UNDERSTANDING VALUE CHAIN PARTICIPANT CONTRIBUTION TO THE COMPETITIVENESS OF SUSTAINABLE FIRMS

by

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Abstract

Historically, there have been trade-offs between the needs for profitability and sustainability in business strategy. This has been changing as the two needs have become interwoven in the pursuit of competitive advantage for many firms. This relatively new phenomenon of profitability being tied to sustainability has been examined from many perspectives, including internal and external pressures to be sustainable and competitive advantage from sustainable practices. Hence, using a model developed from an analysis of the literature, the relative importance of value chain participants and their respective contribution to the competitiveness of firms adopting sustainable practices will be investigated. The validity of the weight of each value chain participant was tested, using a deductive approach. Data collection was carried out through a questionnaire administered by Eco-Business, a large media company addressing ethical and sustainable business practices worldwide, and data analysis was done using multiple regression. Overall, the inclusion of Corporate Social Responsibility in a firm's business strategy was the greatest influence for sustainability compared to its competitors. From primary activities of the value chain, the largest influence on a firm's sustainability is its demand that suppliers have sustainable business practices. To further evaluate the relative importance of value chain participants for a global sample, different geographical regions and industry sectors have been analysed separately. While the results were fairly similar for each subsample, several disparities have arisen for certain geographical regions and industry sectors.

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Dedication

I dedicate this thesis to my parents, who were there to fuel my academic expedition with coffee and unwavering support.

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List of Abbreviations

B2B – Business to business

B2C – Business to customer

CR – Corporate Responsibility

CSR – Corporation social responsibility

GRI – Global Reporting Initiative

GSCM – Green supply chain management

SDG – Sustainable Development Goals

SME – Small and Medium Enterprise

SSCM – Sustainable supply chain management

UN – United Nations

Chapter 1: Introduction

This chapter provides an overview of the study, as a primer for following chapters. A background of sustainability pertaining to business strategy and its importance is covered, followed by the research objectives and a briefing of the research approach. In Chapter 2, a comprehensive literature review is conducted, leading into the research model developed from the literature review for this study. In Chapter 3, the quantitative methodology used for this study is described. In Chapter 4, the results of the research are presented and discussed. In Chapter 5, a conclusion highlighting key findings apprises managerial implications for the inclusion of sustainability in business strategy.

Background and Motivation

The need to be sustainable is a pressing issue in the modern age. Global sustainability is defined by the World Commission on Environment and Development (WCED, 1987, p. 41 as "development that meets the needs of the present without compromising the ability of future generations to meet their needs." Nearly two decades later, in a speech to the United Nations (UN) Ambassadors on April 20, 2006, Gordon Brown further stressed the need to be sustainable (Holt and Ghobadian, 2009):

> "Environmental sustainability is not an option – it is a necessity. For economies to flourish, for global poverty to be banished, for the well-being of the world's people to be enhanced – not just in this generation but in succeeding generations – we have a compelling and ever more urgent duty of stewardship to take care of the natural environment and resources on which our economic activity and social fabric depends."

To further expand upon the notion of global sustainability, the UN outlines seventeen sustainable development goals (SDG), as shown in the appendix (United Nations, 2015). Several of these goals pertain to environmental sustainability, and provide a context for the complexity of the overarching notion of sustainability. Notable SDG's that fall under the umbrella of environmental sustainability include Clean Water and Sanitation, Affordable and Clean Energy, Sustainable Cities and Communities, Responsible Consumption and Production, Climate Action, Life Below Water, and Life on Land. The UN has promoted sustainability for interested parties worldwide, and a specific focus on how enterprises strive towards the principles outlined in these goals merits attention.

The dire need for the inclusion of sustainability in business strategy has not gone unnoticed by the corporate world. In contrast to Friedman's almost fifty year old argument that a corporation's key responsibility is to increase its profits, Savitz (2013) argues that in an interdependent world embracing sustainability and improved relationships with stakeholders is crucial for survival. The prominent concept of the Triple Bottom Line is a feature of business strategy for firms worldwide, influencing managers to take social and environmental aspects of business strategy into account, in addition to economic aspects (Elkington, 1998; Fiksel, 1999). Rather than just using a traditional approach to measuring success, such as profits or shareholder value, the Triple Bottom Line includes the impact on the environment and society as a whole as metrics for success as well. For example, somebody demonstrates the use of inputs, kilowatts produced, and carbon and nitrogen oxides emissions in assessing environmental and health impacts, as well as trade-offs arising from Triple Bottom Line Management (McWilliams et al., 2016). Strongly related to the Triple Bottom Line, is the concept of Corporate Social Responsibility (CSR), a

strategic tool in managing the Triple Bottom Line (Whetten et al. 2002). McWilliams et al. (2006, pg. 1) define CSR as "situations where the firm goes beyond compliance and engages in 'actions that appear to further some social good, beyond the interests of the firm and that which is required by law'." As detailed in the existing literature, implementing CSR initiatives has generally had the ability to yield immense rewards for firms. Griffin and Prakash (2014) discuss corporate responsibility (CR), providing the distinction from CSR as being that CSR focuses on actors involved in an organization's impact, as opposed to how CR focuses on society as a whole. Halme et al. (2009) also discuss CR as activities undertaken by a firm to benefit society as a whole, as well as being context-dependent. While the Triple Bottom Line, CSR, and CR address social factors, in addition to environmental ones, the focus of this study will be on the environmental sustainability practices of firms, In addition, the notion of CSR is more appropriate than CR for this study, due to the focus on stakeholders, as discussed below.

Koho et la. (20011) define sustainable practices as involving the following aspects: reduction in waste and emissions; reduction in energy intensity of goods and services; use of renewable and sustainable energy sources; maximum use and re-use of recycled components and material; measurement and assessment of business impact on ecosystems; standard measures for evaluating sustainability performance; and environmental consciousness pervading the culture of an organisation. This is not an exhaustive list of sustainable practices, as there are countless elements to reducing environmental impacts of a firm's activities. According to a survey conducted by the MIT Sloan Management Review and Boston Consulting Group in 2012, 70% of respondents said their companies have put sustainability on the management agenda in the past six years, and 20% said that it has been two years for their companies (Kiron et al., 2012).

The adoption of sustainability in business strategies of firms is a persistent topic today in strategy research. This is evident through the wealth of prescriptive purpose related to it, explaining how to incorporate sustainability into the value chain of a company for a reduced environmental impact (Szekely and Knirsch, 2005; Truffer et al. 2010; Boons and Lüdeke-Freund, 2013) and for competitive advantage (Sharma et. al, 2010; Tseng and Hung, 2014; Mirkouei at al., 2016). However, there is a need for up-to-date research on what influences firms to strive for sustainable business strategy in the first place, especially the fast-paced changes many industries are facing today in terms of regulations, customer demand, and global trends (Walsh, 2012).

Research Question

Therefore, the intended motivation of the present research is to evaluate the impact of certain internal influences on organisations and their inclusion of sustainability in their business strategy. The phenomenon to be studied is the need for a firm to be sustainable. As elaborated below, this research will use value chain theory as the theoretical perspective. In brief, value chain theory conceptualizes how interdependent activities within the organisation affect the value of the final product or service that the customer receives. As the activities of suppliers and service providers for the organisation affect the activities within an organisation's value chain, participants outside the boundaries of the organisation can also be considered to exert internal influences on business strategy. Through an empirical study, the following research question will be investigated:

What is the relative importance of sustainability to value chain participants (i.e., suppliers, the company itself, and customers) and their respective contribution to the level of a firm's sustainable operations and business practices as compared to their competitors?

Research Objectives

This research has two purposes;

- to describe the relative importance of value chain participants to the level of sustainable operations and business practices of a firm, and
- to explain the above through the testing of hypotheses.

The overarching goal is to extend the understanding of what drives firms to be sustainable, especially in the context of a value chain. According to Pagell and Shevchenko (2014), the notion of sustainability has been a highly contentious topic in supply chain management for decades, as there is a vital need for sustainability to go beyond internal operations and expand to a firm's supply chain as a whole (Fiksel et al., 1999; Asif et al, 2013).

The results of the present research could yield practical benefits for the managers of sustainable firms, or even managers contemplating the inclusion of sustainability in the business strategy of their firms, by providing insight from empirical evidence on the bearing of each value chain participant on the competitive advantage of their firm, allowing them to develop better sustainable business strategy.

This paper starts with a review on the existing literature on the positive and negative implications of sustainability in business strategy, then an overview of the research that has been done on value chain participant influence on the implementation of sustainable business ethics and processes. Value chain theory is addressed as the theoretical perspective chosen for the research, and a methodology is proposed and discussed.

Chapter 2: Literature Review

This chapter will describe the relevant research consulted for the development of this thesis. Prior research has explored the importance of suppliers, employees, and customers to competitive advantage in sustainable firms, and sustainable business strategy in general, from a variety of perspectives. Firstly, in order to understand what influences firms to adopt sustainability as part of their business strategies, it is important to recognize the strategic benefits of doing so. While businesses have traditionally encountered trade-offs between concern for the environment and financial success, environmental sustainability has come to become an integral part of the strategy for many businesses (Pujari et al., 2003). Menon and Menon (1997) argue that business leaders have embraced the notion that doing social and environmental good and succeeding financially are interwoven, rather than being an either-or proposition, and that environmentalism is an effective marketing strategy, coined as enviropreneurial marketing. Some studies have claimed that sustainability has been a means of competitive advantage (Babiak and Trendafilova, 2011; Falkenberg and Brunsael, 2011), especially for environmental first-movers in industries where environmentally sustainable practices have not been universally adopted (Barney, 1991; Powell, 1992; Nehrt, 1996).

Sustainability Strategy and Competitive Advantage

The resource-based view of the firm argues that to attain sustained competitive advantage, firms need key resources and capabilities that exhibit characteristics of value, rareness, inimitability, and non-substitutability (Barney, 1991). The value of resources is determined by how they can enable a firm to implement strategies for improved efficiency and effectiveness in meeting

customer demands. However, a competitive advantage cannot occur or be sustained if the resources of a firm are not rare, meaning that a large number of other firms in the industry can provide the same product or services. According to the economist Hirshleifer (1980), a competitive advantage from a value resource can be sustained as long as the number of firms with the same resource does not exceed the number of firms required to generate perfect competition dynamics within an industry.

Barney (1991) describes imitability as being achieved when a competing firm cannot obtain the same valuable resource, whether it is strategy duplication or obtaining the same technology through means independent of the other firm. In addition to value, rareness, and imitability, the last requirement a firm resource must fulfil to be a source of competitive advantage is substitutability, which is distinct absence of strategically equivalent resources that are valuable or not rare or imitable. Essentially, even if a competitor cannot duplicate a valuable resource of a firm, the firm misses out on the sustained competitive advantage of that resource if its competitors offer a substitute that gives a similar benefit (Barney, 1991). This is seen especially with the adoption of sustainable practices, as only firms with adequate financial resources and management capabilities can imitate proactive environmental strategies that have been effective for other firms (Clarkson et al., 2011). This applies to intangible resources pertaining to sustainability as well; for example a reputation for sustainability leadership could be considered a resource that yields a sustained competitive advantage (Walsh and Dodds, 2017).

Strategy has been defined as being part of the planning process and planning is part of the firm infrastructure support activities (Hines, 1993). Porter (1985) states that there are three generic strategies to achieve competitive advantage: Cost Leadership, Differentiation, and Focus. The implementation of each of these strategies by firms invested in sustainability and CSR as a whole has been extensively studied. For example, Panwar et al. (2016) compared differentiation and cost leadership strategies employed by small firms and studied the effects of those firms' chosen strategies on environmental engagement; for these small firms, it was found the approach to CSR was less formally planned. In contract, using survey data from shipping firms in Singapore, Yuen et al. (2017) have found the differentiation strategy yielded more benefits in CSR implementation compared to the cost leadership strategy. Each individual generic strategy and how it pertains to sustainability is discussed in more detail below.

Cost Leadership

Achieving cost leadership, the competitive advantage gained through having relatively low costs of operation in the industry, has been accomplished through greater efficiencies in sustainable firms. It has been shown that implementation of corporate social initiatives tends to result in direct financial benefits for firms, particularly when resource efficiency measures are undertaken. Using survey data for a United States based study, Judge and Douglas (1998) found a positive relationship between integration of environmental issues into the strategic planning process with a firm's financial performance, as well as its environmental performance, as well as a higher level of environmental issue integration into strategy with a higher level of dedicated resources. Clarkson et al. (2011) studied the pulp and paper, chemical, oil and gas, and metals and mining industries, the highest polluting industries, in the United States over the periods of

1990 to 2003 and found a positive association between environmental performance and financial performance. As well, Qi et al. (2014) also found a positive association between a firm's environmental performance and its financial performance in the Chinese industry, with the level of extra resources that can be used on a discretionary level having a moderating effect on that relationship. The use of the sustainability strategy of resource efficiency was studied, and using a sample of 5877 French firms, it was found that firms employing a cost leadership strategy were more likely to invest in resource efficiency (Delmas and Pekovic, 2015) as a means of cost savings. However, in this study it was also found that firms were less likely to invest in resource efficiency during times of economic decline, illustrating the important role a firm's resources play in its ability to be sustainable. A United States based study, drawing on the perspectives of social investors for a variety of industries, also found a link between CSR performance and financial performance, using return on equity, return in sales, and growth in sales as financial measures (Ruf et al., 2001). Another study based in the United States identified cost savings as a moderate driver of sustainable purchasing and supply management (Giunipero et al. (2012).

Differentiation

Citing the increasing demand for 'eco-fashion' in Sweden during the late 1980's, Kogg (2003) outlines the incorporation of sustainability in a supply chain resulted in a competitive advantage through the strategy of differentiation. In addition to attracting more customers, firms can charge premium prices for more environmentally friendly products, resulting in greater profits (Ytterhus, 1999; Ageron et al., 2012). Interestingly, the likelihood of a firm using sustainability, or CSR as a whole, to attract customers was found to increase during times of economic decline;

communication involving CSR messaging was found to also increase during these times (Green and Peloza, 2015).

Focus

Finally, the generic strategy of focus is the targeting of only a particular market segment. Firms have managed to enter new markets through the adoption of sustainable practices, whether from meeting regulatory standards to enter those markets or developing novel products. For example, Sean and Brown (1995) discuss the advantages and disadvantages new firms have relative to incumbents of a market when pollution regulations are imposed. While new firms may find difficulties due to lack of capital, steep learning curves, and the grandfathering in of incumbents for new environmental standards, the advantages include less stringent regulations being placed on smaller firms, greater flexibility in selection of technologies more adept to meeting environmental regulations, and the development of a business model with sustainability built in from the start. Sean and Brown (1995) go further in their study, to state that while regulations were found to overall deter new firms from entering these markets, there was found to be opportunity for firms that could overcome barriers, for example, hiring of experienced workers to overcome steep learning curves. In terms of innovation for the development of new markets, Schaltegger et al. (2016) discuss the growth of niche business models, such as that of Whole Foods Market's focus on organic food; the creation of radically sustainable niche markets, paired with scalability and high growth, can lead to market transformations. In addition to competitive advantage through the ability to enter new markets, meeting regulatory standards is advantageous for cost savings, as discussed below.

Regulatory Advantages of Sustainability

In addition, through the proactive adoption of sustainability in business strategy, the risk of costly regulations is reduced (Porter and van der Linde, 1995). In outlining the role corporations play in ecological sustainability, Shrivastava (1995) uses Toshiba and Hitachi's design of acid-free and renewable batteries as a means to achieve competitive advantage, as issues with strict disposal regulations are circumvented. As well, they suggest that applying environmentally ecological sustainable practices such as that allows firms to pre-empt regulations before they are introduced and enforced. For companies in the automotive sector studied by Fineman and Clarke (1996), being environmentally sustainable and ahead of the regulatory curve was a source of competitive advantage, as it made quickly adapting to new legislation easier.

