qualitative interviews I conducted with a sample of 10 key officials and senior managerial posts representing Z’s senior management hierarchy, through which I collected a considerable amount of primary data. The interviewed management sample included vice presidents, directors and senior managers of different areas. There was almost a consensus on many of their insights. The views, opinions and insights of the interviewed senior managers gave a clear picture of the general business paradigm of the Z leadership, the organisational culture, the learning organisation, employee involvement and engagement, and the CSR of Z. The enormous data collected was then organised to identify key themes.

The following are the areas that had a large consensus among the senior managers’ interviewees:

LEADERSHIP

It is evident from the interviews that Z’s leaders lack badly an eco-visionary business paradigm and green culture. This explains why Z is not trying hard to grasp opportunities to develop and construct a dedicated green-based strategy to promote environmentally sustainable development. It does not have the will or
commitment either to address seriously the significant impact of the business on the environment and the planet. Managers look relaxed and happy, with no-pressure legislation from the government imposing obligations on their business.

ORGANISATIONAL CULTURE

It is obvious from Z’s senior manager interviews that the firm does not have a sustainable organisational culture. While Z has clear strategic plans to maximise its financial growth and profitability, it does not have social or environmental sustainability strategies.

The senior management interviews reveal that Z’s leadership is aware of the local environmental impact of its business but the managers are neither farsighted nor keen to consider the huge environmental impact of the business on the globe. It seems that a far-sighted vision about protecting the planet is non-existent.

The gist of almost all the managerial interviewee statements on a green paradigm and green culture indicate that Z does not have a holistic approach or strategy to address their significant environmental impacts. While Z is a global corporation it, unfortunately, has a local outlook regarding global environmental protection.

LEARNING ORGANISATION

- Z’s interviewed senior managers admit that the firm should adopt learning as part of the firm’s culture. This would contribute to shaping the employees’ behaviours and paradigm towards being green.

EMPLOYEES’ ENGAGEMENT

- The interviewed senior managers acknowledged that Z should encourage its employees in effective engagement, contribution and involvement.
- It is obvious that Z lacks effective employee engagement.
CORPORATE SOCIAL RESPONSIBILITIES (CSR)

- Z’s interviewed senior managers acknowledge their corporate's deficiency in being a good corporate citizen.
- They admit that Z does not have a dedicated CSR through which the firm would take care of society and community related social affairs.
- Z’s interviewed senior managers acknowledge that the firm’s CSR does not sufficiently consider the firm’s environmental impacts.
5 CHAPTER FIVE DISCUSSION AND CONCLUSION

5.1 GENERAL

This chapter covers the following sections: a discussion on the case study survey’s findings, the correlation between the different sustainability-related organisational factors-, a discussion on the management interview findings, the study’s conclusions, the contributions of this research study, the limitations of the study, and the future areas for research.

It would be beneficial to refresh the memory for the main reason that had triggered this research study. The problematic case discussed in this paper is for a manufacturing corporate suffering from a business dilemma represented by a dramatic financial deterioration of its economic performance on the one hand, and on the other side, terrible failure of its social and environmental responsibilities. Lacking an appropriate corporate sustainability strategy is the obvious cause of this serious problematic situation. The situation was serious to the extent that it forced the subjected firm to dismiss part of its workforce, cut budgets and freeze investment projects. The financial situation has hit everybody in the organisation. Moreover, it shocked the corporate’s shareholders and executives. That financial crisis has put a question mark over the validity of the firm’s economic-based bottom line sustainability strategy and whether it has a robust corporate business sustainability strategy.

The employees and workforce of any firm are the most valuable asset in forming the backbone of its business. Against this context, I consider that the feedbacks I have got through surveying 204 random volunteer participants of Z are precious. The participants who are well educated and well experienced are mainly from Z’s production division. The feedback I acquired from the participants was helpful in understanding what Z looks like through its employees’ eyes. It revealed employees’ views, opinions and perceptions. It explains the way Z employees think, act, react and interact with their organisation’s working environment, how
they view and judge their firm’s performance, culture, learning, policies and leadership, and how they assess their company’s economic, social, environmental perspectives, citizenship, and Z corporate social responsibilities (CSR).

It is assumed that the anonymous and fully confidential survey mode guaranteed the participants a safe and comfortable environment that allowed speaking their minds freely.

5.2 DISCUSSION OF THE SURVEY FINDINGS

The following is a discussion of the findings that emerged from the survey.

Organisational green culture: Z lacks a green paradigm and green vision that should be the driver for introducing green initiatives and green technologies to address the firm’s significant environmental impact. The firm lacks the initiative, planning and strategy to alleviate its huge carbon footprint through creative and innovative approaches.

CSR: Z lacks an efficient or effective CSR and it lacks sound citizenship. The effect of CSR on Z is minimal in both the social and environmental domains.

Z’s leadership: Leaders of Z are perfectly profit-oriented. However, they lack the essence and spirit of sustainable development. They lack farsighted strategic insights for triple bottom line corporate sustainability. Sustainability aspects: Z has a strong financial performance but it lacks seriously the contextual essence of sustainable development. It is far from having a balanced business with regard to the three domains of the triple bottom line, i.e. people, profit and planet.

Employees’ engagement:
It seems Z employees are unhappy for several reasons: not being recognised or praised for good work, their opinions not being considered, the lack of opportunities to learn and grow unfair and unjustified job promotion policies and
regulations, and ineffective organisational policy communication. The percentage of employees intending to discontinue working for the firm within the next two years (51% of participants) is not proportionate to the salaries Z offers, which indicates that there are other incentives for working other than money.

Organisational Learning
Z firm lacks the essence of a ‘learning organisation’. The employees are not rewarded for learning. The firm does not encourage people to think globally. The firm’s leaders neither develop their learning curve nor encourage their people to do the same. Leaders do little in terms of mentoring and coaching. This might explain why employees are incapable of innovating or effectively contributing to improving the process and the business. Ultimately, Z contains itself within its business box as it shows little interaction with others across borders for insights exchange and interchange.

CORRELATION BETWEEN THE DIFFERENT ORGANISATIONAL FACTORS – SUSTAINABILITY RELATED

Based on the survey’s data, the following correlations between the main sustainability drivers and TBLCS and among the drivers themselves are presented. Simultaneously, these statistical correlations validate the study’s hypotheses. The correlations are presented in the tables in Appendix A and in the correlation scatter graphs in Appendix B (see Figures 8-21).

- An SPSS analysis demonstrates a significant positive correlation between the main corporate sustainability drivers and TBLCS, i.e. between eco-transformational leadership, organisational green culture, employees’ engagement, the learning organisation, and CSR with TBLCS at different correlation coefficients.
- An SPSS analysis demonstrates a significant positive correlation and interrelationship between aspects of green transformational leadership,
organisational green culture, employees’ engagement, the learning organisation and CSR at different correlation coefficients.

- ANOVA association relationships are presented in tables 27 to 32 in Appendix A.

5.3 **DISCUSSION OF SENIOR MANAGERS’ INTERVIEW FINDINGS**

5.3.1 **LEADERSHIP**

- It is clear from the senior managers’ interviews that Z’s leadership bid for business sustainability is at the economic bottom line of the business and puts aside the other two business domains, i.e. the social and the environmental.

- Almost all the statements from Z senior managers’ interviewees disclosed that they have no clear idea about triple bottom line sustainability. This means that Z’s leadership is still one paradigm domain of business, i.e. working for one bottom line, i.e. focusing solely into economic bottom line.

- The interviewed senior managers are economic payoff oriented, financially focused and profitability centred. They assess their firm’s performance solely on its economic portfolio basis.

- The interviewed managers are far from having the traits or essence of being green visionary leaders.

- The senior management interviews reveal that Z’s leadership have a piecemeal approach and lack transformational leadership to change the firm’s culture towards a green paradigm and guide it to achieve corporate TBLS through an innovation culture that creates opportunities for value creation.

Despite growing social and environmental concerns, many business leaders still attach greater importance to financial performance and resist the pressures to adopt a green and sustainability-oriented mind-set (Kearins 2004; Wong and Avery
This could be due to many reasons, one of them being that a corporate-wide green strategy will impose costs, slow down productivity and hinder competitiveness, and it is difficult to quantify gains from sustainable practices as compared to the financial benefits. Z’s executives and leaders should acknowledge that in making organisations sustainable in the long term, a green vision and corporate sustainability concept should be the intent of the organisation and this should call for changing the way people think about the organisation’s business approach (Wong and Avery 2008).

Z executives and leaders need to acknowledge that effective strategic leadership is the key organisational factor to achieving a satisfactory and superior performance while confronting the challenges of the global economy (Ireland and Hitt 1999). They should acknowledge that leadership plays an interpretive role in understanding and adapting an organisational commitment to the wider environmental, economic and social factors that achieve business sustainability (Metcalf and Benn 2013), and leadership can help organisations to bridge the gap between being profit motivated and the green business paradigm (Hoffman and Ehrenfeld 1998). Furthermore, transformational leadership is capable of removing the barriers to green change (Senge 1991).

Z needs to have responsible and visionary leaders to implement a corporate sustainable strategy successfully; those leaders play a key role in improving both the efficiency and the speed needed to achieve the sustainability programme results (Paraschiv et al. 2012).

As the world looks for a new breed of leaders to transform the world economy into a green sustainable economy, greater emphasis is needed on developing green leadership teams who really believe in triple-bottom-line effectiveness and its approach and see eco-challenges as opportunities. Z’s executives and leaders should understand that green leadership development requires the utmost attention as much as the attention paid to the technical and operational aspect of achieving the best outcome of the triple-bottom-line. There have to be efforts made and programmes developed to prepare these new leaders as they form the core
human factor that can translate the technical and operational programs into reality (Wirtenberg 2012).

In short, the qualitative analysis of senior managers’ interviews has supported the research study’s hypotheses and answered the study’s questions in general and on leadership in particular. It interprets and explains clearly the quantitative findings.

5.3.2 ORGANISATIONAL CULTURE

The qualitative analysis of senior managers’ interviews interprets and explains the quantitative analysis of the survey. The quantitative findings indicate that the majority of Z’s employees do not see their firm having a green vision or a green strategy although it has huge carbon footprint; they see Z lacking eco-efficiency policies; the firm has no green technologies and has no policies for improving energy efficiencies. Further, Z does not do enough in terms of waste management.

Z should aim to be a good corporate citizen; it should not focus solely on economic revenue but balance the economic bottom line with the two other business bottom lines of social and environmental domains within sustainable development strategies reflected in triple bottom line sustainability.

Prahalad (2005) highlights that to embed ecological concerns and green business practices into the DNA of the organisation, it is important for organisations to learn and overcome anthropocentric institutional influences by undergoing a culture transformation, and engage in a paradigm shifting process towards being green. The onus for transforming the DNA of Z to green perspectives rests with its board of directors, leadership and top management.

Wong and Avery (2008) highlight that in making organisational business sustainable for long-term benefits; a green vision should be the intent of the organisation, a vision which calls for changing the way people think about organisations. Therefore, it is imperative that leaders of Z realise their responsibilities towards the firm’s stakeholders and makes green the intent of the organisation. Considering the planet as one of the business’ stakeholders should
be part of the fundamental shift to the way of thinking, planning and strategies of Z and other major manufacturers.

Daly (1991) posits that large firms use energy and materials from the environment being integral parts of the economy as well as the social and ecosystem. Stead and Stead (1994) posit that large firms need to adopt a communitarian business approach.

Z’s executives and leaders need to understand that in the current highly competitive business environment and being a large firm, an approach that fully exploits its capabilities is required. Z needs to explore innovated mechanisms to effectively face the increasingly volatile and uncertain external environment and achieve corporate sustainability (Benner and Tushman 2003; Kohtamaki et al. 2010).

Z’s executives and leaders need to understand that adopting eco-efficiency and green innovation by organisations does not only optimise production processes and also achieve cost effectiveness and competitive advantage. Therefore, it is imperative for Z to improve operations efficiency and environmental performance not only through typical ways but also through an innovative approach and mechanism (Hart 1995).

Z’s executives and leaders should acknowledge that better corporate governance can drive organisations towards genuine sustainability. Corporate boards need to strike a balance between shareholders and stakeholders’ expectations of fulfilling their triple bottom-line performance. Unfortunately, developing countries lack a reasonable level of corporate governance transparency, which should be addressed and improved by responsible corporates’ leadership. Transparent reporting with timely disclosure of information can assist corporates’ boards in creating public opinion that would support strongly their corporate sustainability ambitious strategies (Elkington 2004).
5.3.3 THE LEARNING ORGANISATION

A qualitative analysis of senior managers’ interviews explains and interprets the quantitative analysis of the employees’ survey. Z’s employees, in the survey, expressed their dissatisfaction with the learning mode of their firm; they do not see change or development; they contained themselves within their own cubicles. They were suffering from Z leaders’ unreceptive and inactive attitudes that hinder seriously the entire organisational learning process, which blocks people passion and desire to learn and innovate, hinders organisational opportunities for change and fails to support the organisation’s sustainability strategies.

Z interviewed managers admitted that the firm should adopt learning as part of the firm’s culture. This would contribute to shaping employees’ behaviours and paradigm towards being green. The managers acknowledged that Z should encourage its employees to be effective engaged, to contribute and be involved.

Z executives and leaders should acknowledge that learning with the help of experience and practice helps in accelerating people’s behavioural change and that organisational learning is the best way to develop the corporate sustainably (Tinaz 2000; Senge et al. 1999).

Z’s leaders should understand that organisational learning is the coherent link that integrates in an efficient way the triple bottom line’s components or domains (economic, social and environmental). Moreover, the learning organisation is a driver for corporate sustainability (Jamali 2006). Organisational learning is an essential tool supporting organisations in boost business performance and sustainability in a volatile market and during rapid change. The firm should invest in leadership learning and the learning organisation to enhance the firm’s profits and build robust business strategies (Werbach 2009).