Barriers of Sustainable Business Practices

It is important to note that, for many firms, adoption of sustainable business practices is not automatically perceived as a competitive advantage. The classically held view in business strategy is that the performance of a firm is hindered due to the expenditures of environmental sustainability initiatives (Friedman, 1970; Mathur and Mathur, 2000). Walley and Whitehead (1994) further argue that additional costs of adopting sustainability can result in an overall competitive disadvantage. A study on the Chinese construction industry found that the effect of increasing competition resulted in higher economic and social performance for firms, but lower environmental performance; in the pursuit of competitive advantage, environmental sustainability was not seen as a source of competitive advantage (Ye et al., 2015). As well,

Berchicci and Bodewes (2005) discuss the challenges firms encounter in environmental new product development, such as a trade-off of reduced quality for increased environmental sustainability, increased complexity, and general uncertainty about the product on the part of consumers. Giunipero et al. (2012) cite costs as a barrier to sustainability implementation, as well as a lack of understanding by leaders in firms.

One common assumption about strategy formulation related to sustainability is that it is generally planned. Recent research has begun emphasizing the difference between planned and emergent strategy making, such as Neugebauer et al.'s (2016) study on the formation of corporate sustainability strategies, where the role the complexity of the problem is discussed. Emergent strategy formation can be described as bottom-up, and planned strategy making is more top-down, and generally includes high level decisions such as the implementation of a CSR strategy. It was found that if a problem is particularly complex, it would be more likely to be addressed by emergent problem solving, whereas if a problem is of immediate concern to stakeholders and is in line with societal norms, it is more likely to be addressed by planned strategy.

Supply Chain Participation

This study will be based on the perceived strategic advantage of an organisation, though an understanding of stakeholders can provide insight on how strategy can be shaped by the specific participants of an organisation's value chain. Shafiq at al. (2014) have identified stakeholders as individuals or groups that pressure firms to exhibit socially responsible behaviour in general, and

these stakeholders can include customers, employees, suppliers, community groups, and shareholders. As well, it was found that through appealing to one group of stakeholders, a spillover effect could occur, resulting in changes in how other stakeholder groups are engaged. Foley (2005, p. 138) defines stakeholders as:

> "...those entities and/or issues, which a business identifies from the universe of all who are interested in and/or affected by the activities or existence of that business, and are capable of causing the enterprise to fail, or could cause unacceptable levels of damage, if their needs are not met."

From this definition, Garvare and Johansson (2010) present a conceptual model of stakeholder management for sustainability, and state that stakeholders;

a) "provide essential means of support required by an organisation; and

b) could withdraw their support if their wants or expectations are not met, thus causing the organisation to fail, or inflicting unacceptable levels of damage."

A distinction in this model is made between primary and secondary stakeholders; primary stakeholders can directly provide means of support required by the organisation and can withdraw their support if needs or expectations are not met, and secondary stakeholders can include bodies such as non-government organisations, academics, or environmental groups, that can influence the primary stakeholders. There is a distinction made between both types of stakeholders and mere interested parties, who hold no influence over a firm. Primary stakeholders may act as interested parties in regard to sustainability if sustainability is not a priority. This study will analyze the influence of primary stakeholders when sustainability is a priority for the firm. As stated above, it is imperative for a firm to utilize its resources and capabilities to meet the demands of its customers, a key primary stakeholder, in order to achieve

a competitive advantage; to do this requires coordination of other primary stakeholders, such as internal employees and suppliers. Therefore, the influence of primary stakeholders can be investigated through the lens of Value Chain theory, discussed below.

Value Chain Approach

Value Chain Theory provides a perspective that allows for the initial exploration of the research question. The value chain of a firm represents the series of interdependent activities within a firm that provides value to the customers of the firm, as shown in Figure 1 (Porter, 1986). The value is created through primary activities, which have a direct impact on the value of the products or services that customers would receive, and the support activities that provide the functions within the firm's infrastructure that allow for the primary activities to be undertaken. Each change to any input to the value chain results in an effect on the margin at the end of the chain. While it is very similar to the notion of a supply chain, the significance of providing a margin of value to the customer at the end is heavily emphasised. When the value created meets or exceeds the demands of customers, they will be willing to pay more for that created value than what the costs used to create the value were, resulting in a profit for the firm.

Porter (1986) expands on value chain theory by introducing the concept of a "value system," which links the activities of buyers and suppliers to the value chain of the firm. A distinction is made between upstream and downstream activities, which are related to a firm's suppliers and buyers, respectively. The procurement of inputs from suppliers upstream, whether it be raw material, outsourced services, machinery, or any other input, impacts the value chain as a whole

as it effects the activities within the value chain and, ultimately, the value received by the customer. Downstream activities are related to the buyer, or customer, and involve the marketing and sales to customers, who themselves are considered part of the downstream aspect of the value chain. These activities generally fall under the competitive scope of the firm and the activities employed for competition in an industry, according to value chain theory (Porter, 1986). As it is the customer who makes the decision of which firms to receive products or services from, it is essential that the value to the customer is optimized. Relationships with customers, employees, and suppliers are included within the primary activities of a firm's value chain, and the impact of a firm's support activities can also be studied for influence on its sustainability.

Pivoda (2014) endorses the use of value chain theory for the study of challenges and risks of sustainability management through emphasizing the comprehensive approach required for mitigating complications in sustainable practices implementation. While all participants of the value chain hold significance in competitive advantage, there will be more importance given to certain participants, which this study will be looking to explore further.

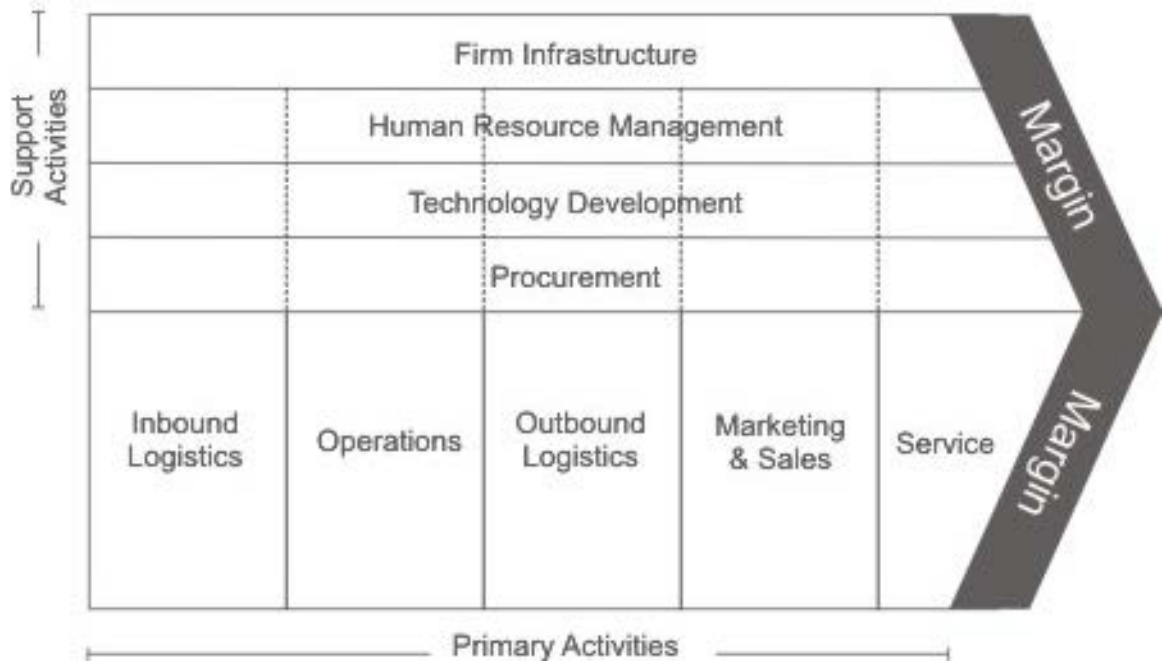

Figure 1 – Value Chain Model (Porter, 1986)

Influence of Customers on Sustainability

As described above, sustainable business practices can lead to a competitive advantage. A large reason for this is the demand of customers for firms to include sustainability in their business strategy. In an empirical study on Business-To-Business (B2B) firms by Lai et al. (2010), it is evident that through engaging in CSR activities a firm can enhance its brand performance. In Garvare and Johansson's conceptual model of stakeholder management (2010), customers are considered the foremost stakeholders, as they provide the revenue necessary to satisfy other stakeholders. It is made clear that being green yields green, for example a North American-based study on sustainability leadership shows a positive relationship between a firm's value, through its book value of equity and net income, and that firm's reputation for sustainable and ethical business practices (Lourenco et al., 2014). Using signal theory, the notion of a firm's ability to

convey positive information about itself to its stakeholders, as a theoretical framework, Alon and Vidovic (2015) found that there is a positive relationship between a firm's sustainability performance with its reputation, as well as a relative relationship between sustainability performance and assurance from a third party. Not only is it important for firms to have sustainable practices to meet customer demands of sustainability, but customers should be made aware of a firm's superior environmental performance, relative to its competitors.

Conversely, there is literature disputing the large relative influence of customers. Customers were defined as being powerless stakeholders in a qualitative study by Fineman and Clarke (1996), where consumers were seen as being ignorant of or apathetic to environmental issues, or prioritizing price and delivery over the greenness of a product. Similarly, in a study done by Pomering and Dolnicar (2009), it was found that consumer awareness of CSR initiatives by the Australian banking sector was low, despite that sector having engaged in CSR the most heavily of all industry sectors within a few years of the study.

Influence of Employees on Sustainability

Understanding the potential positive and negative impacts on organisations for including sustainability in business strategy provides a clearer picture on how motivations for the adoption of such strategies can arise, especially with respect to value chain participants. The significance that customers have is evident, as competitive advantage cannot be achieved without customers choosing a firm for products and services. On the other hand, the significance of employee influence in attaining competitive advantage using sustainability strategies remains unclear and

needs more attention (Chen et al., 2015). Within current literature on employee contribution to a firm's operations, the influence of employees within a sustainable organization has been extensively studied, especially with respect to employee perceptions of their organization with respect to its sustainable actions. Committed employees that see an importance to the work performed by their company will identify more with the company if the CSR initiatives of the company generally improve, including putting more effort into their work (Rodrigo and Arenas, 2008). A study done by Tilleman (2012) found that through linking environmental sustainability with greater affective and normative commitment, employees will be more committed to the firm overall. In addition, in a questionnaire administered by Indianapolis-based Walker Information Inc., a consulting firm that researches business ethics, 1,694 employees were surveyed on their opinions of their companies' ethics; 86% of committed respondents had favourable opinions, only 14% of committed respondents had unfavourable views being committed, and overall, 42% of respondents saying that the ethical integrity of a company would influence their choice of employers (Stodder, 1998). It is important to consider the stake of employees in the value chain of a firm, as Kuik et al. (2010) stress that without cooperation from a firm's labour force, it is not possible to achieve industry goals. In a conceptual study, Bulh et al. (2016) present propositions that high levels of environmentally sustainable innovation driven by employees are positively associated with higher levels of a firm's environmental performance, as well as competitive performance. What is also interesting to consider, is the link between a heightened business reputation due to the CSR initiatives for firms and their labor efficiency. Steubs and Sun (2010) argue that while there is no association between reputation and reduced labor costs for such firms a greater reputation of a firm's CSR initiatives does result in increased labour efficiency, likely due to improved pride among employees.

Holt and Ghobadian (2009) claim that the influence of employees of a company themselves is very low compared to the influence from the higher-up managers for manufacturing firms in the UK. However, a different story is seen for the Indian textile industry, where employees were found to be enablers for the incorporation of sustainability in business strategies for supply chains (Diabat et al., 2014). Aragón-Correa et al. (2013) have found that increased information sharing and collaboration with employees resulted in proactive environmental strategies in the international pharmaceutical industry. This positive relationship between employee engagement and development of environmental initiatives is supported by previous literature as well (Bunge et al., 1996; Daily and Huang, 2001; Rothenberg, 2003). Henry and Dietz (2012) describe the possible role of individual employees as being part of their organization's policy network, where they could have a formal or informal role in organizational decision making.

The significance of employees within the firm extends to top management as well, as shown in a study by Kumar and Rahman (2016) on when managers are faced with external pressure and the knowledge of the benefits of sustainability adoption; the result of that pressure and knowledge is the development of buyer-seller relationships, as well as selections of suppliers in the interest of economic, social and environmental sustainability performance of the supply chain.

In contrast to studies emphasizing employees as a key influencer of business strategy, there may be a managerial perception that employees may choose to not try to influence policy, rather prioritizing their job security instead; while younger employees in a workplace may be more

environmentally minded than their more seasoned colleagues, they are relatively uninfluential on influencing business strategy or policy (Fineman and Clarke, 1996). Additionally, Gelderman et al. (2017) have found that in regard to public sector procurement, it is the top managers that hold the most influence over the inclusion of sustainability in strategy, with budget owners having the final say in sustainability initiative implementation.

Influence of Suppliers on Sustainability

Most of the literature on sustainability and suppliers, or Sustainable Supply Chain Management (SSCM) is of a prescriptive nature, rather than analysing business strategy pertaining to the topic (Thomas et al., 2016). Hoejmose et al. (2012) argue that green supply chain management thrives in business-to-business settings when top management support is coupled with trust in the supplier. Touboulic et al. (2014) contribute to the literature on buy-seller relationships within a supply chain by investigating them through a power perspective. They note that the use of power used by the buyer on less powerful suppliers creates resistance, which can impede long-term sustainability performance. As well, the level of power shifts in favour of the supplier when the buying firm expresses necessity in accessing environmental resources for its supply chain. Walker et al. (2008) evaluated seven firms from different sectors in the United Kingdom, and found large firms driving relatively small supplier firms to be a trend. These findings provide interesting implications for evaluating the importance of suppliers as a value chain participant, particularly in how managers see the influence of their suppliers on the sustainability of a firm based on potential challenges such as these.

Despite the abundance of literature on SSCM practices, there is literature that contrasts the relevance of these practices for competitive advantage. Bowen (2000) has made the case that there is less visibility on business-to-business suppliers, compared to business-to-customer firms. Siegel (2009) argues that since suppliers are not as visible to end-consumers, there is less incentive for suppliers to move beyond mere compliance. It is also argued that industrial buyers prioritize product specifications over the emotional appeal of sustainability, and that the onus on proactive sustainability should be on the supplier side, as a means of establishing a reputation with buyer firms as being dependable. Previous literature argues that managers tend to buy from the lowest priced suppliers; however, in a study done on carrier selection, a specialized form of purchasing decision, Thomas et al. (2016) have shown that price is not as important a factor in both low and high cost situations, when carriers are perceived to be sustainable.

A framework on how sustainability is implemented within supply networks, from an innovation perspective, outlined two types of strategy employed by relatively influential firms when they are under pressure to have more sustainable supply networks; a defensive strategy would be chosen based on risk, and would include activities such as supplier evaluation, whereas an offensive strategy would include cooperation with suppliers through the development of new, sustainable products, which would be chosen when there is a high level of innovation within the supply network (Van Bommel, 2011). The general level of innovation for a firm tends to vary based on the type of industry it is in, as do many other features about firms, such as customer demands. Therefore, it is useful to also investigate distinctions of certain industry sectors.

Industry Differences

Generally, the influences and benefits of sustainability inclusion in business strategy have been studied intensively for particular industries and markets Fineman and Clarke (1996) suggest that managers from different industries may have different perceptions of particular stakeholders. In a more broad study of French firms, Delmas and Pekovic (2015) have found that it is firms employing a cost leadership strategy, are invested in research and development, and are vertically integrated are more likely to invest in resource efficiency during times of economic downturn. This indicates such firms, such as those in manufacturing, may prioritise customer demand less than cost savings as influencers for sustainably implementation. Zhu and Sarkis (2006) compare the drivers and practices of green supply chain management of the automotive sector, thermal powerplants, and the electronic/electrical industry. Due to the greening of the global automotive sector and efforts to establish relationships with overseas customers after China's entry in the World Trade Organisation, it was the automotive sector that faced the greatest pressures and drivers in this study. Thermal power plants faced pressure to be sustainable mainly from regulation rather than market pressure, and the electronic/electrical industry did not appear to be as concerned about environmental supply chain management. Additionally, the study shows higher levels of internal environmental management practices for thermal power plants and the electronic/electrical industry compared to the automotive industry.

It has been shown that companies developing green-products have higher levels of adoption of environmental strategic approaches than those who do not (Albino et al., 2009). It appears that the firms with the largest visible environmental impact face the greatest pressure to adopt sustainable practices, such as the automotive industry in China (Zhu and Sarkis, 2006). The level

of competition within a specific industry is shown to be an important factor for meeting consumer demands through sustainable practices, as Walker et al. (2008) have found that competitive advantage does not appear to be a driver for public sector firms, which are subject to restricted competition.

Although there is a wealth of literature on sustainability in business strategies, there is not much for service-based firms. While the strategy of extractive firms (resource-sector firms) is shaped through pressures from non-government organizations, community stakeholders, and legal regulations, the service sector (heath care, consulting, recreational, etc.) has continued to have an impact on the environment, though a less visible one (Rueda-Manzanares et al., 2008).

Geographical Differences

An overview of Global Reporting Initiative (GRI) adoption for different geographical regions is presented by González et al. (2018), where GRI is stated to be an indicator for sustainable business practices due to encouragement to adopt such practices (Alonso-Almeida et al., 2014) and an increase in visibility of a firm's activities (Bravo et al., 2012). In this study, Europe, especially southern Europe, are the leading continent in GRI adoption, followed closely by Asia, with North America lagging behind.

Compared to Western countries, there is relatively less literature on the influence from value chain participants on the inclusion of sustainability in business strategy for developing countries (Seuring and Gold, 2013). Researchers have only recently begun investigating this area (de Sousa Jabbour et al., 2014; Diabat et al., 2014; Ye et al., 2015). China, has been a focal point in

much of the literature, especially in the study of supply chain sustainability (Zhu and Sarkis, 2006). Chang et al. (2016) discuss the shift of leading Chinese construction companies to sustainability and have found that there are enabling conditions allowing for sustainable practices to be implemented, even if more proactive rather than reactive attitudes are yet to be adopted. The lack of legal regulation and government influences in developing countries relative to developed, Western ones would involve different implications for what influences sustainable business strategy (Mazurkiewicz, 2004).

A study on drivers of sustainability for purchasing and supplier managers in the United States identified vision and support from top management as the most important driver of SSCM; additionally, government regulations were another strong drivers, especially for resource intensive firms in the automotive and manufacturing sectors (Giunipero et al., 2012). Jean et al. (2016) conducted a study comparing transitional markets with high government intervention, such as China, and market economies with limited government intervention, such as Taiwan, regarding the impact of CSR in supply chains on customer satisfaction. It was shown that firms in transition economies are driven more by regulation and efficiency, while market economies are driven more by the competitive advantage of adopting sustainable practices. In this same study, it was found that there was no difference between transition and market economies regarding the link between CSR in supply chains and customer satisfaction. The disparity of results of the influence of regulation for market economies, like in North America, of Jean et al.'s (2016) findings to those of Giunipero et al. (2012) could be explained by the large representation of resource intensive industries in the latter's study.

European markets were compared by Miralles-Quiros et al. (2017), regarding if sustainability is valued by investors, as well as how the global financial crisis in 2008 had an impact. It was only in the German and UK markets that a positive and significant relationship was reported between CSR disclosure and share value, with Sweden reporting a negative and significant value. This result, as well as the result that changes in behaviour for each market changed during times of financial decline, emphasise the impact cultural difference may have on sustainability in business strategy, even between different European countries. Just as there are variances in how managers from specific countries approach sustainability, the drivers for CSR for Middle Eastern firms varies, depending on the respective countries' cultures; though, a general trend for local or regional firms was the drive to meet societal expectations and earn credibility from both local and international stakeholders (Al-Abdin et al., 2018).

Firm Size Differences

In addition to industry type and geographical location, the size of the firm is another important consideration. Prior research has shown that larger firms tend to have more formalized approaches to corporate social responsibility than small- and medium-sized enterprises. (Perrini et al., 2007). In addition, it is suggested that small - and medium-sized enterprises (SME's) may experience less pressure from external stakeholders to adopt sustainability (Holt and Ghobadian, 2009). However, this is challenged by Bondy and Starkey (2014) who highlighted clashes between the strategies of multinational corporations and issues pertaining to corporate social responsibility. Global strategies were found to be at odds with the spirit of local responsiveness embedded in socially responsible thinking in local and regional communities. In that study, the

development of policy set in corporate social responsibility was shaped more from senior management and some general employee input, rather than from community stakeholders.

The internal and external barriers to incorporating sustainability in business strategy for a selection of public and private sector firms have been compared, with cost being identified as a more significant internal barrier for SME's (Walker et al., 2008). Despite the numerous financial benefits cited in literature about sustainability adoption, Carter and Rogers (2008) provide support for this finding by their proposition that sustainable initiatives are expensive undertakings, which acts as a deterrent, especially when information on anticipated demand is lacking. A study by Cote et al. (2008) further supports this notion by this addressing the specific issues small- and medium-sized enterprises faced in adopting sustainable practices within their supply chains, especially pertaining to the initial time and financial costs of sustainability adoption. Externally, the implications of the geographical location come into play, as the barriers include lack of government support (Zutshi and Sohal, 2004) and cultural differences for multinational corporations (Blowfield, 2005). Suppliers have also been found to be potential barriers, in cases when suppliers have been unwilling to exchange information for fear that it might give competitors an advantage (Wycherley, 1999).

Research Approach

From the literature reviewed, a model has been devised, based on the relationships between each of the value chain participants (independent variables): the firm itself through the support activities of its administration (Corporate Social Responsibility Strategy), and the primary

activity participants (Customers, Employees, and Suppliers), and the level by which a firm acts more sustainably than its competition (dependent variable). These relationships are shown in Figure 2. From that model a series of hypotheses can be developed and tested.

Firstly, the initiative of a firm to operate with more sustainable business ethics and processes than its competitions drives the integration of CSR into its business strategy and therefore:

- H1: The greater the level by which a firm integrates corporate social responsibility into an organization's business strategy the greater the likelihood that firm operates with more sustainable business ethics and processes than their competitors

The CSR strategy of a firm influences the relationship between the focal firm and its suppliers and therefore:

- H2: The greater the level by which a firm requires its suppliers to have sustainable business practices the greater the likelihood that firm operates with more sustainable business ethics and processes than their competitors

As per the literature, employees can influence the strategic direction of the firm and therefore:

- H3: The greater the level by which the employees of require a firm to maintain a sustainability policy the greater the likelihood that firm operates with more sustainable business ethics and processes than their competitors

And, as there cannot be a profit margin without customers selecting to buy products or services from a firm, it is not surprising that the literature shows that customer's preference for

sustainable products or services could cause a firm to integrate CSR into its business strategy and therefore:

- H4: The greater the level by which customers require a firm to maintain a sustainability policy the greater the likelihood that firm operates with more sustainable business ethics and processes than their competitors.

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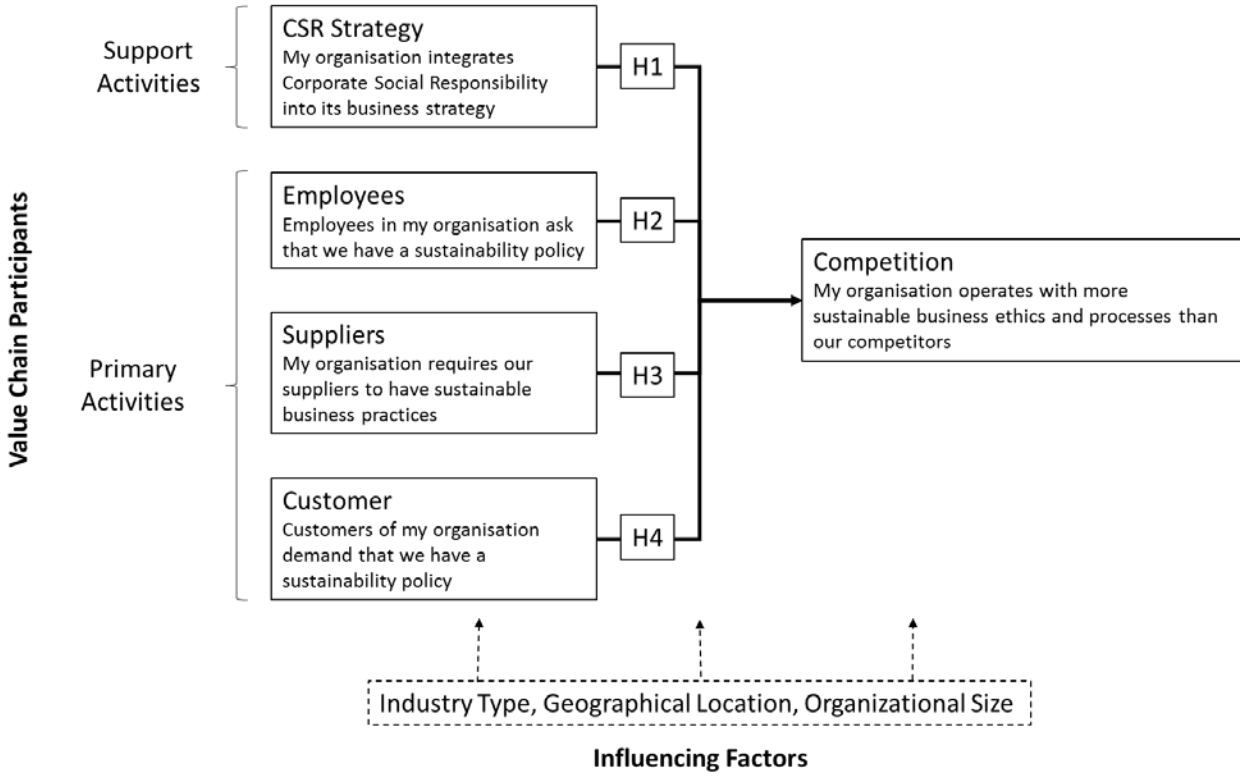


Figure 2 – Research Model

Literature Review Summary

There is a wealth of literature on what influences firms to strive to be sustainable from many different perspectives, especially in terms of influential stakeholders. In addition, the literature points out that the integration of sustainability into the business strategy of the firm can be influenced by the type of industry a firm operates in, the geographical location of its operations, and the size of the organization. Accordingly, the influencing factors in the model (Figure 2) are deemed to be controlling variables and will be treated as such in the statistical analysis.

. While literature provides an abundance of evidence of influence from value chain participants, invaluable managerial insights can be provided by addressing the relative importance of these particular influences.. How the relative contributions to the model each value chain participant is investigated is discussed in Chapter 3 of this study. Finally, if all of the value chain participants contribute in making a firm more sustainable than their competitors then a statistical measure of the relative contribution to the combination of all participants is of interest

Chapter 3: Methodology

A deductive research strategy was used to investigate the research question through the testing of the hypotheses proposed in the introduction of this literature review. The interpretivist research paradigm provided the background of assumptions that the study will be based on, as the perceptions of participants will be measured. A cautious realist ontological assumption was adopted, as well as an epistemological assumption of falsification (Blaikie, 2009). With the assumption of falsification, the initial theory of managers seeing sustainability as a competitive advantage, especially in regard to value chain participant relationships, may be proven false when tested in this study.

Data Collection

Secondary data were used from a questionnaire, conducted in semi-natural settings. The data were collected in August 2016 from 2,450 organizations through a one-off survey administrated by Eco-Business, where an informant reported on his or her perception of the organisation's strategy and competitive advantage. Eco-Business is a large media company, with thousands of subscribers worldwide, that serves the clean technology, smart cities, responsible business and sustainable development community, principally for the Asia Pacific region (Eco-Business, 2016). In addition to media services, Eco-Business provides research and consulting services to businesses, providing a valuable channel through which to administer a questionnaire on business strategy. Through this channel of data selection, the sample consists of organizations that subscribe to Eco-Business globally, including a diversity of industry sectors and continental regions.

The data was provided to me, through my Thesis Supervisor, Dr. Philip Walsh, in September 2016 in response to a request to Tim Hill, Research Director at Eco-business. Being subscribers to Eco-business, the organisations surveyed most likely consider themselves leaders in environmental sustainability or have a great vested interest in sustainable business practices. There subscribers are from a variety of global sectors; Healthcare, Education, Non-Profit, Public Sector, Consumer Packaged Goods, Transportation, Manufacturing, Services, Extractive Sector, Agriculture, Construction, Real Estate, and other sectors. Their organizations operate as Local or Regional, Multinational, or in other ways with subscriber's holding positions as Senior Management, Middle Management, or other roles.

Four categorical concepts and five ordinal concepts were measured:

- Industry type
- Organisation type based on size
- Job title of participant
- Country organisation is based in
- Perception of Corporate Social Responsibility inclusion in the business strategy of firm
- Perceived demand from customers that organisation has a sustainability policy
- Perceived demand from internal employees that organisation has a sustainability policy
- Perceived demand that organisation has of its suppliers to have sustainable business practices
- Perception of organisation's sustainable business ethics and processes relative to those of competitors

Responses for the questionnaire were pre-coded, with a few exceptions in the measurement of categorical concepts. A 7-point Likert scale was used for measurement and include options of: ‘Strongly agree’, ‘Agree’, ‘Somewhat agree’, ‘Neither agree nor disagree’, ‘Somewhat disagree’, ‘Disagree’, and ‘Strongly disagree’ for optimal reliability (Green and Rao, 1970).

Participants in the survey were asked the following descriptive questions to categorize responses:

- What industry best matches your sector (from the list of categories specified above)?
- Is your organisation a multinational corporation, local or regional corporation, or other?
- What is your job title?
- Which country are you based in?

Inferential statements were presented to respondents and they were asked to provide a measure for testing the hypotheses. They are:

- My organisation is a recognized global leader in sustainability issues
- My organisation integrates Corporate Social Responsibility into its business strategy
- Customers of my organisation demand that we have a sustainability policy
- Employees in my organisation ask that we have a sustainability policy
- My organisation requires our suppliers to have sustainable business practices
- My organisation operates with more sustainable business ethics and processes than our competitors

Data Analysis

Data were analysed using IBM Statistical Package for Social Science (SPSS) through bivariate descriptive methods to establish the degree to which perceived competitive advantage and variables of value chain participant significance co-vary. Questionnaire responses with responses for “Organisation Type” and “Role” as “Other” were eliminated, as were responses from the regions of Africa and South America, due to low response rates from those regions.

As explained in the review of prior research, there is no one adequate generalization in regards to issues of what influences business strategy or competitive advantage due to large variances in sustainable business strategy. Hence, to further investigate this, factors such as organizational size, industry sector, , and representative management level will also be introduced as independent variables.

Limitations

One limitation will be the fact that data will be based on the perceptions of those surveyed, rather than the performance of the firm in incorporating sustainability into its strategy. Without in-depth records or objective measurements of the firm’s actual performance, it is impossible to verify the accuracy of the representative’s perception of competitive advantage. However, Judge and Douglas (1998) have defended the use of managerial perceptions through a study on the impact of incorporation of environmental elements on performance. Hence, the focus of the study will be more on the relative importance of each value chain participant, which has been successfully done in related studies (González-Benito and González-Benito, 2006; Walsh and Dodds, 2017).