Z leaders should understand that organisational learning is the way to develop the corporate sustainably and sustainable development cannot be achieved without engaging in innovation, and innovation can only be achieved in organisations focusing more on learning (Senge et al. 1999). For corporates to target
sustainability, they need to introduce cultural changes and adopt new shared standards. It is very important to introduce changes into organisational shared beliefs, culture, processes and strategies through organisational learning (Molnar and Mulvihill 2003; Cramer 2005).

5.3.4 EMPLOYEES’ ENGAGEMENT

The qualitative analysis of senior managers’ interviews explains and interprets the quantitative analysis of the employees’ survey. The quantitative findings show Z employees’ disengagement rather than good engagement, which, in turn, reflected clearly in the intention of 51% of the employees wishing to leave the company in the next two years. It is obvious that Z lacks effective employee engagement and leaders do not do much to change this unwanted situation.

Z’s leaders should understand that employee engagement is a vital part of a comprehensive strategy for Z to make organisational change towards achieving its goals and objectives. Z’s leadership should consider employees as effective change agents by whom Z can reinforce its change plans and development strategies. Employees’ engagement should read rightly as one fundamental tool for sustainable development and TBLCS.

Z’s leaders need to understand that for organisations seeking to adopt TBLCS, they have to institute an integrated strategic plan (ISP) and an associated sustainability task force (STF) dedicated to adopting the organisation’s sustainability. The sustainability strategy should be based on organisational own values and vision and not because of external forces and pressures. It is because if external pressures and forces get shifted, this might cause a sustainability strategy to collapse. Leaders can bid on the incredible power of employees’ engagement for enhancing organisational performances and business. Thus, Z should build employees’ engagement on the solid ground of an established sustainability task force (STF), an integrated strategic plan (ISP) and committed organisation leadership (Moran and Tame 2013).
5.3.5 CORPORATE SOCIAL RESPONSIBILITIES (CSR)

The qualitative analysis of the senior managers' interviews explains and interprets the quantitative analysis of the employees' survey. The quantitative findings show the deficiencies of Z's CSR policies, practices and strategy that affect negatively the organisation's reputation, human resources management, organisational performance, sustainable development and obviously any potential TBLCS strategy.

Z's executives and managers should understand the proven positive correlation between CSR-engaged strategies and firms' corporate financial performance (CFP). The corporate's profitability is shaped by how efficient the corporate CSR is. Corporates can reinforce and robust the correlation between their corporate social responsibility (CSR) and corporate financial performance (CFP) by adopting some appropriate practices, e.g. adopting related and internal CSR dimensions consistently in slow and regular mechanisms will enhance corporates' CFP. They should understand that there is no one size for a 'CSR engagement strategy' that fits all; a corporate can choose its own appropriate and suitable CSR engagement strategy to enhance its CFP irrespective of contextual factors (Tang et al. 2012).

Z's executives and managers should understand that corporate sustainability does not oppose corporate profitability; however, it aims for long-term profitability. Moreover, corporates adopt corporate social responsibility (CSR) not only to meet their legal obligations but also to meet stakeholders’ interests and societal and environmental concerns (Avlonas and Nassos 2013).

Z as a firm needs to incorporate corporate sustainability and CSR into its business strategies to sustain the business in the current unstable and uncertain business market. Z should adopt proactively CSR and sustainability into its devised business strategies in an innovative way to meet its stakeholders’ needs, reinforce, and enhance its competitiveness in such a tough competitive market (Napal 2013).

Z leaders need to look for a creative emerging build of CSR that complements and pairs the capabilities of society and business to address its challenges to the
benefit of both of them through embracing their dual objectives at the same time (Keys et al. 2009).

Overall, the interviewed Z senior managers seemed to be lacking a sound understanding of a corporate sustainability vision, insights, techniques, planning and strategy. They had a shallow understanding of triple bottom line corporate sustainability. The top management interviewees expressed uncertainty about the appropriate roadmap for either sustainable development or corporate sustainability. They lacked the credentials of sustainability leadership. It was obvious they lacked the ‘know how’ of being corporate sustainability leaders.

In short, the qualitative analysis of the Z senior managers’ interviews mirrored the quantitative analysis of the Z employees’ survey. It provided a very clear understanding, explanations and interpretations of the quantitative findings. The findings of the qualitative part of the research study support the study’s assumptions and hypotheses and assisted much in answering the thesis’ questions.

### 5.4 ACCOMPLISHMENT OF THE STUDY’S AIM

This thesis case study aimed to provide the Z Corporation with an actionable green strategy for triple bottom line corporate sustainability that should guarantee it a successful strategic transformational shift to a sustainable green business.

The concept of TBLCS consolidates the conceptual elements of sustainable development, corporate social responsibility, stakeholder theory and corporate accountability theory. The green strategy to adopt TBLCS is founded on a business ‘green paradigm’ that is built on the sustainability context. The corporate should embed and integrate a business green paradigm into its organisational vision, mission, values, culture, decision-making processes, organisational learning, dedicated CSR, business planning and strategy.

The corporate sustainability green strategy is driven by five main drivers, i.e. green transformational leadership, organisational green culture, learning organisation,
employees’ engagement and dedicated CSR. The strategy works in real life through innovative values creation for corporate stakeholders. The processing mechanism of the sustainability green strategy incorporates a creative and innovative approach through improved energy efficiency, efficient waste management, using renewable energy, lean manufacturing, resources management and eco-efficiencies. This ultimately should trigger an intense innovative approach to unblocking a business’ ambitious opportunities and unlock potential value creation.

5.5 ACCOMPLISHMENT OF THE STUDY’S OBJECTIVES

1. Study and analyse the payoff of adopting a triple bottom line corporate sustainability strategy

2. Develop a corporate sustainability green model that interprets the introduced green strategy for TBL corporate sustainability.

3. Develop an actionable roadmap based on the introduced corporate sustainability green model that should enable Z make a strategic transformational shift into greening and sustaining its business in a practical, efficient, and fruitful way.

Objective 1: Study and analyse the payoff of adopting a triple bottom line corporate sustainability strategy

In principal, a corporate sustainable development strategy should be a mechanism by which the firm creates value and develops opportunities to grow. It provides business with a tangible and intangible competitive edge through improving a firm’s processes and operations, cutting costs, reducing waste, improving energy efficiencies, using renewable energies, learning the manufacturing processes, improving resources management that reinforce existing market share, introducing new markets and products, and improving the firm’s reputation and branding, which ultimately boost the business’ bottom lines.
Corporate sustainability stands sound and robust when founded on the business triple bottom line domains of social responsibility, economic prosperity and environmental stewardship. The corporate takes today prudent steps to control its carbon footprint as mitigating global warming and climate change will leverage its competitive edge over its peers tomorrow (Haanaes et al. 2011; Savitz 2013; Willard 2002, 2012).

The corporate with a strong environment conservation commitment has the ability to shift its compass towards new business opportunities. It is matter of time only when existing markets will be changed and new ones will be created on a green paradigm basis where there will be winner corporates and loser ones at the same time. The shape of environmental climate legislation will be the strongest determining factor for the next markets that reward innovators for climate-friendly products and services and penalise laggards. Integrating the carbon footprint into a corporate sustainability strategy would manage risk and allow competitive advantage to be seized through developing corporate sustainability strategies that are green paradigm based. The corporate shifting planet conservation from a periphery perspective to becoming one of its prime objectives gains internal and external stakeholders’ respect and trust. This adds valuable gains to its reputation, name, brand and performance (Hoffman 2007).

The companies that succeed in green initiatives implementations will end with a market competitive advantage, as their products will be favourable to matching the consumer’s preference of buying green products. This approach supports the idea of the triple-bottom-line approach, as the company will be winning on all three fronts (Chen et al. 2014). Now many firms are creating additional value through introducing new markets to their ‘green’ products at premium prices as a resource-efficient product (Porter and Linde 1995).

The social, economic, and environmental elements of TBLCS relate synergistically to each other but that is not the case all the time as they can come into trade-offs, tensions and conflict sometimes. This challenge can be addressed by dedicated leadership that conducts a change in thinking, through collective effort made by all individuals, and by adopting a shift in the firm’s business practices, paradigm and
culture. TBLCS should be rooted in the minds and hearts of the firm’s people who strongly believe that the green business approach is no longer an option but a must. Sustainability leadership should aim to get the three components of TBL into a synergy of ‘triple-win’ confluence (Rogers and Hudson 2011).

**Objective 2: Develop a corporate sustainability green model that interprets the introduced green strategy for triple bottom line corporate sustainability (TBLCS)**

The developed green model for a TBLCS strategy, as demonstrated below in Figure 4, is built on three structural levels, input, process, and output/deliverables. The input component of the model is represented by the five main TBLCS drivers or pillars as shown below in Figure 3, i.e. green transformational leadership, employees’ engagement, organisational green culture, learning organisation and dedicated CSR.

The second component of the developed green model incorporates the corporate sustainability processes but should not be limited to improving energy efficiencies, efficient waste management, eco-efficiency, resources management, lean manufacturing, and using renewable energy, as demonstrated below in Figure 4.

The third component of the Green’ model of TBLCS strategy is the corporate sustainability’s output or deliverables represented in the TBL domains of economic prosperity, social responsibilities and environmental stewardship.

Green transformational leader (GLT) should govern the sustainable development process on a platform of creativity and innovation with the aim of primarily creating values and applying a continual improvement perspective mechanism throughout model execution process.

**Objective 3: Develop actionable roadmap based on the introduced corporate sustainability green model**

The paper has moved further and developed an actionable roadmap. The developed roadmap demonstrates a fully integrated plan of action for corporate
adoption of a green TBLCS strategy across the entire firm of Z through a feasible and practical mechanism. The roadmap illustrated below in Figure 5 (Chapter 6) allows Z to execute the TBLCS green strategy in a way that enables Z to engage in a strategic transformational shift to greening its business in a practical, efficient and fruitful way.

In short, for the successful adoption of a green TBLCS strategy, Z the firm needs to adopt re-structural changes by which it can introduce new dedicated organisational posts like Chief Sustainability Officer (CSO) and Sustainability Task Force (STF). Secondly, Z needs to re-conceptualise the organisational leadership concept so as to establish a Green Transformational Leadership (GTL) which can lead the strategic corporate change into a sustainable green business using the TBLCS drivers of employees’ engagement, organisational green culture, learning organisation and dedicated CSR.

The time has come for organisations/corporates to shift their business paradigm to the notion of ‘More Green – Less Greed’. Green business should be the typical organisational/corporate cultural notion embedded and integrated seamlessly into firms’ business DNA. This systematically aligns firms’ business with THE current and steadily increasing global trend towards ‘green business’ and the ‘green economy’. The proposed business green model aims to leverage the business notion from ‘not harming lives’ to be ‘improving lives’.

The thesis research study supports the tenet that leadership is the panacea for all organisational ills and GTL is the best fit for the leadership type for strategic transformational change towards a green mode of TBLCS. The study concludes that corporate sustainability has become no longer optional, while running a corporate business ‘As Usual’ has become an obsolete tenet. For those firms lacking a green strategy, they need to jump quickly today not tomorrow into the non-stop corporate sustainability’s fast train toward the green sustainable business destination.
5.6 **THESIS CONCLUSION**

5.6.1 **INTRODUCTION**

This thesis research study was of a major manufacturing corporate located in UAE that began suffering from a business dilemma represented by a dramatic financial decline and a significant deterioration in social and environmental business-related aspects. The fundamental cause for this serious business failure was the absence of a corporate sustainability strategy as in the case of numerous examples in developing countries. The action research strategy of this study is founded on a mixed research methodology composed of a quantitative research part represented in a survey that comprised a reasonable sample of the firm's employees while the qualitative research part constituted semi-structured interviews with senior managers of the firm. This thesis’ actionable knowledge aims to provide the corporate under study with an actionable green strategy for triple bottom line corporate sustainability that should guarantee it a successful strategic transformational shift to a sustainable green business.

5.6.2 **CONCLUSION**

This study answers the research question in that adopting a corporate sustainability strategy is a vital element for corporates in terms of achieving business strategic goals, i.e. economic prosperity, social responsibilities and environmental stewardship. Secondly, adopting the triple bottom line (TBL) concept is an appropriate payoff phenomenal for a corporate sustainability strategy. Third, business greening is of utmost value in addition to corporate sustainability. Fourth, the study reveals that green transformational leadership (GTL), green organisational culture, employees’ engagement, learning organisation and dedicated corporate social responsibility (CSR) comprise the fundamental drivers of the study’s developed green strategy of triple bottom line corporate sustainability (TBLCS). The study reveals that leadership is the panacea
for all organisational ills and GTL is the best fit for a leadership type for strategic transformational change towards a green mode of TBLCS.

This thesis concludes that running a corporate business in an ‘as usual’ manner has become an obsolete approach, and instead corporate sustainability has become no longer optional. The study concludes that adopting a developed TBLCS green strategy is an absolute payoff for business sustainability.
Figure 3: Drivers of triple bottom line corporate sustainability
Figure 4: Green model for triple bottom-line corporate sustainability
5.7 **CONTRIBUTIONS OF THIS RESEARCH STUDY**

This study aims to provide the Z corporate with an actionable green strategy for triple bottom line corporate sustainability that should guarantee it a successful strategic transformational shift to a sustainable green business.

The paper has moved further and developed a green model to execute the green strategy of TBLCS through an actionable roadmap that enables Z to make a strategic transformational shift to greening its business in a practical, efficient and fruitful way.

The study emphasised the fact that transformational leaders are a requisite for transforming organisations. It highlighted the vital role and influence of green transformational leaders for the successful adoption of a TBLCS strategy through their proficient leading of organisations’ strategic transformational shift to business greening.

Additionally, the study outcomes act as a motivator and empowering tool, encouraging Z and similar firms to boost their business performance and reinforce their business sustainability through organisations’ strategic transformational shift to business greening. This aspect is more important in the case of Z as it lines it up with the ‘2030 Vision’ of Abu Dhabi that having an emphasis on environmental protection through using renewal energy and with the ‘green economy’ strategic horizon vision of Dubai that pushes powerfully and with great enthusiasm for business and economy greening in the UAE.

5.8 **LIMITATIONS OF THE STUDY**

- This thesis study does not intend to focus nor explain in detail the ways and methods dedicated to measuring triple bottom line corporate sustainability (TBLCS). In-depth studies on TBLCS reporting techniques and methods would be the subject of other dedicated research.
- This paper aims to explore the most influential drivers for TBLCS in a generic way, but it does not intend to study in-depth the constituents of each TBLCS’ driver. Detailed study of the impact and influence of individual corporate sustainability drivers on TBLCS could be a subject of future research.

- Whereas findings look logical and systematic, they have been flawed by geographic, sampling constraints and the nature of manufacturing firm. Thus, these factors affect the potential generalisation of the study's outcomes, which could be a subject of consideration by future researches.

- It would be advisable to conduct a similar research study into other types of manufacturing firms in UAE and other developing countries.

- Furthermore, research could be carried out on the influential effect of individual drivers, e.g. leadership, learning organisation, stakeholders’ engagement, organisational culture and CSR in relation to the successful adoption of TBLCS.

- Future research is required to quantify and value the intangible business benefits and effects of sustainability-related strategies and initiatives in financial terms.

- Further studies are required to unify a consensus standard for reporting and measuring TBLCS.

The next chapter incorporates the phases of Z’s TBLCS green model’s roadmap in the reframed context of Z’s change to ‘green transformational leadership’, Z’s CSR-TBLCS orientation, Z’s learning organisation, Z’s employee engagement and Z’s green organisational culture. It uses Z’s innovative green processes and TBLCS measuring and reporting.
CHAPTER SIX ROADMAP FOR ADOPTING A GREEN MODEL OF TRIPLE BOTTOM LINE CORPORATE SUSTAINABILITY IN Z CORPORATE FIRM

6.1 GENERAL

The developed road map is driven by the findings of this research study. It has been constructed in such; the accomplishment of triple bottom line corporate sustainability’ TBLCS’ drivers form the main destinations that the ‘Green Strategy’ of TBLCS aims to reach in practical and efficient way. The developed green model of TBLCS is a conceptual model. It incorporates the fundamental drivers that collectively and collaboratively can achieve corporate business sustainability holistically and comprehensively.

This chapter encompasses the actionable phases through which Z can execute a TBLCS green model roadmap. It incorporates the following sections: a diagram of the roadmap’s flow chart illustrating the phases flow to adopting the proposed TBLCS green model (see Figure 4: Green model for triple bottom-line corporate sustainability). It includes sections on Z’s organisational re-structuring, the reframed context of Z’s leadership to ‘green transformational leadership’, dedicated CSR-TBLCS orientation, Z’s efficient learning organisation, Z’s employee engagement enhancement and Z’s green organisational culture.

6.2 ROADMAP FLOW CHART DIAGRAM TO ADOPT THE ‘GREEN’ MODEL OF TBLCS

The roadmap’s flow chart below is an illustration of the interrelated phases of the green model developed to help Z/organisations to efficiently execute triple bottom line business sustainability. The green model was outcome driven based on the literature review combined with the study findings, while the flowchart diagram is used to demonstrate the horizontal inter-correlation between the different vertical
sequential flows of the TBLCS phases. It phases out the actionable sequential, parallel and interrelated steps of the TBLCS roadmap.

Figure 5: Green model for triple bottom line corporate sustainability - roadmap’s flow chart
6.3 Z’s TBLS GREEN MODEL KEY POINTS

The following are the key points of the TBLC green model developed in this study, subject to execution by Z:

- The developed TBLC green model is green paradigm based
- It is founded on five pillars – drivers of business sustainability, i.e. green transformational leadership (GTL), learning organisation, green organisational culture, employees’ engagement, and dedicated corporate social responsibility (CSR).
- It is instituted from three sequential levels: the input that comprised the TBLC drivers, the green processes, and the output presented in the TBLC deliverables; profit, people and the environment (planet).
- It aims to convert today’s Z green processes to tomorrow’s great business sustainability
- The business green paradigm should be embedded into Z’s decision-making process as an essential constituent at all Z organisational levels.
- For successful execution of TBLC’s developing a green business model, Z needs to carry out organisational re-structuring and a fundamental change management process, as detailed below:
  - Considering the huge quantities of pollutant gases in general and GHG, in particular, Z is emitting regularly into the atmosphere, the firm has to meet special social and environmental responsibility and accountability towards people, community, environment and the planet.
  - Z needs to develop a new green business paradigm that is in line with business economic sustainability.
  - Reducing the carbon footprint can be achieved through business green innovative initiatives that improve energy efficiency (cutting energy bills), waste management, lean manufacturing, eco-efficiency and using renewable energy.
Greening the business means reducing the corporate’s carbon footprint (measuring units in kg/ton of equivalent carbon dioxide gases, CO2 emitted from a process/activity) through reducing the quantity of greenhouse gases (GHG) in general and carbon dioxide (CO2) in particular.

Hence, as one of the major manufacturing firms emitting huge GHG, controlling the carbon footprint means reducing the carbon footprint and reducing energy consumption, which should effectively cut business costs, improve cost effectiveness and obviously reduce product unit cost. Thus, controlling Z’s carbon footprint becomes a vital tool to boosting its performance and sustaining its business in addition to conserving the environment and the planet.

Having a green business should reinforce Z’s ability to create new business opportunities. It is only matter of time when existing markets will be changed and new ones will be created on a green paradigm basis. At that time; Z would be well placed to benefit.

The shape of climate legislation will be the strongest determining factor for new markets that rewards innovators for climate-friendly products and services and penalise laggards.

Integrating a carbon footprint into a corporate sustainability strategy will not only manage risks but enable the seizing of competitive markets advantages. Incorporating a green paradigm into a corporate strategy proves the corporate’s social and ethical commitment and keeps it one step ahead at the business level.

The level of Z’s external stakeholders’ awareness about climate change-related risks pushes the corporates to develop corporate sustainability strategies that are green paradigm based.

Corporate shifting planet conservation from being periphery based to becoming one of Z prime objectives gains internal and external
stakeholders’ respect and trust. This adds valuable gains to Z’s reputation, name and brand.

6.4 **Z’s ORGANISATIONAL RE-STRUCTURING**

- The right starting point for Z to adopt successfully the ‘green’ model of TBLCS, as illustrated in the road map diagram (above), is through adopting the necessary organisational re-structuring that would appropriately facilitate a systematic and efficient transformation process into business greening led and governed by green transformational leadership (GTL).

- Adopting green initiatives under the umbrella of a triple bottom line sustainability strategy in large corporates needs dedicated and qualified leadership teams to ensure the successful attaining of sustainability deliverables

- Z needs to implement some organisational changes through introducing the post of Chief Sustainability Officer (CSO) into the organisational structure reporting to the CEO and supported by direct reports, i.e. a sustainability task force (STF) dedicated to adopting the organisation TBLS strategy (Moran and Tame 2013; Strand 2014).

- The Z organisation structure should be based principally on the need to learn. The structure should promote a seamless structure avoiding inter-departmental or inter-divisional rigid and restricted boundaries. It should encourage joint tasks, functions; green projects, and provide the resources and support needed for their success. Z should enhance networking by which people are encouraged to take green initiatives and decisions. Z’s structure should encourage small organisational units working with entrepreneurial spirit and thinking (Marquardt 1996).
6.5 **Z’s TBLCS GREEN MODEL ROAD MAP-STRATEGIC ACTION PLAN PHASES**

The developed green TBLCS model consists of three components (See Figure 4: Green model for triple bottom-line corporate sustainability):

1. Input/Drivers of TBLCS
2. The innovative green process of the TBL strategy
3. TBLCS model deliverables

Reflecting on the model, the roadmap consists of three phases:

- Phase 1: Activate TBLCS drivers
- Phase 2: Develop and initiate the green process
- Phase 3: Monitor, measure and report TBLCS deliverables.

6.6 **PHASE 1: ACTIVATE TBLCS DRIVERS**

Phase 1 is composed of the input/drivers of the green model. It incorporates the essential prerequisite elements for the successful execution of TBLCS' green business model. Z TBLCS incorporates the reframing of a leadership typical context to the GTL context, Z’s efficient learning organisation, Z’s green organisational culture, Z’s employee engagement enhancement and Z’s TBLCS-dedicated CSR.

6.6.1 **REFRAMING Z’s LEADERSHIP INTO GREEN TRANSFORMATIONAL LEADERSHIP**

- Z’s typical leadership context should be shifted to a ‘green’ type of business paradigm. The leadership needs to transform the business mode from a typical single bottom line of the economy to a triple bottom line of the economy, society and the environment.
The leadership paradigm transformation process should be directed to encourage attaining the type of green transformational leaders given they have a strong positive influence on employees’ work motivation, and are capable of setting more specific and challenging goals (Bronkhorst et al. 2013).

Z needs to carry out a dedicated type of leadership and management training on modules of green business insights and concepts of the green economy. The idea is to institute green insights into leadership and management's way of thinking, planning and the decision-making process.

There is a need to understand that training for transformational leadership does help in gaining a reduction in passive behaviour, an increase in followers’ output and efforts, and an improvement in goal-setting effectiveness (Parry and Sinha 2005). Green transformational leaders are capable of enhancing leader-subordinate exchange through their positive influence on their attitudes, which, in turn, improves the innovative behaviour of subordinates and boosts their commitment to the organisation (Basu 1991). Transformational leadership has a positive influence on team and organisational performance (Wang et al. 2011). Z should note that transformational leadership has a values-loaded influence where transformational leaders provoke and stimulate a superior performance in subordinates through work values alignment (Groves 2014).

Z’s green transformational leader (GTL) should be a role model for adopting a green approach through exercising a ‘walk the talk’ and ‘walk the walk’ approach.

Z’s GTL needs to redevise structures, culture, policies and procedures for effective learning within and outside the organisation supporting business greening.

Z’s GTL needs to create and institute excellence centres that promote and support green initiatives and projects.
GTL needs to emphasise reflexive abilities as a vital leadership quality skill that corporates should consider for enhancing and promoting sustainability practices and behaviours (Hind et al. 2009).

GTL needs to be equipped with important skills and traits that help them successfully transform the firm into a green business with a long-term vision, communication influence, sound scanning of external environment, efficient collaboration, a good understanding of others’ perspectives, sound systems thinking, good flexibility, taking up and accepting diversity and bold risk-taking (Quinn and Baltes 2007).

Z’s GTL should consider adopting the following practices (Haanaes et al. 2011):

1) Move promptly even if information and data is incomplete
2) Balance broadly long-term vision projects with low-hanging fruit projects that offer near-term paybacks.
3) Drive sustainability effectively through top-down and bottom-up interaction mechanism.
4) Aggressively integrating sustainability into firm’s operations and business set-up.
5) Monitor, measure and report everything, particularly sustainability-related intangibles.
6) Value seriously sustainability-related intangible benefits.
7) Should be reliable, trustworthy and crystal clear internally and externally.

6.6.2 EFFICIENT LEARNING ORGANISATION

Z’s learning organisation insights

- For Z firm to achieve its business sustainability vision, the transforming process through business greening into learning organisation should be
acknowledged, supported and committed to by executives and top management.

- Z needs to empower and encourage people to learn at work, within and outside the company, and to develop a system that eases sharing effectively the organisational knowledge about the green business and green economy.

- Z’s philosophy of learning organisation should promote learning inside the firm through energising people’s passion to learn, grow and prosper with their individual and shared team knowledge. The philosophy of the learning organisation is founded on generating knowledge and sharing it. Now, neither product nor profit is important for organisation but learning without continual learning will not be an option for either product or profit. Hence, the business of the business has become learning and everything else will come after (Marquardt 1996). The organisational learning process should encourage and support Z’s business greening and TBLCS strategy.

- The Z learning organisation should encourage organisations to learn collectively and powerfully, and transform continually green knowledge into organisational success.

Z’s actions to promote the learning organisation

- Institute organisational system founded on organisational green culture to support organisational learning process, knowledge sharing and continuous learning across the organisation in parallel and integrated with work.

- Organisational learning should be focused on generative learning and green creativity founded on systems thinking basis rewarding, encouraging and making it possible way to accelerate individual and group learning. The learning process should be driven by desire, aspiration and reflection, maintaining quality and continuous improvement (Marquardt 1996)
• To promote the learning organisation paradigm that embraces change for greening and consider failures, surprises and unwanted outcomes as opportunities to learn in a flexible and responsive mechanism.

• Z to encourage individual learning as the cornerstone of the whole organisational learning in line with organisational green culture. In reality, organisations learn only through their individuals who learn. Individual learning should be applied to jobs and synchronised with organisational learning in an explicit way and becoming part of employees' career development (Senge 1990).

• Z should help working teams and groups to learn and think as an entity. It should promote a green vision for learning organisations. It should encourage knowledge sharing and experiences that overlap with teams and groups, making use of technology to enhance the organisational learning process.

6.6.3 Z’s GREEN ORGANISATIONAL CULTURE

• Z needs to boost its environmental leadership and environmental organisational culture to reinforce green organisational identity and strengthen the green competitive advantage of organisational business (Chen 2011).

• Z needs to green HRM practices, allowing organisation employees to adopt efficiently environmental management practices and applications (Jose Chiappetta Jabbour 2011)

• Z needs to integrate sustainable development and sustainability issues into its business strategies. The sustainable culture of the firm should fit with sustainability activities (Baumgartner 2009). Z should not be a ‘green washer’ (Welford 1997) through changing only its rhetoric rather than its business practices.
Z should develop a green strategy that establishes a common culture of awareness and action, which is essential for reinforcing employees’ green behaviours. The green behaviours should adopt and bring change in the way things are done by integrating green into every business decision. It is important to cultivate a common culture of environmental awareness by adopting best practices (Olson 2008).

Z’s green strategy should set out a vision that enables the decision makers in the organisation to align their actions with the strategy of their firm. A green strategy will change the behaviour and approach of all organisational units towards a green approach.

Z’s executives and top management should apply a green approach and commitment to middle management and operational processes, supporting activities, and into partners’ channels, which then would make the entire firm breathe green and improve its long-term performance on social, economic and environmental measures (Olson 2008).