This study's use of single respondents from each organization may also be a limitation. Bowman and Ambrosini (1997) warn against the use of single respondents in strategy research as being potentially unreliable, due to the wide variety in responses between senior executives. However, due to the large number of responses, these variances are expected to be insignificant for this study, compared to a study relying on a much more limited number of firms. The most reliable data are assumed to be from responses from senior managers, or CEO's, as it was found that the highest levels of strategic awareness was found at the highest levels of the management hierarchy for organizations (Hambrick, 1981). Shortell and Zajac (1990) further support the notion of senior management as having a more holistic and deeper understanding of an organization's strategy. However, the level of management is included as a control variable to allow for the identification of effect.

One limitation of the survey design is lack identification of specific competitors, customers, and suppliers for each respondent; hence, the impact of where a firm falls within a larger market or supply chain cannot be examined further. Furthermore, the inclusion of geographical region as an influencing factor in the model is limited by the need to generalize each major region, rather than taking culture differences within regions into account. As discussed in the literature review, there were contrasting results for countries within the same continents, such as Miralles-Quiros et al.'s (2017) study on European markets. Therefore, this will be treated as generalizations of the entire regions, as opposed to investigations of each distinct nation state's corporate attitudes. The applies to distinctions of industry sectors as well, especially for sectors such as Services where the types of services rendered are not included in the analysis.

Chapter 4: Results and Discussion

A total of 1416 usable samples were obtained for this study. Tables 1, 2, 3, and 4 depict the breakdown by number of industry type, organisation type, role of respondent, and geographical region. Due to EcoBusiness being situated in Singapore, the majority of the survey responses are from the Middle East and Asian region. The industry with the highest representation, at 31.1% of the total sample, is the Services sector, a sector that has been subject to less public scrutiny regarding sustainable practices according to Rueda-Manzanares et al. (2008). As a fairly resource intensive sector, the environmentally minded Construction, Real Estate firms will be interesting to study to contrast with previous literature that suggest sustainability is not seen as a competitive advantage (Ye et al., 2015).

Table 1 – Industry Sector Distribution

Industry Sector	Category	Number in Sample	%
Healthcare, Education, Non-Profit, Public Sector	**1**	186	13.1%
Consumer Packaged Goods	**2**	66	4.7%
Transportation	**3**	41	2.9%
Manufacturing	**4**	199	14.1%
Services	**5**	441	31.1%
Extractive Sector, Agriculture	**6**	288	20.3%
Construction, Real Estate	**7**	195	13.8%
Total		1416	100%

Table 2 – Firm Size Distribution

Organization	Category	Number in Sample	%
Local or Regional	**1**	774	54.7%
Multinational	**2**	642	45.3%
Total		1416	100%

Table 3 – Respondent Role Distribution

Role	Category	Number in Sample	%
Senior Management	**1**	888	62.6%
Middle Management	**2**	530	37.4%
Total		1416	100%

Table 4 – Regional Distribution

Region	Category	Number in Sample	%
North America	**1**	150	10.6%
Europe	**2**	176	12.4%
Middle East and Asia	**3**	829	58.6%
Australia NZ-Pacific	**4**	261	18.4%
		1416	100%

Tables 5 depicts the means and standard deviations of all the variables in this study. Due to all the responders of this survey being already invested in sustainability as Eco-Business subscribers, the mean values for the inferential variables related to CSR Strategy and Competition are fairly high.

Nonparametric correlations were used to provide initial information and determine statistically significant relationships for the global sample, as well as sub-groups in this study. Figures over 0.5 indicate a strong correlation, figures between 0.3 and 0.5 indicate a moderate correlation, and figures under 0.3 indicate a weak correlation.

Table 5 - Descriptive Statistics

	Mean	Std. Deviation	N
Competition	5.61	1.309	1416
Industry	4.62	1.840	1416
Organization	1.45	0.498	1416
Role	1.37	0.484	1416
Region	2.85	0.842	1416
CSR Strategy	5.81	1.274	1416
Customer Driven	4.94	1.582	1416
Employee Driven	5.00	1.516	1416
Suppliers	5.05	1.550	1416

The relationship with the highest correlation is that of Customer Driven (customers require a sustainability policy) and Employee Driven (employees require a sustainability policy) (r= 0.661, ρ=0.000), indicating that customers may be influencing lower level employees, who in turn demand it of management, meaning that customers are both directly and indirectly demanding sustainability to a firm's management. Additionally, the role of the stigma for working for a firm perceived as unsustainable could also be a factor at work; as employees are members of their local communities, they may have the same sustainability requirements of their firm

Other relationships with high correlations are those of Employees and Suppliers (r=0.589, ρ=0.000), Suppliers and Competition (r=0.574, ρ=0.000), CSR and Competition (r=0.567, ρ=0.000), and CSR and Suppliers (r=0.547, ρ=0.000). The relationships of Competition and Employees (r=0.479, ρ=0.000) and CSR and Employees (r=0.474, ρ=0.000) are moderately strong. The strong correlations between the demand that Suppliers maintain sustainable practices and the firm practices more sustainably than the Competition and the firm's inclusion of CSR in

Global Correlation Analysis

Table 6 – Statistically Significant Global Correlations

		Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Industry	Correlation Coefficient	-.090**	-.071**	.072**		-.068*	-.069**		-.074**
	Sig. (2-tailed)	0.001	0.008	0.007		0.010	0.009		0.005
Organization	Correlation Coefficient		.166**	-.144**	.110**	.156**	.082**		.163**
	Sig. (2-tailed)		0.000	0.000	0.000	0.000	0.002		0.000
Role	Correlation Coefficient				-.091**			-.143**	
	Sig. (2-tailed)				0.001			0.000	
Region	Correlation Coefficient				-.059*	-.110**	-.114**		-.079**
	Sig. (2-tailed)				0.027	0.000	0.000		0.003
CSR	Correlation Coefficient					.402**	.474**	.576**	.547**
	Sig. (2-tailed)					0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient						.661**	.382**	.556**
	Sig. (2-tailed)						0.000	0.000	0.000
Employee Driven	Correlation Coefficient							.479**	.589**
	Sig. (2-tailed)							0.000	0.000
Competition	Correlation Coefficient								.574**
	Sig. (2-tailed)								0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 7: Case processing summary for inferential variables

Variable	Value	Response	N Value	Marginal percentage
CSR	1	Strongly disagree	9	0.6
	2	Disagree	31	2.2
	3	Somewhat disagree	58	4.1
	4	Neither agree nor disagree	96	6.8
	5	Somewhat agree	229	16.2
	6	Agree	501	35.4
	7	Strongly Agree	492	34.7
Customer driven	1	Strongly disagree	34	2.4
	2	Disagree	128	9.0
	3	Somewhat disagree	85	6.0
	4	Neither agree nor disagree	228	16.1
	5	Somewhat agree	325	23.0
	6	Agree	394	27.8
	7	Strongly Agree	222	15.7
Employee Driven	1	Strongly disagree	30	2.1
	2	Disagree	104	7.3
	3	Somewhat disagree	87	6.1
	4	Neither agree nor disagree	232	16.4
	5	Somewhat agree	341	24.1
	6	Agree	410	29.0
	7	Strongly Agree	212	15.0
Suppliers	1	Strongly disagree	32	2.3
	2	Disagree	101	7.1
	3	Somewhat disagree	91	6.4
	4	Neither agree nor disagree	218	15.4
	5	Somewhat agree	312	22.0
	6	Agree	416	29.4
	7	Strongly Agree	246	17.4
Competition	1	Strongly disagree	8	0.6
	2	Disagree	34	2.4
	3	Somewhat disagree	39	2.8
	4	Neither agree nor disagree	219	15.5
	5	Somewhat agree	248	17.5
	6	Agree	445	31.4
	7	Strongly Agree	423	29.9

their business strategy emphasises the role that Suppliers have on the firm's sustainable practices. The strong correlations that were found between the demand of Employees for a firm to have a sustainability policy and that firm's practices are more sustainable than the Competition and the firm's inclusion of CSR in their business strategy highlights either the influence internal employees have on the sustainability of a firm, or the influence of a corporate strategy of sustainability on their employees. The strong correlation between the demand of Employees for a frim to have a sustainability policy and the firm's requirement that their Suppliers operate sustainably could indicate the role employees involved with procurement have on selection and monitoring of their suppliers.

Relationships with moderate correlations include Customer and CSR ($r=0.402$, $\rho=0.000$), as well as Customer Driven and Competition ($r=0.382$, $\rho=0.000$). While not a strong relationship, this suggests that customer demand for sustainability may correspond to a firm implementing CSR strategies and more sustainable practices. From the higher correlation between the demand by Customer Driven and the inclusion of CSR in a firm's business strategy as compared to the firm's ability to operate more sustainably than their Competition suggests that customer influence has a stronger association with the implementation of CSR strategy than it does with the importance to the firm of operating more sustainably than their competitors. Overall, the importance of the firm's ability to operate more sustainably than their competitors does have fairly high correlations with each of the value chain variables, which are explored further with multiple regression analysis.

Global Regression Analysis

In evaluating the relative influence of value chain participants on the sustainability of firms, stepwise multiple linear regression was conducted. Rather than ordinal regression, multiple regression was conducted with the assumption that the dependent variable can be treated as continuous, due to the use of a 7-point Likert scale. With stepwise regression, an iterative process occurs where the independent variable that predicts the highest amount of variance in the dependent variable (Competition) is identified, and then subsequent independent variables are added until the combination of independent variables reach an optimal predictive capability. As well as normally distributed data, a requirement for stepwise linear regression is that no collinearity exists between independent variables; according to the collinearity statistics from the analysis, there is no problem with multicollinearity. The VIF varies from 1.000 to 1.953, well below 10, the threshold for issues with multicollinearity. Additionally, the tolerances are all below 1.0 (Table 8). The Durbin-Watson statistic is 2.050, falling within the acceptable range of 1.5 to 2.5 (Table 9). This confirms that there is no autocorrelation in the sample, validating the model.

From the initial regression analysis (Table 9) of influencers on a firm's perceived sustainability superiority relative to its competitors, as one might expect, the integration of a CSR Strategy into a firm's business strategy is the largest contributor to variance in the model (R^2=0.362). The predictive capacity of the model is further enhanced by the requirement for Suppliers to undertake sustainable business practices (R^2 change=0.085) and when Employees ask for there to be a sustainability policy (R^2 change=0.009). The control variables that effect this predictive model include the type of Role in the firm (R^2 change=0.013) and the Region the firm operates in (R^2 change=0.002) although their contributions are relatively minor. These results can be

expected, according to the literature, as it would naturally follow that an organisation that incorporates CSR strategies would operate with more sustainable business ethics and processes than its competitors (Parisi, 2012; Kuo et al., 2017). This also supports Galpin et al.'s (2015) proposition that an organizational culture embedded with sustainability is based on the integration of sustainability in the firm's mission, values, and strategy. What was interesting was the influence Role Type had, as this suggests that the predictive model is improved, albeit slightly, the more senior the level of management. Combined with the weak, but significant negative correlation between Role Type and outperforming the Competition in implementing sustainable business practices ($r=-0.143$, $p=0.000$) these results suggests that senior managers are more likely to be optimistic about the level of sustainable practices of their firm relative to competitor's than their middle management counterparts may be. This may be due to greater involvement on the part of senior managers in strategy development and evaluation within the firm (Gelderman et al., 2017).

Table 8: Global Model Coefficient Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	2.017	0.130		15.543	0.000	1.762	2.272					
	CSR	0.618	0.022	0.602	28.324	0.000	0.575	0.661	0.602	0.602	0.602	1.000	1.000
2	(Constant)	1.733	0.122		14.157	0.000	1.493	1.973					
	CSR	0.404	0.025	0.393	16.146	0.000	0.355	0.453	0.602	0.395	0.319	0.661	1.513
	Suppliers	0.303	0.021	0.358	14.721	0.000	0.262	0.343	0.587	0.365	0.291	0.661	1.513
3	(Constant)	2.206	0.147		15.047	0.000	1.919	2.494					
	CSR	0.387	0.025	0.377	15.537	0.000	0.338	0.436	0.602	0.382	0.304	0.652	1.535
	Suppliers	0.311	0.020	0.368	15.263	0.000	0.271	0.351	0.587	0.376	0.299	0.657	1.521
	Role	-0.305	0.053	-0.113	-5.722	0.000	-0.409	-0.200	-0.146	-0.151	-0.112	0.986	1.014
4	(Constant)	2.088	0.147		14.157	0.000	1.799	2.377					
	CSR	0.361	0.025	0.352	14.309	0.000	0.312	0.411	0.602	0.356	0.278	0.624	1.604
	Suppliers	0.259	0.023	0.306	11.287	0.000	0.214	0.304	0.587	0.288	0.219	0.512	1.953
	Role	-0.305	0.053	-0.113	-5.770	0.000	-0.409	-0.201	-0.146	-0.152	-0.112	0.986	1.014
	Employee Driven	0.107	0.022	0.123	4.874	0.000	0.064	0.149	0.489	0.129	0.095	0.588	1.702
5	(Constant)	1.890	0.172		10.999	0.000	1.553	2.227					
	CSR	0.361	0.025	0.351	14.312	0.000	0.312	0.410	0.602	0.356	0.277	0.624	1.604
	Suppliers	0.258	0.023	0.305	11.260	0.000	0.213	0.303	0.587	0.287	0.218	0.512	1.954
	Role	-0.314	0.053	-0.116	-5.934	0.000	-0.418	-0.210	-0.146	-0.156	-0.115	0.980	1.020
	Employee Driven	0.111	0.022	0.129	5.079	0.000	0.068	0.154	0.489	0.134	0.098	0.582	1.719
	Region	0.068	0.030	0.044	2.236	0.026	0.008	0.128	-0.011	0.059	0.043	0.982	1.019

a. Dependent Variable: Competition

Surprisingly, the type of organisation was not a relatively strong predictor, as larger firms with more visibility in the public eye would be assumed to feel more pressure to be sustainable. Through the notion of visibility regarding sustainability discussed by Bowen (2000), larger, multinational firms would encounter more pressure to being sustainable, compared to smaller, local firms. However, organisation was not included in the model summary during the analysis. Due to the resources that enable multinational firms to gain status as global leaders in sustainability and the likelihood that the activities of multinational firms would be scrutinized more heavily by the public, it would be expected that there will be more pressure to be sustainable thus supporting a stronger association of multinational companies with whether a firm is more competitive in terms of sustainable business practices, as argued by Holt and Ghobadian (2009) and Perrini et al. (2007).

Table 9: Global Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.602[a]	0.362	0.362	1.046	0.362	802.233	1	1414	0.000	
2	.668[b]	0.447	0.446	0.974	0.085	216.698	1	1413	0.000	
3	.678[c]	0.459	0.458	0.963	0.013	32.740	1	1412	0.000	
4	.684[d]	0.468	0.467	0.956	0.009	23.759	1	1411	0.000	
5	.686[e]	0.470	0.468	0.954	0.002	5.000	1	1410	0.026	2.050

a. Predictors: (Constant), CSR

b. Predictors: (Constant), CSR, Suppliers

c. Predictors: (Constant), CSR, Suppliers, Role

d. Predictors: (Constant), CSR, Suppliers, Role, Employee Driven

e. Predictors: (Constant), CSR, Suppliers, Role, Employee Driven, Region

f. Dependent Variable: Competition

In order to evaluate just the primary activity components of this study the CSR as part of the business strategy variable was emitted from the model. The result (Table 11) was that among the primary activities identified in this study only the combination of Suppliers and Employees (Customers did not add to the predictive capacity of the model) were statistically significant predictors of variance in the level of sustainable business practices as compared to a firm's competition with values of R^2=0.345 and R^2 change=0.025, respectively. The cumulative prediction of variance caused by these primary activities was fairly strong (R^2=0.370) and when the CSR as part of the business strategy variable is added back into the model (Table 9) the cumulative influence predicts almost half of the variance (R^2=0.456).

Table 10: Cumulative Value Chain Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.676[a]	0.456	0.455	0.966	0.456	296.204	4	1411	0.000

a. Predictors: (Constant), Suppliers, CSR, Customer Driven, Employee Driven

Table 11: Cumulative Primary Activities Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.609[a]	0.370	0.369	1.040	0.370	276.857	3	1412	0.000

a. Predictors: (Constant), Suppliers, Customer Driven, Employee Driven

A regression analysis of the influence on variance of the dependent variable, outperforming the Competition in implementing sustainable business practices, by the predictor Customer Driven for a sustainable business policy was conducted to isolate customer influence (Table 12). The

variance caused solely by Customer Driven on a firm's sustainability relative to its competitors was a relatively low (R^2=0.160). Similarly, the variance caused solely by Employee influence (Table 13) is low relative to CSR Strategy (R^2=0.240), but stronger than Customer Driven. While there is a wealth of recent literature attributing customer demand as a strong influence on a firm to be sustainable (Garvare and Johansson, 2010; Lourenco et al., 2014; Alon and Vidovic, 2015), there is also literature refuting the relatively strong influence customers may have, such as that from Fineman and Clarke (1996). As it is more of the recent literature, such as that cited above, suggesting a stronger customer influence, the results in this study are surprising.

Table 12: Customer Driven Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.400[a]	0.160	0.160	1.200	0.160	269.710	1	1414	0.000

a. Predictors: (Constant), Customer Driven

Table 13: Employee Driven Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.489[a]	0.240	0.239	1.142	0.240	445.367	1	1414	0.000

a. Predictors: (Constant), Employee Driven

One possible explanation to this could be the relative lack of interaction managers surveyed in this study have with customers, compared to lower level employees. Additionally, it may be the firm's in this study were already taking the initiative to be sustainable, rather than customers demanding it prior to implementation of sustainable practices. Shrivastava (1995) discusses the role that corporations have on populations, especially in developing countries where concern for

environmental sustainability is not a priority. The fact that customers tend to have higher influence on firms in countries that generally have more environmentally sustainable firms suggests a two-way relationship of promoting environmental sustainability, as these firms are using their sustainable practices as a selling point. This is confirmed by the weak, but moderately significant relationship between Customer and Region ($r=-0.110$, $\rho=0.000$) in Table 6, suggesting that more Western regions, such as North America and Europe, have customers with a generally higher demand for sustainability from firms, in accordance with the findings of Jean et al. (2016) of market-based economies in these regions being driven by attainment of customer approval and competitive advantage, rather than resource efficiency.

This two-way relationship also extends to the employees who decide to work for firms already invested in sustainability, such as those in this study. As Rodrigo and Arenas (2008) found, employees see more importance to their work, resulting in more effort on their part, and for sustainability minded firms, this suggests employee engagement in further improving sustainable practices.

The influence of solely primary activities on CSR strategy implementation is also evaluated (Table 14). With CSR as the dependent variable, Suppliers is a relatively strong predictor ($R^2=0.339$). Employees were significantly weaker in comparison ($R^2=0.029$). A firm's demand of its suppliers to be sustainable is a strong predictor of both CSR strategy implementation and the firm operating with more sustainable and ethical practices then its competitors. There is an abundance of prescriptive literature on how firms can manage their suppliers to ensure more sustainable practices are undertaken.

Table 14: Primary Activities on CSR

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.582[a]	0.339	0.339	1.036	0.339	725.718	1	1414	0.000
2	.607[b]	0.368	0.367	1.013	0.029	64.455	1	1413	0.000

a. Predictors: (Constant), Suppliers

b. Predictors: (Constant), Suppliers, Employee Driven

While older literature suggests that sustainable supply chain management is not of major concern to firms due to low visibility of suppliers, such as research by Bowen (2000) and Siegel (2009), the more recent literature shows that a firm's growing concern over the sustainability of its suppliers is a growing trend (Hoejmose et al., 2012; Thomas et al., 2016).

The perception of a firm operating with more sustainable and ethical practices than its competitors and the influence that the firm's requirement of its suppliers to have sustainable business practices has on that perception illustrates the importance of sustainable supply chain management in business strategy. Previous literature has shown that B2B suppliers are overlooked in terms of environmental visibility by the general public compared to Business-to-Customer (B2C) firms, but the influence of the demand on suppliers to be sustainable has on how a firm perceives its role as a recognized global leader in sustainability suggests there may have been changes in how firms see the impact suppliers have on sustainability.

Geographical Regional Differences

Descriptive statistics for each region are provided in Tables 15, 16, 17, 18. To provide an initial perspective on the regional differences, the average values for each Likert-scale variable was mapped out, according to regional category, as shown in Figure 4. While the regions are fairly homogenous in averages, relatively high average values of Employee Driven sustainable practices for North America and Europe are observed, as well as relatively low values of Suppliers and Customer Driven for the Australian NZ-Pacific region.

Table 15 - Descriptive Statistics – Region 1 – North America

	Mean	Std. Deviation	N
Competition	5.65	1.346	150
Industry	4.41	1.861	150
Organization	1.49	0.501	150
Role	1.17	0.380	150
CSR Strategy	5.93	1.235	150
Customer Driven	5.16	1.563	150
Employee Driven	5.33	1.504	150
Suppliers	4.87	1.564	150

Table 16 - Descriptive Statistics – Region 2 – Europe

	Mean	Std. Deviation	N
Competition	5.60	1.234	176
Industry	4.36	1.793	176
Organization	1.60	0.492	176
Role	1.43	0.496	176
CSR Strategy	5.93	1.222	176
Customer Driven	5.34	1.503	176
Employee Driven	5.41	1.411	176
Suppliers	5.52	1.466	176

Table 17 - Descriptive Statistics – Region 3 – Middle East and Asia

	Mean	Std. Deviation	N
Competition	5.61	1.303	829
Industry	4.67	1.796	829
Organization	1.46	0.499	829
Role	1.41	0.491	829
CSR Strategy	5.77	1.303	829
Customer Driven	4.88	1.597	829
Employee Driven	4.88	1.502	829
Suppliers	5.06	1.553	829

Table 18 - Descriptive Statistics – Region 4 – Australia NZ-Pacific

	Mean	Std. Deviation	N
Competition	5.61	1.303	829
Industry	4.67	1.796	829
Organization	1.46	0.499	829
Role	1.41	0.491	829
CSR Strategy	5.77	1.303	829
Customer Driven	4.88	1.597	829
Employee Driven	4.88	1.502	829
Suppliers	5.06	1.553	829

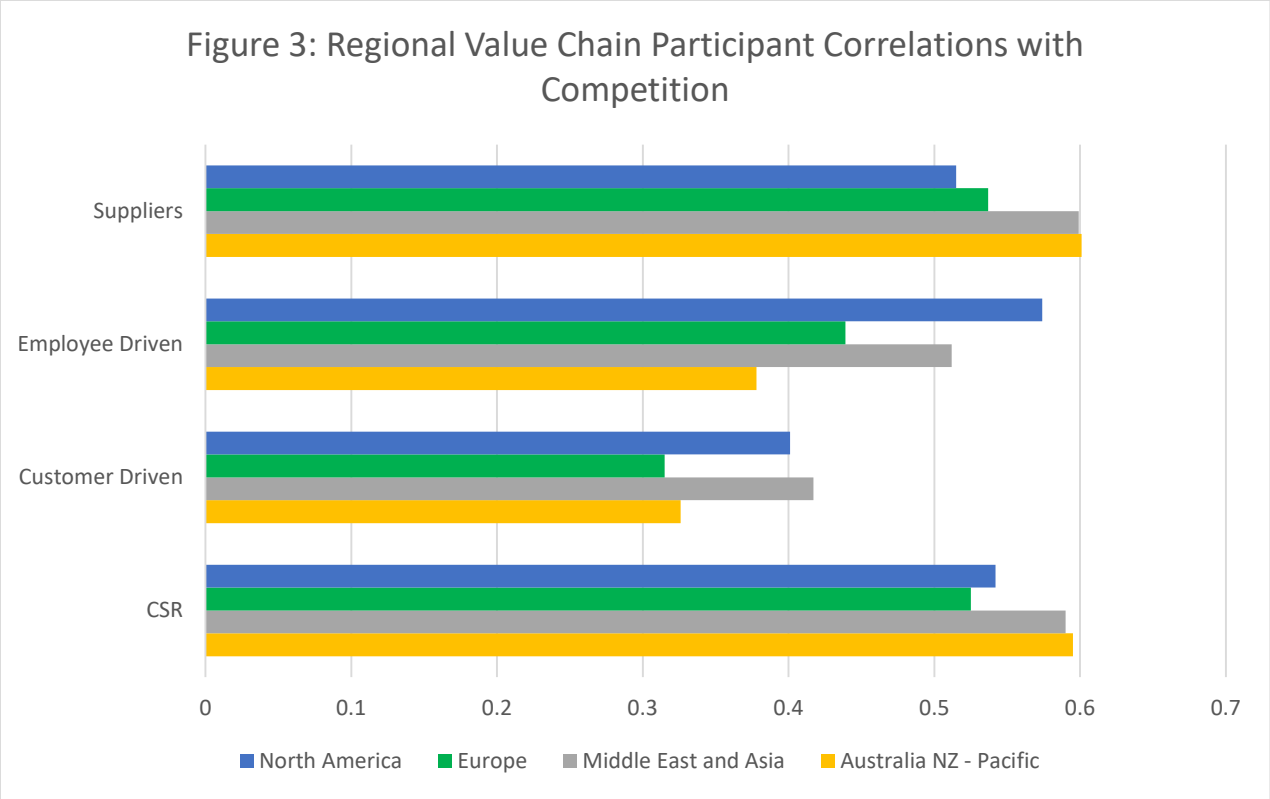
Spearman correlations were done for each region, to identify significant and notable correlations. A graphical representation is presented in Figure 3. For North America, the relationship with the highest correlation, like for the global sample, is that of Customer Driven and Employee Driven ($r= 0.639$, $\rho=0.000$). Other relationships with high correlations are those of Competition and Employee Driven ($r=0.574$, $\rho=0.000$), CSR and Competition ($r=0.542$, $\rho=0.000$), Employee Driven and Suppliers ($r=0.538$, $\rho=0.000$), and Customer Driven and Suppliers ($r=0.519$, $\rho=0.000$), Competition and Suppliers ($r=0.515$, $\rho=0.000$), and CSR and Suppliers ($r=0.512$, $\rho=0.000$). The relationship of CSR and Employee Driven ($r=0.496$, $\rho=0.000$) is moderately

strong. Competition and Customer Driven (r=0.401, ρ=0.000), and CSR and Customers (r=0.375, ρ=0.000) have moderate correlations. The relatively high strength of the correlation between Competition and Employee Driven stands out, especially as the correlation value between Competition and Employee is above r=0.500 for only North America out of all regions. The strong correlation of CSR and Competition, as well as the strong correlations Suppliers has with several other variables, corroborates the study of Giunipero et al. (2012), where the most important driver of SSCM is vision and support from top management. With both direction and empowerment for sustainability implementation, a two-way relationship for it can be fostered.

For Europe, the relationship with the highest correlation is that of Customer Driven and Employee Driven (r= 0.607, ρ=0.000). Other relationships with high correlations are those of CSR and Suppliers (r=0.597, ρ=0.000), Employee Driven and Suppliers (r=0.589, ρ=0.000), CSR and Employee Driven (r=0.543, ρ=0.000), Competition and Suppliers (0.537, ρ=0.000), CSR and Competition (0.525, ρ=0.000), and Customer Driven and Suppliers (0.525, ρ=0.000). Relationships with moderate correlations include Customer Driven and CSR (r=0.447, ρ=0.000), Employees and Competition (r=0.439, ρ=0.000) and Customer Driven and Competition (r=0.315, ρ=0.000). It is interesting to note that Suppliers correlates highly with several other variables, including CSR, Employee Driven, Competition, and Customer Driven. As a facet of González et al. (2018)'s study on GRI adoption was the impact inter-enterprise relationships, it is no surprise to see a strong correlation several variables have with Suppliers, given the findings of European firms influencing other firms, within and outside of Europe, to adopt GRI.

For Middle East and Asia, the relationship with the highest correlation is that of Customer Driven and Employee Driven (r= 0.684, ρ=0.000). Other relationships with high correlations are those of Employees and Suppliers (r=0.620, ρ=0.000), Competition and Suppliers (r=0.599, ρ=0.000), CSR and Competition (0.590, ρ=0.000), and Customer Driven and Suppliers (r=0.564, ρ=0.000). Customer Driven and Competition (r=0.417, ρ=0.000), and Customer Driven and CSR (r=0.411, ρ=0.000). Similar to the European region, the very high correlations that Suppliers has with Employees and Competition is notable. Relationships with suppliers may play an important role in the Middle Eastern countries especially, due to the efforts of local firms in the Middle East to secure legitimacy among regional stakeholders (Al-Abdin et al., 2018). Relationships with moderate correlations include Customer Driven and Competition (r=0.417, ρ=0.000), and Customer Driven and CSR (r=0.411, ρ=0.000).

For Australia, New Zealand-Pacific, the relationship with the highest correlation is that of Customer Driven and Employee Driven (r= 0.605, ρ=0.000). Other relationships with high correlations are those of Competition and Suppliers (r=0.601, ρ=0.000), CSR and Competition (0.595, ρ=0.000), CSR and Suppliers (r=0.553, ρ=0.000), Customer Driven and Suppliers (r=0.527, ρ=0.000) and Employee Driven and Suppliers (r=0.515, ρ=0.000). Relationships with moderate correlations include CSR and Employee Driven (r=0.430, ρ=0.000), Employees and Competition (r=0.378, ρ=0.000), Customer Driven and CSR (0.336, ρ=0.000) and Customer Driven and Competition (r=0.326, ρ=0.000). For this region, the high correlations CSR has with Competition and Suppliers provides insight on the role of a top-down approach on business strategy for firms in this region.



To control for the influence of regional differences, multiple regression analyses are conducted separately for each region, as with the sample as a whole. The North American model (Table 19) is distinct in that the predictor responsible for the greatest variance in sustainability relative to competitors in the model is Employee Driven (R^2=0.368), despite being a relatively weak predictor of variance in the global model. CSR is the second largest contributor to the model (R^2=0.074). This suggests that the sustainability of firms in North America relative to their competitors is most heavily influenced by internal employees, indicating that employees may have a greater influence within firms in this region.