Z’s green strategy should provide people with attractive incentives for cost effectiveness through energy efficiency improvement, reduction in wastage, recycling and reusing that add value to the organisation, the society and the environment (Olson 2008).

Z’s green strategy should set clear and goal stretched corporate green key performance measures (KPIs), which will reward employees for green performances that will lead ultimately to new roles with responsibilities for delivering the results of the green strategy. Therefore, adopting a corporate holistic green strategy is essential to reaping the full benefits of going green (Olson 2008).

6.6.4 Z’s EMPLOYEE ENGAGEMENT ENHANCEMENT

Employee work engagement is defined by (Demerouti et al. 2001) as a positive, emotional-motivational state of self-actualisation characterised by vigour, dedication and absorption. Z needs to deploy its green culture and
approach to encourage its people’s persistence, resilience and vigorous willingness to exert effort in the job, be more involved in the job, have a high degree of enthusiasm and inspiration, a boosted sense of pride, and a full pleasant attachment and immersion in the job.

- Z needs to deploy business greening as a driver and efficient tool for employee engagement enhancement through involving people as active agent, encouraging them for feedback, keeping their own values aligned with the firm’s green values, remaining emotionally fond of the organisation and involved in the job with great interest, enthusiasm, and passion, seeking for the success and benefits of the organisation (Bakker et al. 2000). Z needs to consider that the truly engaged employee is usually willing to go the extra mile beyond their job description (Kompaso and Sridevi 2010).

- Z needs to encourage its people to show their personal green initiatives, green innovation, creativity, commitment and proactive behaviours.

- Z needs to encourage the cultivating and nurturing of a loving green business as part of employee engagement enhancement.

- Z needs to encourage an organisational motivational approach through setting and following express, meaningful and extended green goals.

- Z needs to develop and encourage participative green initiatives and projects

- Z needs to nurture and develop green transformational leadership as the best effective driver for boosting employees’ engagement that improves and leverages team efficiencies (Schaufeli and Salanova 2007).

- Z needs to revise process procedures and maximize job resources that support the organisational green approach.

- Improve and encourage leadership training, organisational learning, formal training, and informal learning and support career development for people
with setting the bar high for extended and challenging green goals (Schaufeli and Salanova 2007).

- As empirically proven, the two fundamental key success tips for robust employees' engagement are organisational culture and leadership (Hewitt 2012), Z should use its organisational green culture and GTL to enhance its employee engagement and boost its effectiveness.

- Z should make its green strategy a business approach governing and embracing the employee engagement drivers that have been identified and set by Hewitt (2012): senior leadership, organisation reputation, valuing people/people focus, managing performance, brand alignment, work processes, innovation, recognition, people/HR practices, communication, pay, and career opportunities.

6.6.5 Z’s TBLCS DEDICATED CSR

Z needs to consider the following actions to develop a dedicated CSR that supports its green TBLCS strategy and business green approach:

- Z to incorporate its CSR into organisational disciplines and constructs such as, a green strategy, operations, finance, HR, supply, and marketing (Michael et al. 2005).

- Make use of CSR external experts that are green business oriented.

- Attain international green standards certificates like the ISO standards, Global Reporting Initiative (GRI), and social accountability standards.

- Adopt a triple bottom line reporting system that incorporates economic, social, and environmental organisational performance in a transparent way.

- Assign some business stakeholders representatives who are pro-environment to the board of directors of Z organisation.

- Apply and adhere to organisational green values and ethics within the business.
• Host CSR’s seminars and workshops supporting business greening.

• Encourage the organisation and stakeholders to ‘Talk up TBLS dedicated CSR’.

• Provide funds to reward CSR green activities and initiatives.

• Adopt Green CSR not as a morale responsibility but as a green strategy for organisation success (Logaa and Zailani 2013).

• The green ethical basis of quality management should be used as a catalyst to develop effectively TBLCS-dedicated CSR within organisations (McAdam and Leonard 2003).

• TBLS dedicated CSR of Z should be framed, shaped, and founded on organisational internal institutional factors like top management values and commitment, corporate green ethical culture, and external institutional factors such as political influence and perspectives, globalisation pro-environmental pressure, and social-environmental normative pressure (Yin 2015).

6.7 PHASE TWO: DEVELOP AND INITIATE PROCESSES GREENING

6.7.1 SUSTAINABLE ENVIRONMENTAL MANUFACTURING

As a typical example of a manufacturing firm, Z is a big consumer of resources and energy. Considerable quantities of global CO2 emissions can be attributed to manufacturing industries. The improvement potential towards sustainable development is significant. The sustainable environmental manufacturing the companies do within and beyond their boundaries yield better environmental performance improvements. Thus, Z adopting sustainable environmental manufacturing practices should be reflected significantly in environmental performance and manufacturing firms' performance (OECD 2008; Klassen and Whybark 1999; Rusinko 2007; Vachon and Klassen 2008).
The following are examples of sustainable environmental manufacturing practices that Z should consider:

6.7.2 POLLUTION CONTROL

Pollution control is the most basic category of sustainable manufacturing. The OECD (2008) describes the purpose of pollution control as an attempt to improve the environmental performance of the company. It is often done by using so-called end-of-pipe solutions. Initiatives within pollution control do not attempt to restructure or change the production process, but rather implement a technology that will restrict environmental pollution of air, soil and water. Different kinds of filters and techniques can be used as applications of typical end-of-pipe solutions to treat and clean air and water. In general terms, pollution control initiatives are often considered to be costly, with little financial upside, where the main financial benefit comes through cost savings related to compliance with environmental and social regulations mandated by governmental authorities.

6.7.3 CLEAN PRODUCTION

Efficiency is a keyword within clean production, according to the OECD (2008). More efficient resource and energy use can lead to financial benefits far greater than pollution control initiatives. The potential to increase environmental performance is also higher than pollution control initiatives. The implementation of clean technology initiatives is generally a more complex and difficult task that requires co-ordination and managerial support.

6.7.4 ECO-EFFICIENCY

Perotto et al. (2008) suggest a few indicators that can adequately describe the situations selected for EMS to avoid redundant information or measurement errors. The steps can be applied to any aspect of the company’s activities. EMS has been standardised with the ISO 14001 standard to ensure that the main principles are followed, although the actual implementation can vary. The benefits of using EMS
are not limited to a potentially increased environmental performance: financial benefits can also be realised. Perotto et al. (2008) argue that implementation of an EMS system can address pressures from external stakeholder and improve a company's image. The challenge with EMS usually lies in how environmental performance is measured and what should be included in the measurements.

Huppes and Ishikawa (2005) have examined a framework to quantify eco-efficiency. They illustrated that eco-efficiency is an appropriate empirical tool that can measure the effectiveness of the relation of environmental impact and environmental cost in business green initiatives. This analytical mechanism helps corporates to assess the trade-off between maintaining environmental quality and economic cost. It helps decision makers to evaluate economic sustainability and environmental sustainability through assessing the exchange rate between economic welfare and addressing the environmental impact. Huppes and Ishikawa argue that eco-efficiency is neither a simple equation nor a straightforward one; however, introducing a framework or model defining the why and what of eco-efficiency would be an initial important step in the way for reporting and reinforcement of both economic and environmental sustainability.

Burnett et al. (2011) have studied the empirical phenomena of co-effectiveness that links environmental value and corporate sustainability. The authors argue that for a corporate to achieve sustainability, it should target a balance between its economic interest for shareholders and the social and environmental interests of stakeholders through managing risks and developing opportunities for value creation. The authors confirmed the hypothesis that adoption of eco-effective management improves corporates’ market valuation, which continues. The study results give confidence to firms’ decision makers for the economic validity and payback of eco-effective management. For a corporate to achieve environmental sustainability, in particular, it needs to create value in a way that exceeds its environmental impact (Figge and Hahn 2004).

Paraschiv et al. (2012) have studied factors that influence the implementation of organisational sustainability through questionnaire-based research carried out in
Romanian enterprises. The authors concluded that four factors influence the organisational sustainability implementation: responsible leadership, Eco-innovation, organisational change, and sustainable organisational culture. The authors gave more weight to the crucial role of eco-innovation in achieving the objectives and goals of corporate sustainability. The study also revealed that the moral duty to have a clean environment and economic and financial advantages, and organisation culture are drivers for organisations to induce sustainability development to an organisation strategy as a basic element. Paraschiv et al. concluded in their study that visionary leadership is essential for adopting a firm's sustainability through their constructive influence to carry out the organisational change process in a speedy and efficient way. Paraschiv et al. acknowledged that due to research limitations in terms of methods of sampling and response rate, it is difficult to generalise the results of the research to all Romanian organisations. This study focused on corporate sustainability from two dimensions, explored its influential drivers and merged those drivers in a model for the sake of effective strategic sustainability's implementation and execution.

6.7.5 LIFE CYCLE THINKING

Life Cycle Assessments (LCA) goes beyond the boundaries of the organisation and considers the environmental impact of a product throughout the value chain, commonly referred to as a ‘cradle-to-grave’ perspective. Gehin et al. (2008) point to LCA as a key step in reducing environmental harm as a successful LCA can help the company to identify the most harmful activities. The purpose is to create a ‘green’ supply chain where the phases of raw material extraction, design, development, usage and disposal are also designed to be less environmentally harmful (Seuring and Muller 2008).

Porter and Kramer (2006) show that increased pressure on companies to be held accountable for their harmful impacts on society has led many of them to adopt the concept of Corporate Social Responsibility (CSR). CSR is a voluntary commitment that companies make to act ethically, with environmental and social interests in mind. However, several companies have adopted CSR as a business model
because of the increased demand from customers for socially and environmentally ethical products. Companies adopting CSR usually publish sustainability reports with details about the company’s economic, social and environmental achievements.

6.7.6 CLOSED LOOP PRODUCTION

A closed circular loop production system allows disposed resources to be revitalised and reused. The approach is similar to the LCA approach, but it closes the cycle of resources and materials, going from a ‘cradle-to-grave’ to a ‘cradle-to-cradle’ perspective, according to McDonough and Braungart (2002). A cradle-to-cradle perspective minimises demand for raw material extraction in favour of reusing existing resources to minimise waste streams. The OECD (2008) notes that the approach requires that the production process is designed to accommodate the reuse of materials. The design and development phase thus becomes the focus of the circular loop production approach. Kleindorfer et al. (2005) argue that closed loops foster sustainability while increasing profits and benefiting society.

6.7.7 EFFECTIVE WASTE MANAGEMENT

Alexatos (2012) discussed the optimum approach to handling waste in an economical, eco, biological and friendly environmental ways. The authors emphasised the importance of adopting creative and innovative handling concepts and mechanisms to address appropriately waste issues other than landfilling options. We need to challenge the necessity of manufacture some stuff and where things will end up. The author suggests adopting three approaches for effective waste management, i.e. the efficient adoption of sustainability’s 3Rs (reduce-reuse-recycle).
INDUSTRIAL ECOLOGY

Industrial ecology can be achieved if the circular-loop production approach is applied at an industrial or societal level. Graedel and Allenby (1995) argue that the production process in industrial ecology is influenced by its surroundings while at the same time being a source of influence. This means that a production process should not be seen as an isolated process in society. The OECD (2008) states that industrial ecology serves as a connector between sub-systems of closed-loop production systems and facilitates the transfer of material flows between the sub-systems. The approach is based on the idea that the waste generated by one producer can be used as the input by another. Co-operation between different industries is thus required. Industrial ecology is a highly desirable approach in theory, but the gap between theory and a practical implementation is significant. A challenge that must be considered is the geographical distance between different industries. An application of industrial ecology is eco-industrial parks, where different industries gather in a cluster in the same geographical area and serve as a smaller eco-system, providing each other with resources needed for manufacturing. Cohen-Rosenthal (2004) argues that industrial ecology increases the value of products by a less dissipative resource usage. The exchange of resources between the companies can create economic as well as environmental synergy effects. Graedel and Allenby (1995) argue that not only the use of resources should be optimised in industrial ecology, but energy and capital as well.

The outcome to take away at the end of this section can be described as follows: the corporate sustainability should be considered as business’ keystone and firms’ centre of focus. Firms should aim for attaining business sustainability through thorough planning, a robust strategy and proficient implementation and execution. Firms should consider the importance of maintaining transparency and corporate governance. Corporate sustainability in manufacturing organisations has increased in importance because of their significant environmental impacts and it is more challenging as well. Sustainable environmental manufacturing leverages both environmental and manufacturing performance.
6.8 **Z’s GENERAL PRINCIPLES FOR BUSINESS GREENING**

That climate change and global warming has put the future of the planet at stake and consequently makes the sustainable business development (SBD) in manufacturing and services an imperative requirement to safeguard the environment and welfare of those alive today and for generations to come (Makower and Pike 2009).

GTL and executives with help of CSO and STF should consider the following principles and parameter to the greening of Z’s business. The intention should be to translate these principles into key performance indicators (KPIs) by respective departmental managers.

Z’s business greening KPIs should be green based and TBLCS oriented. These green KPIs should be a product of Z decision makers’ commitment, i.e. executives and top management, approved and supported by the CEO and board of directors.

Organisations aiming for adopting and boosting green business implement green business process management (GBPM) technologies that analyse, fine tune, optimize and improve business processes through better process understanding, modelling and reengineering (Hoesch-Klohe et al. 2010).

**Z’s principles of green processes (derived from Anastas & Zimmerman 2003):** All input and output material and energy should be non-hazardous as much as practically possible.

- The target should be adopting a waste-free process rather than handling, cleaning up or treating of generated/produced waste
- Business processes should be designed to use the least material quantities and minimum energy consumption.
- Business processes should be designed to maximise the efficiency of material, space, energy and time.
Business processes should be aligned with the concept of ‘pulling output’ rather than ‘pushing input’.

Business processes should consider effective waste management via reusing or recycling, or recovery choices and solutions.

Equipment design should not aim for immortality but for robustness, sturdiness, and toughness.

Avoid product design flaw like producing ‘one size fits all’.

Maximise the possibility of value retention through possible disassembling via minimising production of diverse multicomponent elements.