Table 19 - Statistically Significant Correlations (Spearman's rho N=150) – Region 1 – North America

		Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Industry	Correlation Coefficient		-.222**					
	Sig. (2-tailed)		0.006					
Organization	Correlation Coefficient			-.165*			-.177*	
	Sig. (2-tailed)			0.043			0.030	
Role	Correlation Coefficient			-.172*			-.261**	
	Sig. (2-tailed)			0.036			0.001	
CSR	Correlation Coefficient				.375**	.496**	.542**	.512**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.639**	.401**	.519**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.574**	.538**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.515**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 20 - Statistically Significant Correlations (Spearman's rho N=176) – Region 2 – Europe

		Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Industry	Correlation Coefficient			-.175*	-.227**	-.245**		-.200**
	Sig. (2-tailed)			0.021	0.002	0.001		0.008
Organization	Correlation Coefficient		.170*					
	Sig. (2-tailed)		0.024					
Role	Correlation Coefficient							
	Sig. (2-tailed)							
CSR	Correlation Coefficient				.447**	.543**	.525**	.597**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.607**	.315**	.525**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.439**	.589**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.537**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 21 - Statistically Significant Correlations (Spearman's rho N= 829) – Region 3 – Middle East and Asia

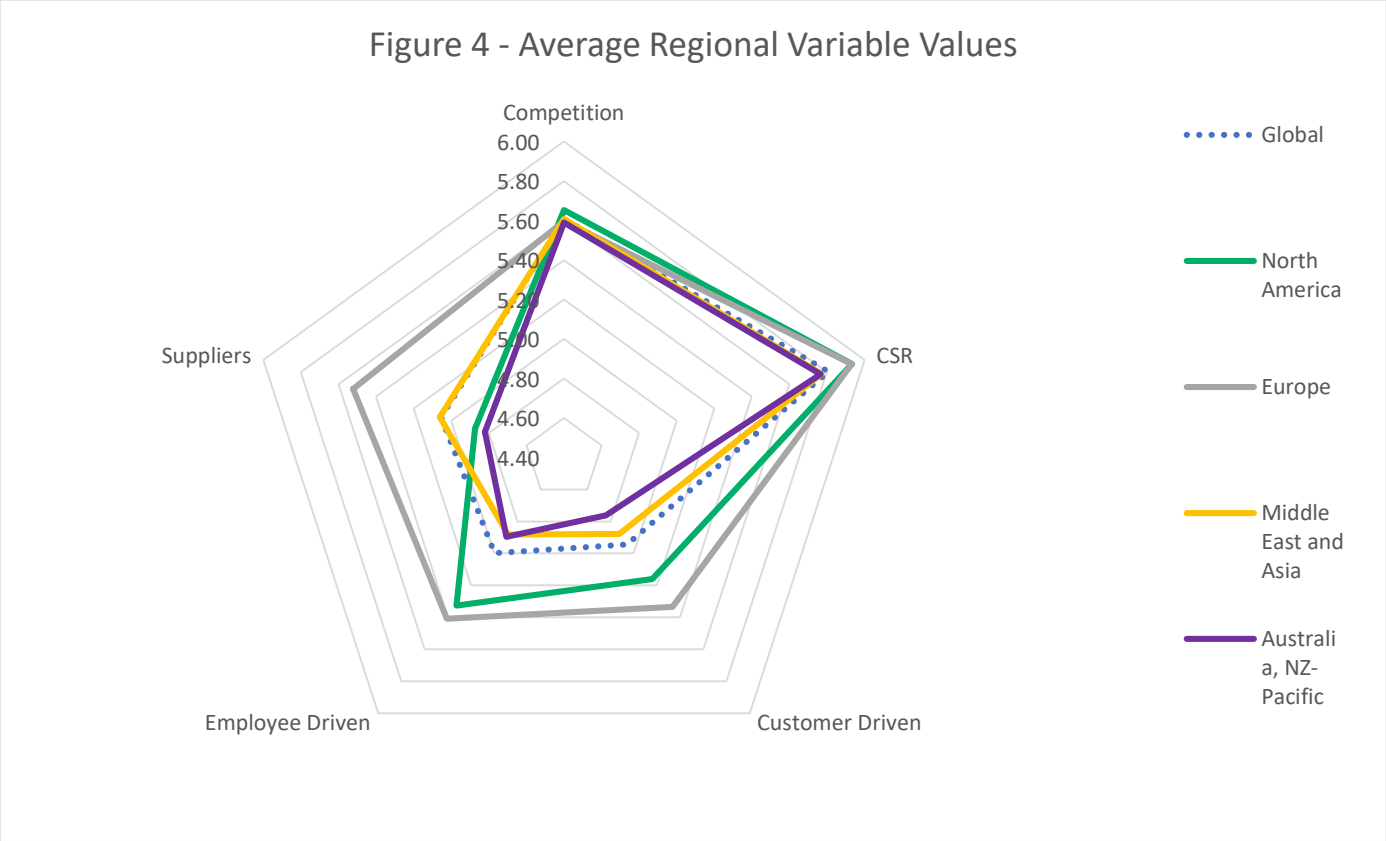
		Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Industry	Correlation Coefficient	-.121**						
	Sig. (2-tailed)	0.000						
Organization	Correlation Coefficient		.162**	.144**	.161**	.072*		.154**
	Sig. (2-tailed)		0.000	0.000	0.000	0.038		0.000
Role	Correlation Coefficient			-.102**			-.140**	
	Sig. (2-tailed)			0.003			0.000	
CSR	Correlation Coefficient				.411**	.467**	.590**	.547**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.684**	.417**	.564**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.512**	.620**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.599**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 22 - Statistically Significant Correlations (Spearman's rho N= 829) – Region 4 – Australia NZ - Pacific

		Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Industry	Correlation Coefficient							
	Sig. (2-tailed)							
Organization	Correlation Coefficient		.188**	.168**	.191**	.183**	.160**	.239**
	Sig. (2-tailed)		0.002	0.007	0.002	0.003	0.009	0.000
Role	Correlation Coefficient							
	Sig. (2-tailed)							
CSR	Correlation Coefficient				.336**	.430**	.595**	.553**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.605**	.326**	.527**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.378**	.515**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.601**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).



As Jean et al. (2016) state, firms in market economies, like North America would be classified as, are more likely to be driven by competitive advantage than by regulation and efficiency. This may explain the greater emphasis on North American firms to be driven to higher levels of sustainability from a bottom-up approach, as opposed to a top-down one. In the European model (Table 20) CSR is the predictor responsible for the greatest variance in the model (R^2=0.299), with suppliers as the second largest contributor (R^2=0.065), parallel to the global model (Table 9). In the Asian and Middle East model (Table 21) it is the predictor variable of Suppliers are required to have sustainable business practices that accounts for the greatest variance in that model (R^2=0.372), with CSR as the second largest contributor (R^2=0.096), and Employee Driven as the third largest (R^2=0.012). Due to the high volume of responses from the region (58.6% of

the total sample), it is this region that holds the strongest influence over the global model overall. The difference in the model for this region, compared to the global model, is the stronger influence from Suppliers compared to CSR. A study by Liu et al. (2011) on green supply chain management (GSCM) in China suggests that influence from top management has a relatively low influence on GSCM. However, another study, focusing on manufacturing and service provider businesses from Taiwan and Vietnam, CSR strategy was identified as being crucial to successful sustainable supply chain management (Kuo et al., 2017). Further studies could go to analysing the differences between specific countries in the Asia and Middle East region.

In the Australian NZ-Pacific model (Table 26) the predictor responsible for the greatest variance in the model is CSR (R^2=0.416), with Suppliers as the second largest contributor (R^2=0.072) and Role as the third largest one (R^2=0.012). With a particularly strong influence from CSR on the sustainability of a firm, there appears to be a strong top-down approach to sustainable practices for firms in this region, compared to other regions. This result corresponds to literature such as the low level of consumer awareness of sustainability in the Australian banking sector (Pomering and Dolnicar, 2009). Conversely, a study based in New Zealand illustrates the demand consumers there have for businesses to operate in an ethical manner, prioritizing ethics above employment opportunities.

Table 23 - Model Summary – North America (Region 1)

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.607[a]	0.368	0.364	1.074	0.368	86.193	1	148	0.000
2	.665[b]	0.442	0.435	1.012	0.074	19.587	1	147	0.000
3	.687[c]	0.472	0.462	0.988	0.030	8.343	1	146	0.004

a. Predictors: (Constant), Employee Driven
b. Predictors: (Constant), Employee Driven, CSR
c. Predictors: (Constant), Employee Driven, CSR, Role

Table 24 - Model Summary – Europe (Region 2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.547[a]	0.299	0.295	1.036	0.299	74.120	1	174	0.000
2	.603[b]	0.364	0.356	0.990	0.065	17.609	1	173	0.000

a. Predictors: (Constant), CSR
b. Predictors: (Constant), CSR, Suppliers

Table 25 - Model Summary – Middle East and Asia (Region 3)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.610[a]	0.372	0.372	1.033	0.372	490.510	1	827	0.000
2	.684[b]	0.468	0.467	0.951	0.096	149.498	1	826	0.000
3	.693[c]	0.480	0.478	0.941	0.012	18.748	1	825	0.000
4	.700[d]	0.490	0.488	0.933	0.010	15.840	1	824	0.000

a. Predictors: (Constant), Suppliers
b. Predictors: (Constant), Suppliers, CSR
c. Predictors: (Constant), Suppliers, CSR, Employee Driven
d. Predictors: (Constant), Suppliers, CSR, Employee Driven, Role

Table 26 - Model Summary – Australia-NZ Pacific (Region 4)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.645[a]	0.416	0.413	1.042	0.416	184.286	1	259	0.000
2	.699[b]	0.488	0.484	0.977	0.072	36.508	1	258	0.000
3	.707[c]	0.500	0.494	0.967	0.012	6.121	1	257	0.014

a. Predictors: (Constant), CSR
b. Predictors: (Constant), CSR, Suppliers
c. Predictors: (Constant), CSR, Suppliers, Role

Industry Differences

Like with regional differences, Descriptive statistics for each region are provided in Tables 27, 28, 29, 30, and 31 to provide an initial perspective on the industry differences, the average values for each Likert-scale variable was mapped out, according to industry category, as shown in Figure 5. As not every industry group size in this study is statistically significant, meaning that

they do not all include responses from at least 100 firms, only the following industries are analysed individually: Healthcare, Education, Non-Profit, Public Sector, Manufacturing, Services, Extractive and Agriculture, and Construction and Real Estate. From the visual representation of the average values, Industry 4, the Manufacturing Sector, stands out in that it has relatively high average values for Suppliers (are required to have sustainable business practices) and Customer Driven (demand a sustainability policy) and the lowest average value for CSR (contained within the firm's business strategy). The two industries with highest average values for Employee Driven (ask that there be a sustainability policy) are Industries 1 and 6, the Healthcare, Education, Non-Profit, Public Sector and Extractive and Agriculture Sector, respectively. It is the Services and Construction and Real Estate sectors that have the lowest average values for Employees Driven.

Table 27 - Descriptive Statistics – Industry 1 – Healthcare, Education, Non-Profit, Public Sector

	Mean	Std. Deviation	N
Competition	5.52	1.372	186
Organization	1.31	0.464	186
Role	1.45	0.499	186
CSR Strategy	2.85	0.892	186
Customer Driven	5.77	1.263	186
Employee Driven	4.99	1.639	186
Suppliers	5.22	1.566	186

Table 28 - Descriptive Statistics – Industry 4 – Manufacturing

	Mean	Std. Deviation	N
Competition	5.74	1.207	199
Organization	1.70	0.458	199
Role	1.43	0.497	199
CSR Strategy	2.73	0.857	199
Customer Driven	5.98	1.180	199
Employee Driven	5.34	1.327	199
Suppliers	5.03	1.423	199

Table 29 - Descriptive Statistics – Industry 5 – Services

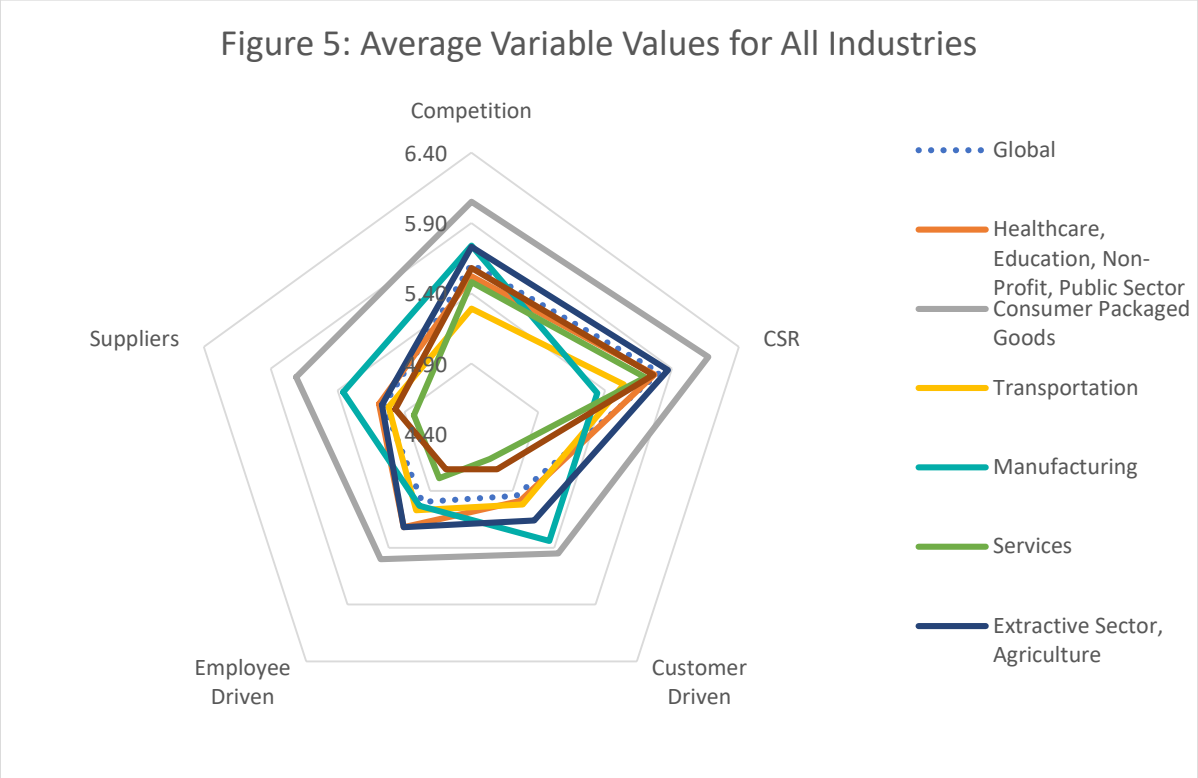
	Mean	Std. Deviation	N
Competition	5.48	1.297	441
Organization	1.44	0.497	441
Role	1.32	0.469	441
CSR Strategy	2.90	0.775	441
Customer Driven	5.70	1.309	441
Employee Driven	4.62	1.642	441
Suppliers	4.79	1.556	441

Table 30 - Descriptive Statistics – Industry 6 – Extractive and Agriculture Sector

	Mean	Std. Deviation	N
Competition	5.73	1.286	288
Organization	1.40	0.490	288
Role	1.33	0.471	288
CSR Strategy	2.69	0.902	288
Customer Driven	5.87	1.265	288
Employee Driven	5.16	1.576	288
Suppliers	5.22	1.462	288

Table 31 - Descriptive Statistics – Industry 7 – Construction and Real Estate

	Mean	Std. Deviation	N
Competition	5.58	1.319	195
Organization	1.36	0.481	195
Role	1.38	0.488	195
CSR Strategy	3.14	0.725	195
Customer Driven	5.76	1.192	195
Employee Driven	4.71	1.500	195
Suppliers	4.71	1.516	195



Correlations and multiple regression analyses are conducted separately for each industry, except for Industries 2 and 3, due to sample sizes lower than 100 from those industries groups.

For Healthcare, Education, Non-Profit, Public Sector (Industry 1 - Table 31) , the relationships with the highest correlations are those of Customer Driven and Employee Driven (r= 0.685, ρ=0.000) and Competition and Suppliers (r= 0.601, ρ=0.000). Other relationships with high correlations are those of Employee Driven and Suppliers (r=0.569, ρ=0.000), Employee Driven and Competition (r=0.514, ρ=0.000), and Customer Driven and Suppliers (r=0.504, ρ=0.000). Relationships with moderate correlations include CSR and Competition (r=0.490, ρ=0.000), CSR and Suppliers (r=0.480, ρ=0.000), CSR and Employee Driven (0.477, ρ=0.000), Customer Driven and Competition (r=0.439, ρ=0.000), and CSR and Customer Driven (r=0.402, ρ=0.000).

For Manufacturing (Industry 4 - Table 28), the relationships with the highest correlation are those of Employee Driven and Suppliers (r= 0.685, ρ=0.000) and Customer Driven and Employee Driven (r= 0.601, ρ=0.000). While the correlation values are similar, it is interesting to note the greater strength in correlation for Employee Driven and Suppliers, whereas for most other industry groups and the global sample, it is the Customer Driven and Employee Driven relationship that is the strongest. Other relationships with high correlations are those of CSR and Suppliers (r=0.592, ρ=0.000), Competition and Suppliers (r=0.564, ρ=0.000), CSR and Employee Driven (r=0.502, ρ=0.000), and CSR and Competition (r=0.498, ρ=0.000). Relationships with moderate correlations include Employee Driven and Competition (r=0.484, ρ=0.000), CSR and Customer Driven (r=0.402, ρ=0.000), and Customer Driven and Competition (r=0.330, ρ=0.000).

For Services (Industry 5 – Table 29), a particularly strong correlation is found between Customer Driven and Employee Driven (r=0.717, ρ=0.000). This is the strongest relationship between any two variables for any sample group in this study. Other relationships with high correlations are those of CSR and Competition (r=0.642, ρ=0.000), Customer Driven and Suppliers (r=0.577, ρ=0.000), Employee Driven and Suppliers (r=0.571, ρ=0.000), CSR and Suppliers (r=0.546, ρ=0.000), and Competition and Suppliers (r=0.498, ρ=0.000). Relationships with moderate correlations include CSR and Employee Driven (r=0.472, ρ=0.000), Employee Driven and Competition (r=0.402, ρ=0.000), CSR and Customer Driven (r=0.368, ρ=0.000), and Customer Driven and Competition (r=0.356, ρ=0.000).

For the Extractive Sector and Agriculture (Industry 6 - Table 30) , the relationship with the highest correlations is that of Customer Driven and Employee Driven (r= 0.601, ρ=0.000). Other relationships with high correlations are those of Employee Driven and Suppliers (r=0.570, ρ=0.000), Customer Driven and Suppliers (r=0.567, ρ=0.000), Suppliers and Competition (r=0.567, ρ=0.000), CSR and Competition (r=0.555, ρ=0.000), and Employee Driven and Competition (r=0.523, ρ=0.000). Relationships with moderate correlations include CSR and Suppliers (r=0.464, ρ=0.000), Customer Driven and Competition (r=0.419, ρ=0.000), CSR and Employee Driven (0.410, ρ=0.000), and CSR and Customer Driven (r=0.408, ρ=0.000). A moderately weak correlation is found between Role and Organisation (r=0.243, ρ=0.000).

For Construction and Real Estate (Industry 7 – Table 31), the relationships with the highest correlation are those of Competition and Suppliers (r= 0.625, ρ=0.000) and Customer Driven and

Employee Driven (r= 0.620, ρ=0.000). Other relationships with high correlations are those of CSR and Suppliers (r=0.599, ρ=0.000), Employee Driven and Suppliers (r=0.589, ρ=0.000), CSR and Competition (r=0.555, ρ=0.000), and Customer Driven and Suppliers (r=0.494, ρ=0.000). Relationships with moderate correlations include Employee Driven and Competition (r=0.487, ρ=0.000), CSR and Employee Driven (0.451, ρ=0.000) CSR and Customer Driven (r=0.320, ρ=0.000), and Customer Driven and Competition (r=0.307, ρ=0.000).

Table 32 - Statistically Significant Correlations (Spearman's rho N=186) – Industry 1 - Healthcare, Education, Non-Profit, Public Sector

		Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Organization	Correlation Coefficient				.202**			
	Sig. (2-tailed)				0.006			
Role	Correlation Coefficient							
	Sig. (2-tailed)							
Region	Correlation Coefficient							
	Sig. (2-tailed)							
CSR	Correlation Coefficient				.402**	.477**	.490**	.480**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.685**	.439**	.504**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.514**	.569**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.601**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 33 - Statistically Significant Correlations (Spearman's rho N=199) – Industry 4 - Manufacturing

		Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Organization	Correlation Coefficient		-.236**	.206**		.211**		.230**
	Sig. (2-tailed)		0.001	0.003		0.003		0.001
Role	Correlation Coefficient							
	Sig. (2-tailed)							
Region	Correlation Coefficient						.139*	
	Sig. (2-tailed)						0.050	
CSR	Correlation Coefficient				.402**	.502**	.498**	.592**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.634**	.330**	.539**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.484**	.654**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.564**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 34 - Statistically Significant Correlations (Spearman's rho N=441) – Industry 5 - Services

		Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Organization	Correlation Coefficient	.177**			.155**	.112*		.129**
	Sig. (2-tailed)	0.000			0.001	0.019		0.007
Role	Correlation Coefficient			-.149**		-0.038	-.161**	
	Sig. (2-tailed)			0.002		0.422	0.001	
Region	Correlation Coefficient				-.134**	-.106*		
	Sig. (2-tailed)				0.005	0.026		
CSR	Correlation Coefficient				.368**	.472**	.642**	.546**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.717**	.356**	.577**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.425**	.571**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.525**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 35 – Statistically Significant Correlations (Spearman's rho N=288) – Industry 6 - Extractive Sector, Agriculture

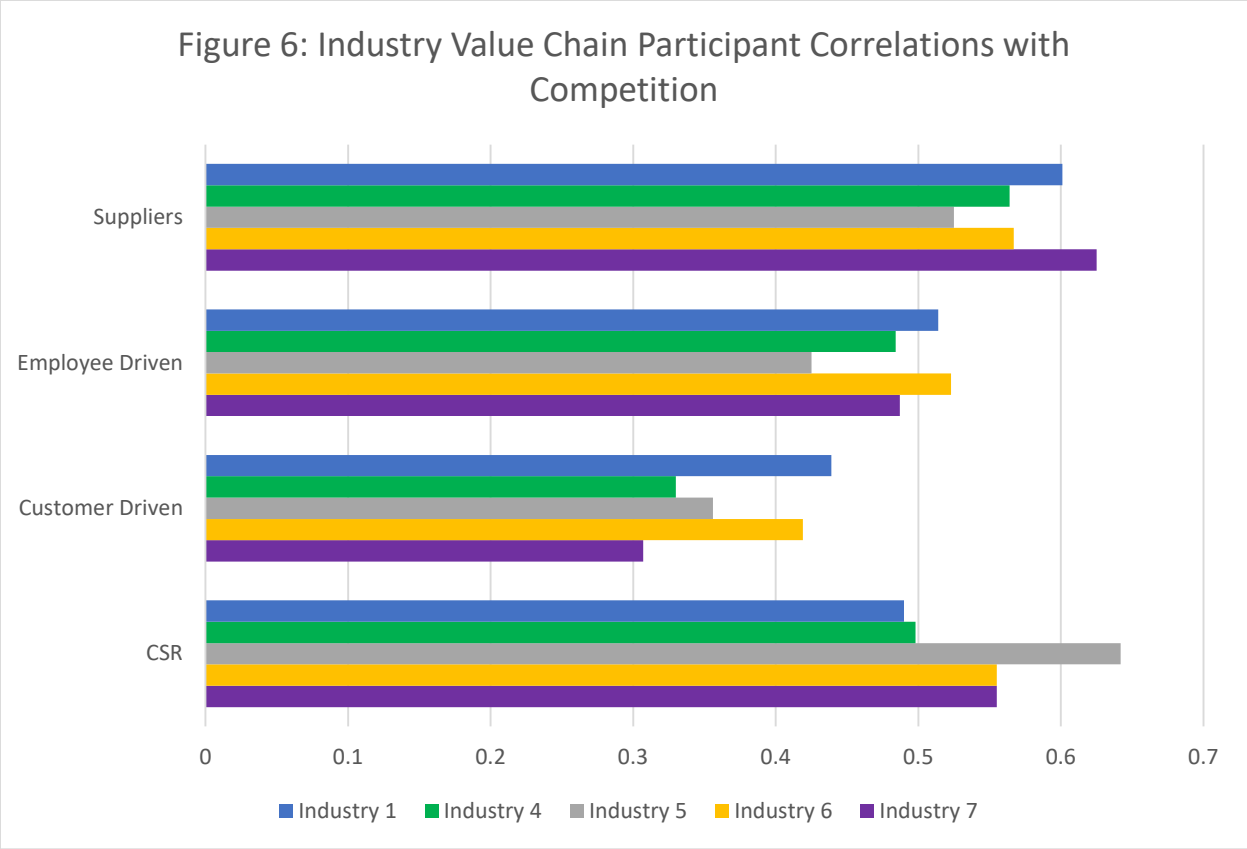
		Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Organization	Correlation Coefficient	.248**	-.138*					
	Sig. (2-tailed)	0.000	0.019					
Role	Correlation Coefficient						-.161**	
	Sig. (2-tailed)						0.006	
Region	Correlation Coefficient			-.128*				
	Sig. (2-tailed)			0.030				
CSR	Correlation Coefficient				.408**	.410**	.555**	.464**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.601**	.419**	.567**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.523**	.570**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.567**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 36 – Statistically Significant Correlations (Spearman's rho N=195) – Industry 7 - Construction, Real Estate

		Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Organization	Correlation Coefficient	.156*		.148*	.162*			
	Sig. (2-tailed)	0.030		0.039	0.024			
Role	Correlation Coefficient			-.169*			-.164*	
	Sig. (2-tailed)			0.018			0.022	
Region	Correlation Coefficient							
	Sig. (2-tailed)							
CSR	Correlation Coefficient				.320**	.451**	.555**	.599**
	Sig. (2-tailed)				0.000	0.000	0.000	0.000
Customer Driven	Correlation Coefficient					.620**	.307**	.494**
	Sig. (2-tailed)					0.000	0.000	0.000
Employee Driven	Correlation Coefficient						.487**	.589**
	Sig. (2-tailed)						0.000	0.000
Competition	Correlation Coefficient							.625**
	Sig. (2-tailed)							0.000

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).



Just as with different regions, multiple regression analyses were conducted for each statistically significant industry sector. Figure 7 displays a graphical representation of the variances on Competition caused by each independent variable predictor.

In the Healthcare, Education, Non-Profit, Public Sector model (Table 37), the predictor responsible for the greater explanation of variance in sustainability relative to competitors is Suppliers (R^2=0.383), with CSR as the second largest contributor (R^2=0.047) and Employee Driven as the third largest one (R^2=0.026). Given the public attention organisations within this industry group may face, this is a surprising result.

In the Manufacturing Sector model (Table 38), the predictor responsible for the great variance in the model is CSR (R^2=0.3260), with Suppliers as the second largest contributor (R^2=0.059), Region as the third largest one (R^2=0.019), and Role as the fourth largest (R^2=0.016). This suggests that it is support activities that are the main driver for sustainability for firms in Manufacturing.

In the Services Industry model (Table 39), the predictor responsible for the great variance in the model is CSR (R^2=0.405), with Suppliers as the second largest contributor (R^2=0.043) and Organization as the third largest one (R^2=0.014). The Services Sector is distinct in that Organisation type is a notable predictor in the sustainability of a firm. As service firms are not as subject to public visibility as more resource extensive firms, it is the public visibility of multinational service firms that influences the inclusion of sustainability in the firms' business strategy. Alternatively, sustainability offers more of a competitive advantage relative to competitors in this particular sector for multinational corporations, as opposed to a resource extensive firm, where the main driving factor may be efficiency, such as the Chinese construction industry as studied by Ye et al. (2015) and several of the highest emitting industries in the US, as investigated by Clarkson et al. (2011).

In the Extractive and Agriculture Sector model (Table 40), the predictor responsible for the great variance in the model is Suppliers (R^2=0.413), with CSR as the second largest contributor (R^2=0.114), Employee Driven as the third largest one (R^2=0.026), and Role as the fourth largest (R^2=0.016).

In the Extractive and Agriculture Sector, a more resource-extensive industry, Suppliers is a strong predictor in the model. This suggests that firms in this sector may be well-aware of the environmental impact of their activities, as well as those of their suppliers. With greater visibility on these types of firms, it is likely that there is an increased focus on sustainable practices along the entire supply chain, to mitigate issues with public perception.

In the Construction and Real Estate Sector model (Table 41), the predictor responsible for the great variance in the model is Suppliers (R^2=0.354), with CSR as the second largest contributor (R^2=0.064). As this industry is heavily reliant on resources for the construction and commercialization of buildings, this result is expected.

Table 37 - Model Summary – Industry 1 – Healthcare, Education, Non-Profit, Public Sector

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.619[a]	0.383	0.379	1.081	0.383	114.041	1	184	0.000
2	.656[b]	0.430	0.424	1.042	0.047	15.209	1	183	0.000
3	.675[c]	0.456	0.447	1.021	0.026	8.525	1	182	0.004

a. Predictors: (Constant), Suppliers

b. Predictors: (Constant), Suppliers, CSR

c. Predictors: (Constant), Suppliers, CSR, Employee Driven

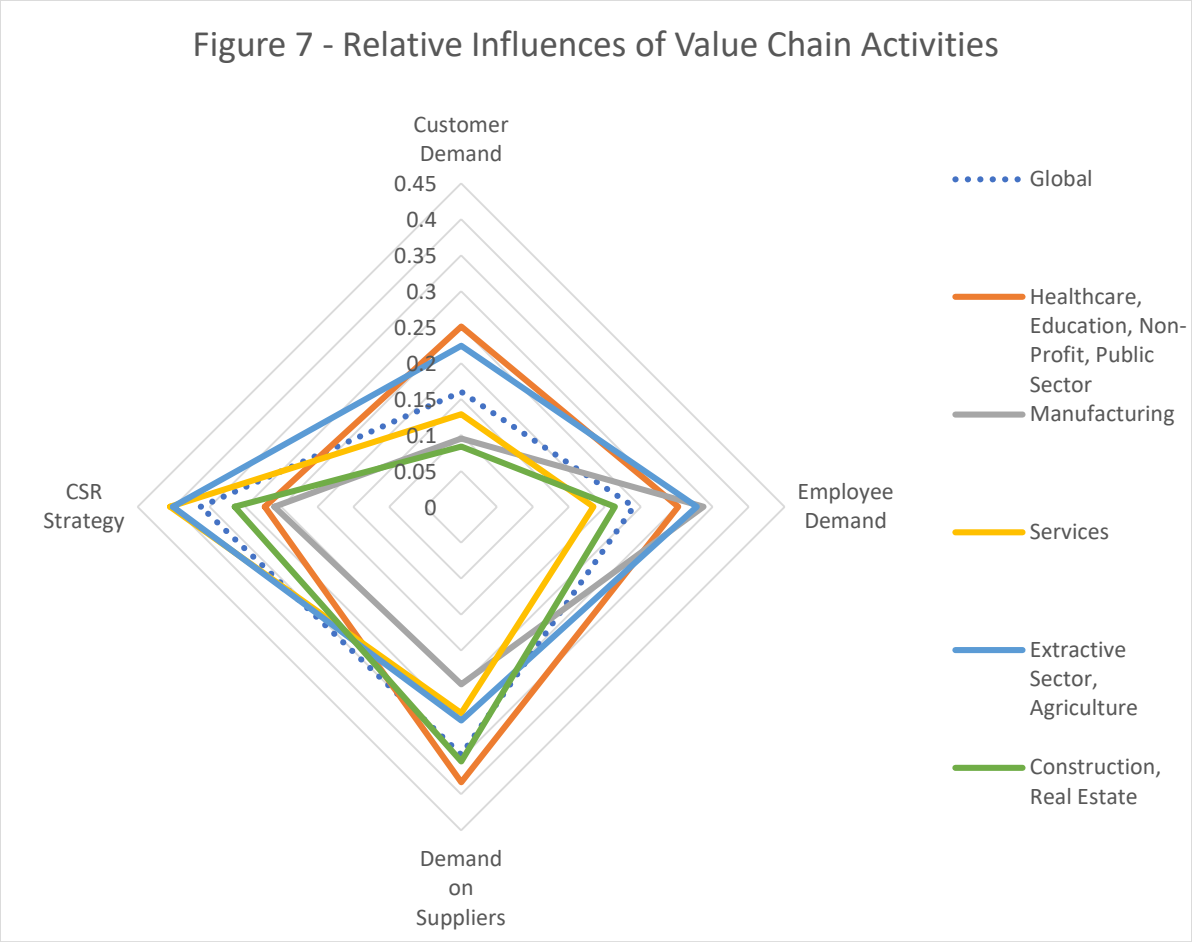


Table 38 - Model Summary – Industry 4 - Manufacturing

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.510[a]	0.260	0.257	1.041	0.260	69.363	1	197	0.000
2	.566[b]	0.320	0.313	1.000	0.059	17.145	1	196	0.000
3	.582[c]	0.339	0.329	0.989	0.019	5.658	1	195	0.018
4	.596[d]	0.355	0.342	0.979	0.016	4.858	1	194	0.029