Business processes should be designed to maximise interconnection and integration of material/energy streamlines.

Business processes, systems and products should be designed to perform commercially for the long term.

Business processes should be designed to use renewable resources.

6.9 CONCEPTS OF Z’s ‘INNOVATIVE GREEN PROCESSES’

- The innovative green processes should found principally on fundamental key performance indicators (KPIs) for ‘carbon footprint’ reduction.

- Green/carbon footprint KPI should be the measure for effective energy efficiency, lean manufacturing, eco-efficiency, use of renewable energy and waste management in the forms of reduce, reuse, recycle and recover best practices.

- Green/carbon footprint KPI should be set and committed by the CEO at Z level as a whole, and filtered down to divisions, departments, sections, production units and further down to each and every workplace. Everyone in the organisation from an operator to the CEO should be engaged with and involved into organisational business greening. More importantly, everyone
should have responsibility and accountability for business greening through their commitment to meeting green/carbon footprint KPIs.

- Z’s organisational appraisal system should consider incorporating green/carbon footprint KPIs into their categories of rewards and recognition criteria.
- Green/carbon footprint KPI should subject principally to a continual improvement/reduction mechanism.
- Decision makers should consider business TBLCS’ perspectives when making their decisions. Decisions should meet the expectations of shareholders and stakeholders as well. Decision-making should consider the three dimensions of corporate sustainability, i.e. the triple bottom lines of people, profit and planet.

6.9.1 THEORIES AND MODELS TO SUPPORT GREEN BEHAVIOURS AND APPROACH

There are models and theories that green transformational leaders of Z could use to promote responsible behaviours of individuals to enhance energy conservation and business greening to a good extent. The following are examples of such environmentally friendly theories and models that can be utilised efficiently by Z leaders: ‘Value Belief Norm’ Theory by Stern et al.(1999), ‘Theory of Planned Behaviour’ by Ajzen (1991), ‘Social Marketing Model’ by Andreasen (2002), ‘Social Dilemma System Model’ by Gifford (2008), and ‘Diffusion of Innovations Theory’ by Roger (2003).

VALUE BELIEF NORM (VBN) THEORY BY STERN ET AL. (1999)

The Value Belief Norm (VBN) theory model articulates that values like selfless values, noble values, philanthropic values, and openness to change values drive the ‘New Ecological Paradigm’. This is, in turn, promotes awareness of consequences, which results in acknowledgment of responsibility that initiates pro-
environmental personal norms. This ultimately enhances environmental activism, environmental citizenship, policy support and private-sphere behaviours. The ‘VBN’ model can be understood in simple words as values create beliefs that further create personal norms, which can be interpreted to an intent to act or tendency for action. Thus, the noble action can at the end result in empowering a noble value and belief through a noble personal norm.

The constructive mechanism for social and environmental movement action is triggered when individuals have a belief that the valued objects/resources on the planet are threatened and believe that their actions would restore or protect them. Such values frame an obligation or personal norm and tendency for action to support. This action phenomenon supports environmentalism in terms of energy, environment and planet conservation.

The right starting point to activate and mobilise a ‘VBN’ model mechanism is getting people aware of the serious threats facing the environment and planet represented by global warming and climate change. Getting people aware of the consequences of global warming and climate change makes them understand the capacity and potential risks and threats the environment and planet face and the consequent effects on humankind and human life on the planet now and for coming generations. The other side of the picture is getting individuals to feel that everybody is responsible for acting based on sound and noble values and beliefs people have to save humankind and human wellbeing through committed personal norms. The ‘VBN’ model can be simplified sequentially as illustrated below:

Value → Belief → Norm → Action

Applied study examples of VBN Theory

Ibtissem (2010) has examined the ‘Value Belief Norm’ theory of Stern et al. (1999) through a study based on the ‘Structural Equations Method’ (SED). The study was undertaken on the VBN theory’s concepts, as the conservative behaviours of an
individual are driven by their values and beliefs. The outcomes of the study have confirmed the VBN theory model.

Sahin (2013) has examined the Value-Belief-Norm (VBN) Theory model applied to energy conservation behaviours of the study’s participants. The study shows that candidates’ behaviours regarding energy conservation were controlled by personal norms, biosphere values and personal values like egocentrism and altruism. The study also shows that the three elements of the VBN model are significantly allied and connected to each other. Further, the study shows that the component of value in the VBN model has a more influential effect on individuals’ behaviours as values empower moral obligations that develop a sense of responsibility about behaviours’ consequences.

THEORY OF PLANNED BEHAVIOUR BY AJZEN (1991)

The Theory of Planned Behaviour (TPB) was founded on the Theory of Reasoned Action in 1980. Its rationale is to predict the behavioural intent of an individual engaged in specific circumstances at a particular place in a particular time provided such behaviours are within the individuals’ self-control. In general terms, individual’s attitudes shape their behavioural intentions. Ajzen (1991) devised his theory based on the concept that individuals’ intentions are mainly constructed according to three major drivers; attitude towards act or behaviour, subjective norms, and perceived behavioural control. Consequently, behaviour is a product of intention and influenced by perceived behavioural control.

Ajzen’s Theory of Planned Behaviour can be smartly utilised as an efficient tool by environmentalists’ and organisations’ leadership to promote the green behaviours of individuals that institute for green initiatives in line with a dedicated approach for corporate sustainable development and, more specifically, towards adopting TBLCS.
Applied study example of Ajzen’s theory of planned behaviour

Green marketing and Ajzen’s theory of planned behaviour: a cross-market examination.

Kalafatis et al. (1999) have applied Ajzen’s theory of planned behaviour (TPB) to examine individuals’ green behaviours through a study in two distinct market conditions in UK and Greece. The study’s outcomes have provided strong support for the robustness of the TPB in explaining individuals’ intentions and behaviours in both samples. The study’s outcomes are in line with the moral behaviours in previous research. However, the study has indicated that the TPB theory is more appropriate, with clearly formulated individuals’ behavioural patterns in well-established markets, as in the case of the UK versus the Greece example.

SOCIAL MARKETING MODEL BY ANDREASEN (2002)

Achieving good social behavioural goals for society requires particular marketing concepts and techniques using social policies and science strategies. The prime philosophy of Andreasen’s Social Marketing Model is to learn about the real needs of people and provide them rather than convincing them of the merits of whatever is available at hand.

Conceptually social marketing aims for ‘Social Good’. In basic terms, social marketing is marketing concepts that can be embedded, induced and incorporated into programmes designed to influence the deliberate behaviours of targeted individuals or groups to improve their quality of life from certain perspectives. Environmentalists can use this social marketing model to market a people green approach and green initiatives through meeting their social interests of conserving environment and planet.

SOCIAL DILEMMA SYSTEM MODEL BY GIFFORD (2008)

The dilemma arises when conflict in resources management takes place between individual interest and society’s interest. Typically, when an individual gains
immediate profit through overusing a certain resource, a particular loss to this resource and damage to the environment takes place to some extent in the short or long term. In such a case, a social conflict arises because the individual benefited on the one hand through resource overusing while on the other hand society suffered from the damage to the resource and the environment. Thus, appropriate resource management-resource use behaviours become a social dilemma.

A comprehensive social dilemma model explains the influences of decision making that incorporate interpersonal, geophysical, governance and dilemma awareness. The model should help decision makers with appropriate strategies to address social and environmental dilemmas. Environmentalists’ and organisations’ managers and leaders should be aware of social dilemmas in their approach and decision-making process so as to avoid such situations and instead adopt a win-win situation where stakeholders partly on one side and partly on the other receive benefits rather than engage in conflict.

**DIFFUSION OF INNOVATION THEORY BY ROGERS (2003)**

The Diffusion of Innovation (DOI) Theory developed by Rogers (2003) explains how an idea, product, practice, object or behaviour perceived as new or innovative by individuals gains momentum and spreads or diffuses through a social system or group of people or a population over a time. At the end of the innovation diffusion process, the individuals, group of people or a part of a certain society or community get voluntarily convinced that this particular idea, product or behaviour is different to what they are used to and it is beneficial to adopt it.

As per the author, the innovation diffusion process and adoption of innovation go through four phases: the individual feels a need for innovation, the individual decides to adopt or reject the innovation, initially they experiment with the innovation to assess it, and, lastly, they are convinced and satisfied to continue using the innovation regularly. The innovation diffusion process does not go smoothly through a social system evenly or harmoniously across all kinds of
individuals. The rate and success of the innovation diffusion process is dependent on the receptors and customised by different characteristics of individual adopters based on their willingness to adopt innovations.

The innovation diffusion model can be a very beneficial tool to cultivate and implement green ideas, initiatives or programmes in a way that supports the pro-environmental approach and encorporate planning for sustainable development and TBL corporate sustainability.

6.10 STAGES OF PROCESSES GREENING FOR Z

Z’s business greening can be phased into three stages: short-term, medium-term and long-term processes.

6.10.1 SHORT TERM PROCESSES GREENING

- Improve energy efficiency
- Efficient waste management
- Effective lean manufacturing
- Efficient eco-efficiency
- Efficient resources management

6.10.2 MEDIUM TERM PROCESSES GREENING

Use renewable energy, e.g. solar energy, making use of the cumulative experience of UAE in solar energy generation that is being run in the SHAMS project in Abu Dhabi where they successfully harness the power of the sun – Concentrated Solar Power (CSP) – efficiently to produce cost effective, clean and green energy.

- As Z has significant building roof surface areas, generating green and clean solar energy is potentially and practically feasible. The potential solar power
generation project is supported in case of the Z as it already has steam turbines, which represent the most crucial and expensive element for such commercial solar energy generation projects.

6.10.3 LONG TERM GREENING PROCESS

Adopt a potential Carbon Capture-Usage-Storage (CCUS) project: Z should embrace a joint project with the Masdar Institute, Abu Dhabi, to capture the huge quantities of CO2 generated from Z’s operations/ processes and use it for enhancement of oil recovery (EOR) from depleted oil wells of the UAE. The potential project would make use of cumulative experience generated from Emirates Steel, where its generated CO2 quantity would be used to enhance the oil recovery of some ADNOC’s oil wells. Z in this regard is a potential candidate for CCUS technology application regionally and globally.

In general, all green processes mechanisms regardless of type or category should subject to a continual improvement exercise for betterment through the Deming Cycle of the PDCA (plan, do, check, act) (see Figure 5: Innovative value creation).
6.11 PHASE THREE: MONITOR, MEASURE AND REPORT TBLCS DELIVERABLES

6.11.1 MEASURING AND REPORTING TBLCS-RELATED PARAMETERS

Slaper and Hall (2011) suggest ways to measure and evaluate the adoption efficiency of TBLS. The authors argue that economic measures would be straightforward money-related figures, while the social and environmental sustainability measures would incorporate measuring the potential influences of business’ social and environmental impacts on societal and natural resources and their viability.

Z’s TBLS environmental measured parameters are not limited to the following:

- Contamination impact on water and air quality
- Greenhouse gas emissions

Figure 5: Innovative value creation processes
- Material recycling rates
- Water consumption
- Energy consumption
- Generated quantities of pollutant gases and substances
- Waste management in general and hazards in particular
- Rate of landfilling

On the other side, the social sustainability measured parameters would incorporate the influential impact of Z’S business on but not limited to the following:

- Education level in the local community
- Equity level
- Local community welfare
- Z’s staff retention
- Z’s charitable contributions
- Level of health care and well-being of the local community
- Rate of unemployment in the local community
- Local communities’ living quality
- Local communities' violent crimes per capita
- Z’s local community’s relative poverty and social capital

6.11.2 POSSIBLE WAYS FOR Z TO MEASURE AND REPORT TBLCS-RELATED PARAMETERS

Fauzi et al. (2010) suggest that TBL as a ‘sustainable corporate performance’ (SCP) should monitor, measure and report the three themes of TBL – financial,
social and environmental perspectives – derived from the interface between corporate performance, corporate social performance and corporate financial performance in a dynamic and iterative pattern.

- Building on the concept of Slaper and Hall (2011), Z’s stakeholders with the help of experts could develop and establish an adaptive Genuine Progress Indicator (GPI) applicable to Z’s business tasks and activities that incorporate social, economic and environmental perspectives converted into monetary units and ultimately computed in dollar values.

- Z can alternatively monitor and measure its TBLCS-related parameters through a conceptual framework of stakeholder-based Sustainable Balanced Scorecard (SBSC) and a single-measure Organisational Sustainability Performance Index (OSPI) introduced by Hubbard (2009).

- Z can use, measure and report TBLCS success also through the organisational framework of the Balanced Scorecard (BSC) suggested by Epstein and Wisner (2001) (see Figure 6: Reporting-measuring TBLCS).
6.12 SUCCESSFUL ADOPTION OF Z’s TBLCS GREEN MODEL

Z’s TBLCS green strategy is presented by the TBLCS green model. The successful adoption of Z’s TBLCS green strategy/model is founded conceptually on the value creation aspect. The value creation approach is basically rooted in the innovation and creativity that develop opportunities through new efficient, applied technologies and applications that address corporate sustainability’s constraints, limitations and challenges. Creative and innovative approaches and initiatives are capable of achieving breakthroughs in the fields of lean manufacturing, resources management, waste management, eco-efficiency, energy efficiencies and using renewable energy. Value creation should support the business to achieve Z’s TBLCS prime goals of economic prosperity, social responsibility and environmental stewardship.

Z should ensure that communication related to sustainability and business greening is cascaded effectively to all internal stakeholders in general and to
middle and junior management levels and to people in workplaces in particular. Moreover, the mission and its translation into an action framework should be communicated and understood by all people at all levels (Sachdev and Batra 2013).

6.13 Z TBLCS’ GREEN MODEL ADOPTION – POTENTIAL OUTCOMES

Although the suggested route to adopting a green TBLCS model would not be all rosy as it might have hidden turns and twists, following the roadmap will potentially shift Z’s business into green, meeting stakeholders’ demands and interests and providing Z with unlimited access to a green marketplace at a breakneck pace.

The following below are some outcomes that Z can potentially acquire from the adoption of a green TBLCS model:

- Z’s TBLCS green strategic model is based on a business context that the corporate takes prudent steps today to green its business as mitigating global warming and climate change will leverage its competitive edge over its peers tomorrow. Business greening shifts the business’ compass towards new business opportunities (Hoffman 2007)

- Z’s TBLCS green strategy is a ‘Trade-Off’ balance between corporate business profitability and corporate social and ethical commitment (Sneirson 2009). ‘Greening’ is a ‘paid-for’ business phenomenon (Russo and Fouts 1997). Z’s sustainability strategy should aim to achieve economic prosperity, social responsibility and environmental stewardship in a synergy of ‘Triple-Win’ confluence (Rogers and Hudson 2011)

- The adoption of a TBLCS green strategic model by Z achieves multiple strategic advantages. It burnishes the image of Z as a socially responsible organisation that cares for its people and community and takes the opportunity to mitigate its environmental impacts. It supports and reinforces Z’s corporate branding. It attracts the best talent who like to work for socially
responsible organisations. Moreover, it leverages Z’s employees’ loyalty, engagement and ownership spirit that reflect positively on employees’ productivity and obviously organisation performance (Delmas and Pekovic 2013).

- Z’s TBLCS green strategy burnishes Z image as a high ethical and accountable corporate. It elevates the positive image of the firm among its suppliers, customers, partners and stakeholders locally and globally. It gains Z a global prestigious creditability, being viewed as an environmental committed corporate. It helps at the same time in enhancing the stature of the UAE worldwide.

Adoption of TBLCS green strategic model by Z will provide it with a competitive edge over its competitors, keeping in mind that markets will credibly appreciate and consider tomorrow only those who are truly green (Hoffman 2007). Conducting organisational internal environmental programmes and collaborating supply chain will enhance Z performance across the three themes of TBL (Gimenez et al. (2012). Moreover, corporates that turn to green processes today will attain ‘gold’ corporate business sustainability tomorrow (Esty and Winston 2009). Overall, embracing and adopting TBLCS’ green model by Z through its actionable roadmap is an invaluable opportunity for strategic transformational shift into business greening that grants Z the sustainability’s sweet spot, where the interests of business stakeholders are met at a common junction point, attaining the three themes of TBL, economic prosperity, social responsibilities, and environmental stewardship, balanced, overlapped and in a synergy of ‘Triple-Win’ (Savitz & Weber 2007; Rogers & Hudson 2011; Unruh 2013). The developed green model for the TBLCS strategy that is supported by an actionable roadmap should enable Z to execute its strategic transformational shift into business greening in a practical, efficient and fruitful way.
APPENDIX A – TABLES

The literature review has revealed the influential factors affecting firms’ sustainability in general and triple bottom line corporate sustainability (TBLCS) in particular. I could probe from literature review that the fundamental and crucial drivers of TBLS are, green transformational leadership, green organisational culture, employees’ engagement, learning organisation, and CSR – TBLCS oriented.

The research study in its quantitative part of mixed method incorporates 204 random volunteer participants of diverse educational backgrounds and different number of experience years with’ Z’ firm representing in same time the different departments of the subjected firm in representative way.

This section incorporates descriptive statistical tables for the following:

- Demographic distribution of the study participants
- Feedbacks of the study’s participants regarding; organisational green culture, employees’ engagement, learning organisation, CSR, and TBLCS.
- Descriptive statistics of various variables
- Data reliability analysis
- Variables Correlations
- The study’s hypotheses’ validation correlations
- Variables associations / ANOVA
Table 1 Demographic Distribution of the Study Participants

<table>
<thead>
<tr>
<th>Department</th>
<th>Workforce</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production/ Operation</td>
<td>Workforce</td>
<td>520</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>104</td>
</tr>
<tr>
<td>Process Control</td>
<td>Workforce</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>10</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Workforce</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>34</td>
</tr>
<tr>
<td>Services</td>
<td>Workforce</td>
<td>230</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>50</td>
</tr>
<tr>
<td>Others</td>
<td>Workforce</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Workforce</td>
<td>1000</td>
</tr>
<tr>
<td></td>
<td>No. Of Participant</td>
<td>204</td>
</tr>
</tbody>
</table>

Table 2 Distribution of the study participants based on their educational level

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did not Complete High School</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>62</td>
<td>30.4</td>
</tr>
<tr>
<td>Certificate or Associate Degree</td>
<td>113</td>
<td>55.4</td>
</tr>
<tr>
<td>Under Graduate Degree</td>
<td>24</td>
<td>11.8</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>5</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>204</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 3 Distribution of Years of Experience of the Study Participants

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2 Years</td>
<td>29</td>
<td>14.2</td>
</tr>
<tr>
<td>3 - 4 Years</td>
<td>72</td>
<td>35.3</td>
</tr>
<tr>
<td>5 - 10 Years</td>
<td>70</td>
<td>34.3</td>
</tr>
<tr>
<td>Above 10 Years</td>
<td>33</td>
<td>16.2</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 4 Participants' Survey Feedback Regarding Organisational Green Culture

<table>
<thead>
<tr>
<th>GREEN CULTURE</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Disagree</th>
<th>Neutral</th>
<th>Total agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The organisation’s green vision and strategies are based on global best practices</td>
<td>53.9</td>
<td>37.7</td>
<td>6.9</td>
<td>1.5</td>
<td>0</td>
<td>91.6</td>
<td>6.9</td>
<td>1.5</td>
</tr>
<tr>
<td>The firm recognizes that it has a huge carbon footprint</td>
<td>43.1</td>
<td>47.5</td>
<td>8.8</td>
<td>0</td>
<td>0.5</td>
<td>90.6</td>
<td>8.8</td>
<td>0.5</td>
</tr>
<tr>
<td>The organisation adopts green technologies to reduce GHG and CO₂</td>
<td>59.8</td>
<td>35.3</td>
<td>3.9</td>
<td>1</td>
<td>0</td>
<td>95.1</td>
<td>3.9</td>
<td>1</td>
</tr>
<tr>
<td>The firm developing innovative and green products</td>
<td>39.7</td>
<td>55.4</td>
<td>4.4</td>
<td>0.5</td>
<td>0</td>
<td>95.1</td>
<td>4.4</td>
<td>0.5</td>
</tr>
<tr>
<td>The firm has an eco-efficiency plan</td>
<td>37.7</td>
<td>55.4</td>
<td>6.9</td>
<td>0</td>
<td>0</td>
<td>93.1</td>
<td>6.9</td>
<td>0</td>
</tr>
<tr>
<td>The organisation reduces wastage and recycles</td>
<td>17.6</td>
<td>60.8</td>
<td>18.6</td>
<td>2.9</td>
<td>0</td>
<td>78.4</td>
<td>18.6</td>
<td>2.9</td>
</tr>
<tr>
<td>The organisation has strategies to reduce energy consumption</td>
<td>1</td>
<td>31.9</td>
<td>56.9</td>
<td>8.3</td>
<td>2</td>
<td>32.9</td>
<td>56.9</td>
<td>10.3</td>
</tr>
<tr>
<td>The organisation continuously innovates and introduces new products</td>
<td>40.2</td>
<td>46.6</td>
<td>11.3</td>
<td>2</td>
<td>0</td>
<td>86.8</td>
<td>11.3</td>
<td>2</td>
</tr>
</tbody>
</table>
### Table 5: Participants’ Survey Feedback Regarding Employee Engagement

<table>
<thead>
<tr>
<th>Employee Engagement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Disagree</th>
<th>Neutral</th>
<th>Total agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The employees got recognition or praise for doing good work in last seven days</td>
<td>7.8</td>
<td>51</td>
<td>34.8</td>
<td>5.9</td>
<td>0.5</td>
<td>58.8</td>
<td>34.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Opinions count at work</td>
<td>2</td>
<td>34.3</td>
<td>52.5</td>
<td>11.3</td>
<td>0</td>
<td>36.3</td>
<td>52.5</td>
<td>11.3</td>
</tr>
<tr>
<td>The pay and benefits in the organisation are comparable to similar companies</td>
<td>0</td>
<td>3.4</td>
<td>32.8</td>
<td>41.2</td>
<td>22.5</td>
<td>3.4</td>
<td>32.8</td>
<td>63.7</td>
</tr>
<tr>
<td>The job promotions in the organisation are fair and objective</td>
<td>35.3</td>
<td>41.7</td>
<td>21.1</td>
<td>1</td>
<td>1</td>
<td>77</td>
<td>21.1</td>
<td>2</td>
</tr>
<tr>
<td>The organisational policies are clearly communicated in the organisation</td>
<td>2.5</td>
<td>36.8</td>
<td>46.1</td>
<td>13.7</td>
<td>1</td>
<td>39.3</td>
<td>46.1</td>
<td>14.7</td>
</tr>
<tr>
<td>The employees are committed to do the part to improve the organisation’s economic, social and environmental performance</td>
<td>0.5</td>
<td>19.6</td>
<td>55.4</td>
<td>20.1</td>
<td>4.4</td>
<td>20.1</td>
<td>55.4</td>
<td>24.5</td>
</tr>
<tr>
<td>The employees are committed to do the part to improve operational efficiency</td>
<td>0</td>
<td>11.8</td>
<td>54.9</td>
<td>27.9</td>
<td>5.4</td>
<td>11.8</td>
<td>54.9</td>
<td>33.3</td>
</tr>
<tr>
<td>The employees are committed to do the part to reduce energy consumption</td>
<td>0</td>
<td>14.7</td>
<td>51</td>
<td>27.9</td>
<td>6.4</td>
<td>14.7</td>
<td>51</td>
<td>34.3</td>
</tr>
<tr>
<td>The employees are committed to do the part to reduce wastage</td>
<td>0</td>
<td>20.1</td>
<td>51</td>
<td>23.5</td>
<td>5.4</td>
<td>20.1</td>
<td>51</td>
<td>28.9</td>
</tr>
<tr>
<td>The employees will continue to work for the organisation two years from now</td>
<td>13.7</td>
<td>37.3</td>
<td>24</td>
<td>15.2</td>
<td>9.8</td>
<td>51</td>
<td>24</td>
<td>25</td>
</tr>
</tbody>
</table>
Table 6 Participants’ Survey Feedback Regarding Learning Organisation

<table>
<thead>
<tr>
<th>Learning Organisation</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Disagree</th>
<th>Neutral</th>
<th>Total agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The people openly discuss mistakes in order to learn from them</td>
<td>16.7</td>
<td>34.8</td>
<td>31.4</td>
<td>16.2</td>
<td>1</td>
<td>51.5</td>
<td>31.4</td>
<td>17.2</td>
</tr>
<tr>
<td>The people are rewarded for learning in the organisation</td>
<td>7.4</td>
<td>53.4</td>
<td>35.3</td>
<td>3.4</td>
<td>0.5</td>
<td>60.8</td>
<td>35.3</td>
<td>3.9</td>
</tr>
<tr>
<td>The organisation encourages people to think from a global perspective</td>
<td>32.4</td>
<td>43.6</td>
<td>23</td>
<td>0.5</td>
<td>0.5</td>
<td>76</td>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>The leaders generally support requests for learning opportunities and training</td>
<td>0.5</td>
<td>57.8</td>
<td>32.8</td>
<td>8.3</td>
<td>0.5</td>
<td>58.3</td>
<td>32.8</td>
<td>8.8</td>
</tr>
<tr>
<td>The leaders mentor and coach those they lead</td>
<td>2.9</td>
<td>41.7</td>
<td>43.1</td>
<td>11.8</td>
<td>0.5</td>
<td>44.6</td>
<td>43.1</td>
<td>12.3</td>
</tr>
<tr>
<td>The leaders continually look for opportunities to learn</td>
<td>5.9</td>
<td>60.3</td>
<td>29.4</td>
<td>3.9</td>
<td>0.5</td>
<td>66.2</td>
<td>29.4</td>
<td>4.4</td>
</tr>
<tr>
<td>The employees using the knowledge gained to innovate</td>
<td>21.1</td>
<td>44.6</td>
<td>29.4</td>
<td>4.4</td>
<td>0.5</td>
<td>65.7</td>
<td>29.4</td>
<td>4.9</td>
</tr>
<tr>
<td>The employees have opportunities at work to learn and grow</td>
<td>11.8</td>
<td>41.2</td>
<td>37.3</td>
<td>9.3</td>
<td>0.5</td>
<td>53</td>
<td>37.3</td>
<td>9.8</td>
</tr>
</tbody>
</table>

Table 7 Participants’ Survey Feedback Regarding ‘Z’ Company CSR

<table>
<thead>
<tr>
<th>CSR Questions</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Disagree</th>
<th>Neutral</th>
<th>Total agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Z’ firm having CSR clear policies</td>
<td>15.2</td>
<td>57.4</td>
<td>6.4</td>
<td>5.4</td>
<td>15.7</td>
<td>72.5</td>
<td>6.4</td>
<td>21.2</td>
</tr>
<tr>
<td>CSR addresses ‘Z’ firm’s social and environmental impacts</td>
<td>8.8</td>
<td>63.7</td>
<td>19.6</td>
<td>7.4</td>
<td>0.5</td>
<td>72.5</td>
<td>19.6</td>
<td>7.9</td>
</tr>
<tr>
<td>CSR of ‘Z’ firm supports business sustainability</td>
<td>27.5</td>
<td>44.6</td>
<td>26</td>
<td>1.5</td>
<td>0.5</td>
<td>72.1</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>CSR of ‘Z’ firm supports ‘Greening’ of the organisation business</td>
<td>35.3</td>
<td>38.2</td>
<td>5.9</td>
<td>12.3</td>
<td>8.3</td>
<td>73.5</td>
<td>5.9</td>
<td>20.6</td>
</tr>
<tr>
<td>CSR of ‘Z’ firm enhances the organisation performance</td>
<td>13.2</td>
<td>59.3</td>
<td>18.1</td>
<td>7.8</td>
<td>1.5</td>
<td>72.5</td>
<td>18.1</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Table 8 Participants’ Survey Feedback Regarding ‘Z’ Company TBLCS

<table>
<thead>
<tr>
<th>TBLCS</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Total Disagree</th>
<th>Neutral</th>
<th>Total agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The firm experiencing regular annual growth in its turnover</td>
<td>0</td>
<td>1.5</td>
<td>50</td>
<td>33.3</td>
<td>15.2</td>
<td>1.5</td>
<td>50</td>
<td>48.5</td>
</tr>
<tr>
<td>The firm achieves its annual financial objectives</td>
<td>0</td>
<td>0.5</td>
<td>21.1</td>
<td>25</td>
<td>53.4</td>
<td>0.5</td>
<td>21.1</td>
<td>78.4</td>
</tr>
<tr>
<td>The firm has specific KPIs for economic sustainability</td>
<td>0</td>
<td>3.9</td>
<td>48.5</td>
<td>32.8</td>
<td>14.7</td>
<td>3.9</td>
<td>48.5</td>
<td>47.5</td>
</tr>
<tr>
<td>The firm has a management system in place to manage social issues</td>
<td>8.8</td>
<td>42.6</td>
<td>39.2</td>
<td>8.3</td>
<td>1</td>
<td>51.4</td>
<td>39.2</td>
<td>9.3</td>
</tr>
<tr>
<td>The organisation were aware about our social impact</td>
<td>6.4</td>
<td>52</td>
<td>32.4</td>
<td>7.8</td>
<td>1.5</td>
<td>58.4</td>
<td>32.4</td>
<td>9.3</td>
</tr>
<tr>
<td>The organisation has made plans to minimize our social impact</td>
<td>10.3</td>
<td>50</td>
<td>30.9</td>
<td>7.8</td>
<td>1</td>
<td>60.3</td>
<td>30.9</td>
<td>8.8</td>
</tr>
<tr>
<td>The firm engages in active corporate citizenship and philanthropy</td>
<td>27.5</td>
<td>44.6</td>
<td>26</td>
<td>1.5</td>
<td>0.5</td>
<td>72.1</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>The firm has specific KPIs for social sustainability</td>
<td>3.9</td>
<td>56.9</td>
<td>30.9</td>
<td>7.8</td>
<td>0.5</td>
<td>60.8</td>
<td>30.9</td>
<td>8.3</td>
</tr>
<tr>
<td>The firm has a social impact reporting system</td>
<td>7.4</td>
<td>53.4</td>
<td>29.9</td>
<td>8.3</td>
<td>1</td>
<td>60.8</td>
<td>29.9</td>
<td>9.3</td>
</tr>
<tr>
<td>The organisation has awareness about our environmental impact</td>
<td>3.4</td>
<td>27.5</td>
<td>53.4</td>
<td>14.2</td>
<td>1.5</td>
<td>30.9</td>
<td>53.4</td>
<td>15.7</td>
</tr>
<tr>
<td>The organisation has made plans to minimize our environmental impact</td>
<td>3.4</td>
<td>27.5</td>
<td>53.4</td>
<td>14.2</td>
<td>1.5</td>
<td>30.9</td>
<td>53.4</td>
<td>15.7</td>
</tr>
<tr>
<td>The organisations scan its external environment and adopt new technologies</td>
<td>7.8</td>
<td>37.3</td>
<td>32.4</td>
<td>16.7</td>
<td>5.9</td>
<td>45.1</td>
<td>32.4</td>
<td>22.6</td>
</tr>
<tr>
<td>The firm has specific KPIs for environmental sustainability</td>
<td>5.9</td>
<td>59.3</td>
<td>27</td>
<td>7.4</td>
<td>0.5</td>
<td>65.2</td>
<td>27</td>
<td>7.9</td>
</tr>
<tr>
<td>The firm has an environmental reporting system</td>
<td>6.4</td>
<td>27.9</td>
<td>34.3</td>
<td>25.5</td>
<td>5.9</td>
<td>34.3</td>
<td>34.3</td>
<td>31.4</td>
</tr>
</tbody>
</table>

Table 9 Descriptive Statistics of TBLCS Drivers’ Variables

<table>
<thead>
<tr>
<th>Latent Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green/Eco transformations Leadership</td>
<td>204</td>
<td>1.45</td>
<td>3.61</td>
<td>2.4227</td>
<td>.40561</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>204</td>
<td>1.80</td>
<td>4.40</td>
<td>2.9686</td>
<td>.52924</td>
</tr>
<tr>
<td>Green Culture</td>
<td>204</td>
<td>1.1</td>
<td>3.0</td>
<td>1.835</td>
<td>.3508</td>
</tr>
<tr>
<td>Learning Organisation</td>
<td>204</td>
<td>1.25</td>
<td>3.75</td>
<td>2.4350</td>
<td>.49528</td>
</tr>
<tr>
<td>CSR</td>
<td>204</td>
<td>1.00</td>
<td>4.20</td>
<td>2.2480</td>
<td>.65318</td>
</tr>
<tr>
<td>TBLCS</td>
<td>204</td>
<td>1.643</td>
<td>4.429</td>
<td>2.82248</td>
<td>.499295</td>
</tr>
</tbody>
</table>
Table 10 Study Survey’s Data Reliability Analysis

<table>
<thead>
<tr>
<th>Main Variable</th>
<th>Cronbachs Alpha (acceptable if value&gt;0.07)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Culture</td>
<td>0.595</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>0.870</td>
</tr>
<tr>
<td>Organisation Learning</td>
<td>0.808</td>
</tr>
<tr>
<td>CSR</td>
<td>0.650</td>
</tr>
<tr>
<td>TBLCS</td>
<td>0.906</td>
</tr>
<tr>
<td>Green/Eco Transformation Leadership</td>
<td>0.871</td>
</tr>
<tr>
<td>Overall Survey</td>
<td>0.933</td>
</tr>
</tbody>
</table>

Cronbach’s alpha is the basic statistic for determining the reliability of data / measures based on the internal consistency and with a lower threshold of 0.70. The overall survey data reliability is 0.933, which gives the feeling to rely on study survey’s data with high confidence.

Table 11 Variables Correlations

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Green/Eco Transformation Leadership</th>
<th>Employee Engagement</th>
<th>Green Culture</th>
<th>Learning Organisation</th>
<th>CSR</th>
<th>TBLCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green/Eco Transformation Leadership</td>
<td>1</td>
<td>.870**</td>
<td>.668**</td>
<td>.867**</td>
<td>.822**</td>
<td>.698**</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td>.870**</td>
<td>1</td>
<td>.323**</td>
<td>.677**</td>
<td>.637**</td>
<td>.547**</td>
</tr>
<tr>
<td>Green Culture</td>
<td>.668**</td>
<td>.323**</td>
<td>1</td>
<td>.554**</td>
<td>.527**</td>
<td>.460**</td>
</tr>
<tr>
<td>Learning Organisation</td>
<td>.867**</td>
<td>.677**</td>
<td>.554**</td>
<td>1</td>
<td>.564**</td>
<td>.482**</td>
</tr>
<tr>
<td>CSR</td>
<td>.822**</td>
<td>.637**</td>
<td>.527**</td>
<td>.564**</td>
<td>1</td>
<td>.820**</td>
</tr>
<tr>
<td>TBLCS</td>
<td>.698**</td>
<td>.547**</td>
<td>.460**</td>
<td>.482**</td>
<td>.820**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed).
The following below the Study’s Hypotheses’ Correlations

Table 12 Correlation between Green Transformational Leadership and TBLCS

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Transformational Leadership</td>
<td>0.698**</td>
<td>0.000</td>
</tr>
<tr>
<td>TBLCS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 13 Correlation between Green Transformational Leadership and Learning Organisation

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Transformational Leadership</td>
<td>0.867**</td>
<td>0.000</td>
</tr>
<tr>
<td>Organisational Learning</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 level

Table 14 Correlation between Green Transformational Leadership and Employee Engagement

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Transformational Leadership</td>
<td>0.870**</td>
<td>0.000</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 15 Correlation between Green Transformational Leadership and Organisational Green Culture

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Transformational Leadership</td>
<td>0.668**</td>
<td>0.000</td>
</tr>
<tr>
<td>Organisational Green Culture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels
Table 16 Correlation between Green Transformational Leadership and CSR

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green Transformational Leadership</td>
<td>0.822**</td>
<td>0.000</td>
</tr>
<tr>
<td>CSR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 17 Correlation between Learning Organisation and TBLCS

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Organisation</td>
<td>0.482**</td>
<td>0.000</td>
</tr>
<tr>
<td>TBLCS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 18 Correlation between CSR and Learning Organisation

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.564**</td>
<td>0.000</td>
</tr>
<tr>
<td>Learning Organisation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 19 Correlation between Learning Organisation and Employee Engagement

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Organisation</td>
<td>0.677**</td>
<td>0.000</td>
</tr>
<tr>
<td>Employees' Engagement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels.
Table 20 Correlation between Organisational Green Culture and Learning Organisation

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Green Culture</td>
<td>0.554**</td>
<td>0.000</td>
</tr>
<tr>
<td>Learning Organisation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 21 Correlation between Employee Engagement and TBLCS

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Engagement</td>
<td>0.547**</td>
<td>0.408</td>
</tr>
<tr>
<td>TBLCS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels.

Table 22 Correlation between Organisation Green Culture and Employee Engagement

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Green Culture</td>
<td>0.323**</td>
<td>0.000</td>
</tr>
<tr>
<td>Employee Engagement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 23 Correlation between Organisation Green Culture and TBLCS

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisational Green Culture</td>
<td>0.460**</td>
<td>0.000</td>
</tr>
<tr>
<td>TBLCS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 24 Correlation between CSR and Green Culture

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.527**</td>
<td>0.000</td>
</tr>
<tr>
<td>Organisational Green Culture</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels
Table 25 Correlation between CSR and TBLCS

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSR</strong></td>
<td>0.820**</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>TBLCS</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 26 Correlation between CSR and Employees’ Engagement

<table>
<thead>
<tr>
<th>Independent/Dependent Variables</th>
<th>Correlation</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CSR</strong></td>
<td>0.637**</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Employees Engagement</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Correlation is significant at 0.01 levels

Table 27 Association between Employee Engagement and participants’ Respective Department (ANOVA)

<table>
<thead>
<tr>
<th>Department</th>
<th>Employee Engagement</th>
<th>Total</th>
<th>Fisher’s Value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (12.5%)</td>
<td>Medium (73.1%)</td>
<td>High (14.4%)</td>
<td>104</td>
</tr>
<tr>
<td>Operations / Productions</td>
<td>13 (12.5%)</td>
<td>76 (73.1%)</td>
<td>15 (14.4%)</td>
<td>104</td>
</tr>
<tr>
<td>Process Control</td>
<td>1 (10.0%)</td>
<td>8 (80.0%)</td>
<td>1 (10.0%)</td>
<td>10</td>
</tr>
<tr>
<td>Maintenance / Technical</td>
<td>4 (11.8%)</td>
<td>28 (82.4%)</td>
<td>2 (5.9%)</td>
<td>34</td>
</tr>
<tr>
<td>Services</td>
<td>0 (0.0%)</td>
<td>46 (92.0%)</td>
<td>4 (8.0%)</td>
<td>50</td>
</tr>
<tr>
<td>Others / IT</td>
<td>1 (16.7%)</td>
<td>5 (83.3%)</td>
<td>0 (0.0%)</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19 (9.3%)</td>
<td>163 (79.9%)</td>
<td>22 (10.8%)</td>
<td>204</td>
</tr>
</tbody>
</table>

**NS** Association is not significant.

The association between employee engagement and respective departments studied using Fisher’s exact test. The p-value is greater than the significance level of 0.05 that means that the association between employee engagement and respective departments is not significant.
The association between green culture and participants’ years of experience in ‘Z’ firm studied using Fisher’s exact test. The p-value is greater than the significance level 0.05, which means that the association between green culture and participant’s years of experience in the company is non-significant.

The association between learning organisation and participants’ respective departments examined using Fisher’s exact test. The p-value is less than the significance level 0.01, which means that the association between learning organisation and participants’ respective department is significant. The table shows that 58.7% of operation / production employees have low organisational learning, which is alarming sign. Busy working times and high workload of

### Table 28 Association between Green Culture and Participants’ Year of Experience in ‘Z’ firm (ANOVA)

<table>
<thead>
<tr>
<th>Year of Experience in the Company</th>
<th>Green Paradigm / Green Culture</th>
<th>Total</th>
<th>Fisher’s Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (82.8%)</td>
<td>Medium (17.2%)</td>
<td>High (0.0%)</td>
</tr>
<tr>
<td>1 - 2 Years</td>
<td>24</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>3 - 4 Years</td>
<td>69</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>5 - 10 Years</td>
<td>65</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Above 10 Years</td>
<td>32</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>190 (93.1%)</td>
<td>14 (6.9%)</td>
<td>0</td>
</tr>
</tbody>
</table>

**NS** ➔ Association is not significant.

### Table 29 Association of Learning Organisation and Participants’ Respective Departments (ANOVA)

<table>
<thead>
<tr>
<th>Department</th>
<th>Organisational Learning</th>
<th>Total</th>
<th>Fisher’s Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low (58.7%)</td>
<td>Medium (41.3%)</td>
<td>High (0.0%)</td>
</tr>
<tr>
<td>Operations / Productions</td>
<td>61</td>
<td>43 (41.3%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Process Control</td>
<td>2 (20.0%)</td>
<td>8 (80.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Maintenance / Technical</td>
<td>8 (23.5%)</td>
<td>26 (76.5%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Services</td>
<td>9 (18.0%)</td>
<td>40 (80.0%)</td>
<td>1 (2.0%)</td>
</tr>
<tr>
<td>Others / IT</td>
<td>2 (33.3%)</td>
<td>4 (66.7%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>82 (40.2%)</td>
<td>121 (59.3%)</td>
<td>1 (0.5%)</td>
</tr>
</tbody>
</table>

** **Association is significant at 0.01 level
production people should not be an acceptable excuse for low learning level of those vitally important assets.

Table 30 Learning Organisation - Participants’ Respective Departments (ANOVA)

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean</th>
<th>Fisher’s Value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations / Productions</td>
<td>17.65</td>
<td>7.104</td>
<td>0.000</td>
</tr>
<tr>
<td>Process Control</td>
<td>19.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance / Technical</td>
<td>19.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>20.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others / IT</td>
<td>18.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The association between learning organisation and study participants’ departments was examined using ANOVA test. The p-value is less than the significance level 0.01, thus the association is significant with lowest mean value for production people. This comes in line with Fisher’s exact test for same association.

Table 31 Association of TBLCS with Study Participants’ Respective Departments (ANOVA)

<table>
<thead>
<tr>
<th>Department</th>
<th>Mean</th>
<th>Fisher’s Value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations / Productions</td>
<td>41.32</td>
<td>4.414</td>
<td>0.002</td>
</tr>
<tr>
<td>Process Control</td>
<td>37.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance / Technical</td>
<td>37.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>33.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others / IT</td>
<td>39.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The association between TBLCS and the study participants’ respective departments examined using ANOVA test. The p-value is less than the significance level 0.01, thus the association is significant. The table shows that operation / production people have the highest mean value (41.32) being they are factually the main contributors to the firm’s sustainability KPIs.
Table 32 Association of TBLCS with Participants’ Work Experience (ANOVA)

<table>
<thead>
<tr>
<th>Year of Experience in the Company</th>
<th>Mean</th>
<th>F-Value</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2 Years</td>
<td>42.00</td>
<td>6.786</td>
<td>0.000</td>
</tr>
<tr>
<td>3 - 4 Years</td>
<td>40.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 - 10 Years</td>
<td>39.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Above 10 Years</td>
<td>35.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The association between TBLCS and the study participants’ years of experience in the ‘Z’ firm examined using ANOVA test. The p-value is less than the significance level 0.01, which means that TBLCS is significantly associated with participants’ experience with the company. Surprisingly, the newly and fresh recruited employees (1-2 service years) have the highest mean (42.0). I assume this phenomenal probably because those fresh and young recruits’ generations are more enthusiastic, pro-social, and pro-environmental agents.
APPENDIX B – GRAPHS

This section of the research study incorporates the graphs representing the correlations between the individual drivers of TBLCS and TBLCS in total. The section incorporates also the graphs demonstrating the interrelationships between individual TBLCS drivers with each other. The graph at end of this section demonstrates the study participants’ intentions to stay with the firm for the next two years. However, the correlation graphs demonstrate the relationships between TBLCS variables but they in same time demonstrate the study's hypotheses validation. As a thumb rule, all graphs represented in a way that X-axis represents independent variable while Y-axis represents dependent variable.

Figure 7 Correlation of Green/Eco Transformational Leadership with TBLCS

Green/ Eco -Transformational Leadership has a positive significant correlation with TBLCS (Correlation = 0.698, p<0.05).
Green/Eco Transformational Leadership has a positive and significant correlation with the learning organisation (Correlation = 0.867, p<0.05).

Green/Eco- transformational leadership has a significant positive correlation with employees' engagement (Correlation=0.870, p<0.05).
Green/Eco- transformational leadership has a positive and significant correlation with organisational green Culture (Correlation=0.668, p<0.05).

Green/Eco Transformational Leadership has quite a significant positive correlation with CSR (Correlation = 0.822; p<0.05)
Learning organisation has a positive and significant correlation with TBLCS (Correlation = 0.460, p<0.05)

Corporate social responsibility (CSR) has a positive significant correlation with the learning organisation (Correlation = -0.564; p<0.05)
Learning organisation has a significant positive correlation between learning organisation with employees' engagement (Correlation = 0.677; p<0.05)

Organisational green culture has a significant positive correlation with the learning organisation (Correlation = 0.554; p<0.05)
Employees’ engagement has a significant positive correlation with TBLCS (Correlation=0.547; p<0.05)

Organisational green culture has a positive correlation with employees’ engagement (Correlation=0.323; p<0.05)
Figure 18 Correlations of Organisational Green Culture with TBLCS

Organisational green culture has a positive correlation with TBLCS (Correlation=0.460; p<0.05)

Figure 19 Correlations of CSR with Organisational Green Culture

CSR has a positive significant correlation with organisational green culture (Correlation= 0.527; p<0.05)
Figure 20 Correlations of CSR with TBLCS

CSR has quite significant a positive correlation with TBLCS (Correlation= 0.820, p=0.00<0.05).

Figure 21 Results of whether the employees will continue to work for ‘Z’ firm for next two years
APPENDIX C – PARTICIPANTS’ SURVEY AND MANAGEMENT INTERVIEWS

Survey’s Questionnaire for ‘Z’ Firm’s Employees
Agreement to participate in a survey’s questionnaire

Title of the survey
Insights about an appropriate corporate strategy for sustainable development and firm’s sustainability for the purpose of DBA thesis’ gap analysis study on ‘Triple Bottom Line’ Corporate Sustainability Strategy.

Dear Sir

You are kindly asked to participate in this survey of the aforementioned subject within the following ground rules:

1. Principally the information that you provide in this questionnaire will be confidential and the whole questionnaire will be fully anonymous.
2. The questionnaire does not ask for any personal identifying information like your name, employee number, grade, designation, nor address.
3. Your participation in this questionnaire is absolute voluntarily. You may refuse to participate in the entire questionnaire or in any part of it.
4. You have the right to not answering any questions you do not wish to answer.
5. After analyzing the questionnaire data, the questionnaires sheets will be destroyed.
6. There is no any foreseeable risk that anticipated because of participating in this exercise.
7. There will be no direct benefits to you from participating in this exercise.
8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose not participating in this study.
9. However, the gain will be the general feeling of reward that comes from being of help to build better understanding of questionnaire’s subject
10. Please note that ‘Z’ is a symbol used to identify anonymously your firm in this survey.

The survey is prepared by; Abdelmoniem Saeed
I can be reached through land line phone (04-4228598) and mobile phone number (050-6534206)
SECTION - 1
Demographic Distribution
1.1 Which department you are working?
1. Operations/Production  2. Process Control
3. Technical / Maintenance  4. Services
5. Others / IT

1.2 What is your educational background?
1. Did not complete high school  2. High school graduate
3. Certificate or associates degree  4. Undergraduate degree
5. Graduate degree

1.3 How many years you are working in this company?
(1) 1 - 2 years  (2) 3 - 4 years  (3) 5 - 10 years  (4) More than 10 years

SECTION - 2
Green Culture
Please respond to each of the following items 1 -8. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Our Organisation’s green vision and strategies are based on global best practices</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Does your firm recognize that it has a huge carbon footprint?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Our organisation adopts green technologies to reduce GHGs and CO₂</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Is your firm developing innovative and green products</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Does your firm have an eco-efficiency plan?</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Our organisation reduces wastage and recycles</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. In our organisation we have strategies to reduce energy consumption</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Our organisation continuously innovates and introduces new products</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
**Section - 3**

**Employee Engagement**

Please respond to each of the following items 1-10. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In the last seven days, I have got recognition or praise for doing good work?</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>2. At work, my opinions count?</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>3. The pay and benefits in my organisation are comparable to similar companies?</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>4. Job promotions in my organisation are fair and objective?</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>5. Organisational policies are clearly communicated in my organisation?</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>6. I am committed to do my part to improve the organisations economic, social and environmental performance</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>7. I am committed to do my part to improve operational efficiency</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>8. I am committed to do my part to reduce energy consumption</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>9. I am committed to do my part to reduce wastage</td>
<td>( )</td>
<td></td>
</tr>
<tr>
<td>10. I see myself continuing to work for this organisation two years from now?</td>
<td>( )</td>
<td></td>
</tr>
</tbody>
</table>

**Section - 4**

**Learning Organisation**

Please respond to each of the following items 1-8. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true of your department or work group, score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Almost</th>
<th>Never</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

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1. In my organisation, people openly discuss mistakes in order to learn from them. (    )

2. In my organisation, people are rewarded for learning. (    )

3. My organisation encourages people to think from a global perspective. (    )

4. In my organisation, leaders generally support requests for learning opportunities and training (    )

5. In my organisation, leaders mentor and coach those they lead. (    )

6. In my organisation, leaders continually look for opportunities to learn. (    )

7. I use the knowledge I gained from learning to innovate. (    )

8. In the last year, I had opportunities at work to learn and grow? (    )

SECTION-5

Corporate Social Responsibility (CSR)

Please respond to each of the following items 1 - 5. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is usually true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Your ‘Z’ firm having clear policies for corporate social responsibility (CSR)</td>
<td>(     )</td>
<td></td>
</tr>
<tr>
<td>2) CSR of your ‘Z’ firm addresses effectively the firm’s social and environmental impacts. (     )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) CSR of your ‘Z’ firm supports effectively the firm’s business sustainability. (     )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) CSR of ‘Z’ firm supports much ‘greening’ of the organisation business. (     )</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) CSR of ‘Z’ firm enhances the organisation performance. (     )</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section- 6

Triple Bottom line Performance / Sustainability

Adapted from Global Reporting Initiative (GRI) and OECD Sustainability Reporting and few measures of economic performance from Marsick and Watkins (2003).

Please respond to each of the following items 1 -3. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is your firm experiencing regular annual growth in its turnover?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does your firm achieve its annual financial objectives?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Does your firm have specific KPIs for economic sustainability?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2 Social Sustainability

Please respond to each of the following items 1 -6. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Does your firm have a management system in place to manage social issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. In my organisation we are aware about our social impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In our organisation we have made plans to minimize our social impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Does your firm engage in active corporate citizenship and philanthropy?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Does your firm have specific KPIs for social sustainability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Does your firm have a social impact reporting system</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 6.3 Environmental Sustainability

Please respond to each of the following items -1 -5. If the item refers to a practice that rarely or never occurs, score it as one (1). If it is almost always true then score the item as five (5). Fill in your response by marking the appropriate number on the answer sheet provided.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In my organisation we are aware about our environmental impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. In our organisation we have made plans to minimize our environmental impact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Our organisations scan its external environment and adopt new technologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Your firm has specific KPIs for environmental sustainability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Your firm has an environmental impact reporting system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
‘Z’ Firm’s Management Semi - Structured Interview
Agreement to participate in a semi-structured interview

**Title of the interview**

Insights about an appropriate corporate strategy for sustainable development and firm’s sustainability for the purpose of DBA thesis’ case study on ‘Triple Bottom Line’ Corporate Sustainability Strategy.

Dear Sir

You are kindly asked to participate in this survey of the aforementioned subject within the following ground rules:

1. Principally the information that you provide in this questionnaire will be confidential and the whole questionnaire will be fully anonymous.
2. The questionnaire does not ask for any personal identifying information like your name, employee number, grade, designation, nor address.
3. Your participation in this questionnaire is absolute voluntarily. You may refuse to participate in the entire questionnaire or in any part of it.
4. You have the right to not answer any questions you do not wish to answer.
5. After analyzing the questionnaire data, the questionnaires sheets will be destroyed.
6. There is no any foreseeable risk that anticipated as a result of participating in this exercise.
7. There will be no direct benefits to you from participating in this exercise.
8. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose not participating in this study.
9. However, the gain will be the general feeling of reward that comes from being of help to build better understanding of questionnaire’s subject
10. Please note that ‘Z’ is a symbol used to identify anonymously your firm in this survey.

The survey is prepared by; Abdelmoniem Saeed
I can be reached through landline phone (04-4228598) and mobile phone number (050-6534206).
1. ‘Z’ is one of the biggest manufacturing firms in its industry sector, what is the future vision of ‘Z’?

2. Who are the stakeholders of ‘Z’ firm?

3. ‘Z’ firm has a huge impact on the economy of UAE? How sustainable is your firm’s position in the long term?

4. Globally there is a growing debate on environmental protection? What is the position of your firm on this debate?

5. Is your organisation ambidextrous? I.e. is it effective in balancing internal efficiency with innovation? Or is it only good at either efficiency or innovation?

6. How important is continuous innovation in product development and business operations in ‘Z’ firm?

7. Does ‘Z’ firm use innovative technologies to improve efficiency and reduce wastage?

8. High numbers of large firms globally are having sustainability programs and reporting their triple bottom line performance, is ‘Z’ firm on same track?

9. To what extent does ‘Z’ firm comply with the Corporate Governance guidelines set by the UAE Companies’ law for large shareholding firms?

10. Do you think a better corporate governance framework will enhance transparency?

11. What is the role of learning in your organisation? Does it help in changing employee behaviors towards change initiatives?

12. What initiatives if any your firm is launching to engage employees? Is employee engagement given greater importance?

13. It is argued that leadership plays a critical role in adopting and driving a green culture? Is the leadership of your firm geared towards a green organisational culture?

14. How do you see the economic performance of ‘Z’ in the next 5 years?
15. Being a large firm the economic, social and environmental impacts of ‘Z’ are huge? How does ‘Z’ balance these triple domains into a corporate strategy?

16. The carbon footprint of ‘Z’ is substantial and with further growth ‘Z’ firm plans, it will only become bigger. What strategies are in place to reduce carbon emissions and mitigate the environmental impact of ‘Z’ firm?

17. What strategies are in place to reduce wastage and improve operational and energy efficiency?

18. What are the objectives of your environmental management system?

19. Does ‘Z’ fulfill its social responsibilities and act as good corporate citizen? Any specific social initiatives undertaken?

20. As ‘Z’ is a large firm, can it influence its suppliers to comply with its CSR / Sustainability policies? Does ‘Z’ plan to do so?

21. Does ‘Z’ firm has specific KPIs for social and environmental sustainability?

22. Are there any plans to initiate triple bottom line reporting system within triple bottom line corporate sustainability strategy?

23. What are your insights regarding the adoption of an appropriate corporate strategy for sustainable development and corporate sustainability?
REFERENCES


Henriques, A. and Richardson, J. eds., 2013. The triple bottom line: Does it all add up. Routledge


Quinn, L. and Baltes, J., 2007. *Leadership and the triple bottom line: bringing sustainability and corporate social responsibility to life*. Center for Creative Leadership, p.6