a. Predictors: (Constant), CSR

b. Predictors: (Constant), CSR, Suppliers

c. Predictors: (Constant), CSR, Suppliers, Region

d. Predictors: (Constant), CSR, Suppliers, Region, Role

Table 39 - Model Summary – Industry 5 - Services

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.636[a]	0.405	0.403	1.002	0.405	298.618	1	439	0.000
2	.669[b]	0.448	0.445	0.966	0.043	33.826	1	438	0.000
3	.679[c]	0.461	0.458	0.955	0.014	11.182	1	437	0.001
4	.684[d]	0.468	0.463	0.951	0.006	5.131	1	436	0.024

a. Predictors: (Constant), CSR

b. Predictors: (Constant), CSR, Suppliers

c. Predictors: (Constant), CSR, Suppliers, Organization

d. Predictors: (Constant), CSR, Suppliers, Organization, Role

Table 40 - Model Summary – Industry 6 – Extractive Sector, Agriculture

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.643[a]	0.413	0.411	0.987	0.413	201.082	1	286	0.000
2	.726[b]	0.527	0.524	0.888	0.114	68.706	1	285	0.000
3	.744[c]	0.553	0.548	0.864	0.026	16.658	1	284	0.000
4	.754[d]	0.569	0.563	0.851	0.016	10.381	1	283	0.001

a. Predictors: (Constant), Suppliers

b. Predictors: (Constant), Suppliers, CSR

c. Predictors: (Constant), Suppliers, CSR, Employee Driven

d. Predictors: (Constant), Suppliers, CSR, Employee Driven, Role

Table 41 - Model Summary – Industry 7 – Construction, Real Estate

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.595[a]	0.354	0.351	1.063	0.354	105.693	1	193	0.000
2	.646[b]	0.418	0.412	1.012	0.064	21.034	1	192	0.000

a. Predictors: (Constant), Suppliers

b. Predictors: (Constant), Suppliers, CSR

Summary

Through hypotheses testing, the relative influence of each value chain participant has been tested. As value chain theory infers that value is added through each firm's primary or support activity, worthwhile insight is provided by evaluating where in the value chain the most value in terms of sustainability is added. Generally, this value is added in greater proportion through support activities involving the incorporation of CSR in a firm's business strategy. Of the primary value chain activities, it is Suppliers, or the inbound logistics involved in SSCM that add the most value of sustainability.

While there are general trends over different regions and industry sections, the results are not homogenous, with some exceptions noted in discussions above. Due to the diversity in literature regarding different geographical regions and industry sectors, especially as these trends change over time, this study contributed to the field of study through identification of generalizations to tie together many of the more focused existing literature. Key deviations from the global sample include the strong influence on sustainability from employee demand in North America, as well as the strong influence from requiring suppliers to be sustainable for the Middle East and Asia. While literature has shown Western countries to be more influenced by internal factors, than external ones such as regulation, this study shows a shifting focus on SSCM for firms in the Middle East and Asian. Regarding industry sectors, key deviations include a stronger influence from Suppliers, rather than CSR, within the Extractive Sector, Agriculture, Construction, and Real Estate sectors. These findings overall contrast literature suggesting the strong influence customer demand has on the sustainability of a firm for resource intensive, with a generally more visible impact, firms, and further stresses the important of SSCM.

Chapter 5: Conclusion

This chapter summarizes the research findings and presents implications for business strategy for sustainable firms. Previous literature has studied motivators and determinants of a firm's sustainability. This study has explored these with a value chain framework, to develop a model investigate the relative influence of components of value chain activities of firms. the perspective of firms already invested in sustainability is observed, rather than a general sample. As well, this study contributes to existing knowledge in the field by providing a comparative study for different geographical regions and industry sectors. Additionally, as the role of sustainability in business strategy has changed over time, it is critical for an up-to-date study to capture the current drivers of sustainability in business practices.

The research question investigated in this study is:
What is the relative importance of sustainability to value chain participants (i.e., suppliers, the company itself, and customers) and their respective contribution to the level of sustainable operations and business practices as compared to their competitors?

Due to the vested interest the firms surveyed, as indicated by them being subscribers to EcoBusiness, firms generally saw themselves as leaders in sustainability; the mean values for each inferential variable were fairly high, with the mean for firms perceiving themselves as operating with more sustainable and ethical business practices being 5.61, with a standard deviation of 1.309. By virtue of this result, it is not surprising to observe that the mean value for a firm's incorporation of CSR being the highest of the value chain participant variables, being

5.81, with a standard deviation of 1.274. It was surprising to find that aside from the North American mode, Employee Driven (mean = 4.94, std. deviation = 1.582) was a predictor for relatively low variance in Competition, with Customer Driven (mean = 4.94, std. deviation = 1.582) not being included in the regression analysis model at all.

Overall, close to half of the variance in a firm's sustainability is a result of influences from value chain activities. A top-down approach is the dominant influence for sustainability, as the implementation of CSR strategies has been attributed to a firm's sustainable and ethical practices more than the primary value chain activities studied. This finding supports a great deal of the existing literature on the role of business strategy implementation on a much of a firm's activities, such as those of Giunipero et al. (2012) and Kumar and Rahman (2016), as well as emphasize the importance of firm infrastructure as a support activity in sustainability.

There is a strong relationship between a firm's requirement of its suppliers to be sustainable, and that firm's perception of a high environmental and ethical performance. Rather than its internal employees or customers, it is the suppliers that make the largest impact on the sustainability of a firm. Surprisingly, customers are not a large driving force in the sustainability of the firms, considering the recent literature, such as from Garvare and Johansson (2010), presenting customers as the prominent stakeholder. The overall results are likely influenced by the large representation of certain geographical regions and industry sectors, such as the large representation of firms from the Middle East and Asian region, as well as firms from the Services industry sector.

Several notable results arose when each geographical region and industry sector was evaluated in silo. It should be noted that differences between the models for geographical regions and industry sectors do not account for variances in business strategies within each group. Nevertheless, valuable insight can be drawn from the generalizations provided by these results. The influence of internal employees was relatively weak in the global model but was the strongest influencer in the North American model, while for Asia and the Middle East, the strongest influencer on sustainability was the demand on suppliers to be sustainable, which supports literature on the importance of suppliers on the sustainability of a firm (Zhu and Sarkis, 2006; Kuo et al., 2017; Al-Abdin et al., 2018).This is also seen in Europe, where literature has cited strong influences from CSR strategy implementation and relationships with suppliers (Walker et al., 2008).

A notable result from the Services sector was the strong influence of organization type, indicating that services are unique in that firm size is an influence on sustainability. This is an interest result, as it could have been assumed that a large, resource-intensive firm would be subject to the implications of visibility of impact (Carter and Rogers, Cote et al., 2008; 2008; Holt and Ghobadian, 2009). Rather, the general literature supporting sustainable business practices being adopted at larger rates for multinational firms than SME's (Walker et al., 2008) is corroborated by this study.

While there are quite a few disparities in findings from literature, especially for very specific regions or sectors (such as Liu et al.'s (2011)) findings that top management has a low influence

on sustainability within the supply chain in China), overall. these results corroborate general trends in existing empirical research.

Managerial implications

Beyond the scope of academic research, this study provides practical yields. Due to the strong relationship between suppliers and a firm's self-perception of its superior environmental and ethical performance to its competitors, a key insight for managers from this study is the importance of suppliers to the sustainability of a firm. As Seuring and Gold (2013) state, it is entire supply chains competing with other supply chains, rather than single firms competing with other firms.

With employees also highlighted as an important influencer, it is in the best interest of managers to adopt practices to both manage sustainability initiative implementation, as well as incorporate feedback from employees on sustainability demands. The significance of employees in sustainability in business strategy stresses the importance of human resource management regarding sustainability, such as top management support and employee empowerment, as outlined by Daily and Huang (2001). Additionally, Galphin et al. (2016) emphasize the importance of organizational culture for firms striving to implement sustainability in their business strategies, discussing the importance of embedding culture change into human resources practices such as recruitment and incentives.

Through distinguishing between different geographical regions and industry sectors, insight is provided for any deviations from the global sample. For example, the greater influence

employees have on a firm's sustainability in the extractive and agriculture sectors, compared to the services sector, illustrates the distinction that technical knowledge of employees may have on their demand for sustainability. With business today being more interconnected than ever, it is imperative that managers are able to understand how sustainability fits into the business strategies of their partners, suppliers, or clients, and who the influencers of sustainability for them are. Regnér (2003) illustrates the distinction between strategy making at the corporate centre and at the levels of management outside this centre, with strategy making for the latter being inductive and explorative in nature, as well as better suited for complex problems. With sustainability being a complex issue for many businesses, the strategy making outside the corporate centre should be more highly accentuated by managers.

The managerial implications extend beyond the firm, and into the policy landscape. Ramanathan et al. (2017) discuss implications of regulation design for policy makers and firms, addressing the intersections of regulations, innovation, and sustainability in a conceptual model developed. With inflexible environmental regulations resulting in a reactive approach, there may be a negative impact of sustainability overall, rather than a positive impact that could be achieved with innovation and a proactive approach. In terms of policy design, addressing the relative influences on the sustainability of a firm may be more ideal than traditional environmental regulation.

Current research limitations and recommendations for further research

While this research provides insight on the relative influence of internal value chain forces, the perspective is restricted to that of higher level managers. A holistic view of business strategy can

be achieved by senior manager insights, according to the notion from Shortell and Zajac (1990) that senior management have a more holistic and deeper understanding of an organization's strategy, but the results in this research suggest a potential disparity between lower level employees and their managers.

Further research should investigate the relative influence of external influencers compared to value chain participants, by exploring the influence of regulation compared to internal forces. Additionally, it should be focused on the specific traits of the respondents, to give an indication of whether role in firm, gender, academic background, or other traits may influence strategy perception. In this study, firms were categorized as local or regional firms or as multinational corporations. Future studies could explore the impact of organizational type on the sustainability of a firm through having organizational size on a scale, rather than a binary.

With the role of visibility and influence from community members on the sustainability of a firm, the difference between firms in rural and urban environments can also be studied further, as well as an in-depth evaluation of how certain industries more prominent in today's media, such as the energy industry, are adopting sustainable business strategies compared to their less visible counterparts.

Appendix

Sustainable Development Goals:

- Goal 1. End poverty in all its forms everywhere
- Goal 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3. Ensure healthy lives and promote well-being for all at all ages
- Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5. Achieve gender equality and empower all women and girls
- Goal 6. Ensure availability and sustainable management of water and sanitation for all
- Goal 7 Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10. Reduce inequality within and among countries
- Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12. Ensure sustainable consumption and production patterns
- Goal 13. Take urgent action to combat climate change and its impacts*
- Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Full Relationships Correlations – Region 1 (from Table 15)

			Industry	Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Industry	Correlation Coefficient	1.000	-0.133	-.222**	0.137	-0.002	0.048	0.149	-0.061
		Sig. (2-tailed)		0.105	0.006	0.095	0.981	0.561	0.069	0.457
		N	150	150	150	150	150	150	150	150
	Organization	Correlation Coefficient	-0.133	1.000	0.153	-.165*	-0.017	-0.139	-.177*	-0.030
		Sig. (2-tailed)	0.105		0.061	0.043	0.839	0.090	0.030	0.711
		N	150	150	150	150	150	150	150	150
	Role	Correlation Coefficient	-.222**	0.153	1.000	-.172*	-0.014	-0.109	-.261**	-0.091
		Sig. (2-tailed)	0.006	0.061		0.036	0.862	0.185	0.001	0.268
		N	150	150	150	150	150	150	150	150
	CSR	Correlation Coefficient	0.137	-.165*	-.172*	1.000	.375**	.496**	.542**	.512**
		Sig. (2-tailed)	0.095	0.043	0.036		0.000	0.000	0.000	0.000
		N	150	150	150	150	150	150	150	150
	Customer Driven	Correlation Coefficient	-0.002	-0.017	-0.014	.375**	1.000	.639**	.401**	.519**
		Sig. (2-tailed)	0.981	0.839	0.862	0.000		0.000	0.000	0.000
		N	150	150	150	150	150	150	150	150
	Employee Driven	Correlation Coefficient	0.048	-0.139	-0.109	.496**	.639**	1.000	.574**	.538**
		Sig. (2-tailed)	0.561	0.090	0.185	0.000	0.000		0.000	0.000
		N	150	150	150	150	150	150	150	150
	Competition	Correlation Coefficient	0.149	-.177*	-.261**	.542**	.401**	.574**	1.000	.515**
		Sig. (2-tailed)	0.069	0.030	0.001	0.000	0.000	0.000		0.000
		N	150	150	150	150	150	150	150	150
	Suppliers	Correlation Coefficient	-0.061	-0.030	-0.091	.512**	.519**	.538**	.515**	1.000
		Sig. (2-tailed)	0.457	0.711	0.268	0.000	0.000	0.000	0.000	
		N	150	150	150	150	150	150	150	150

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Full Relationships Correlations – Region 2 (From Table 16)

			Industry	Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Industry	Correlation Coefficient		—	-0.010	-.175*	-.227**	-.245**	—	-.200**
		Sig. (2-tailed)		0.249	0.892	0.021	0.002	0.001	0.427	0.008
		N		176	176	176	176	176	176	176
	Organization	Correlation Coefficient			.170*	—	—	—	—	—
		Sig. (2-tailed)			0.024	0.483	0.125	0.240	0.919	0.129
		N			176	176	176	176	176	176
	Role	Correlation Coefficient				—	—	—	—	-0.016
		Sig. (2-tailed)				0.539	0.578	0.811	0.078	0.834
		N				176	176	176	176	176
	CSR	Correlation Coefficient					.447**	.543**	.525**	.597**
		Sig. (2-tailed)					0.000	0.000	0.000	0.000
		N					176	176	176	176
	Customer Driven	Correlation Coefficient						.607**	.315**	.525**
		Sig. (2-tailed)						0.000	0.000	0.000
		N						176	176	176
	Employee Driven	Correlation Coefficient							.439**	.589**
		Sig. (2-tailed)							0.000	0.000
		N							176	176
	Competition	Correlation Coefficient								.537**
		Sig. (2-tailed)								0.000
		N								176
	Suppliers	Correlation Coefficient								
		Sig. (2-tailed)								
		N								

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Full Relationships Correlations – Region 3 (From Table 17)

			Industry	Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Industry	Correlation Coefficient	1.000	-.121**	-0.062	-0.037	-0.039	-0.032	-0.009	-0.059
		Sig. (2-tailed)		0.000	0.072	0.282	0.265	0.355	0.795	0.089
		N	829	829	829	829	829	829	829	829
	Organization	Correlation Coefficient	-.121**	1.000	.162**	.144**	.161**	.072*	0.050	.154**
		Sig. (2-tailed)	0.000		0.000	0.000	0.000	0.038	0.150	0.000
		N	829	829	829	829	829	829	829	829
	Role	Correlation Coefficient	-0.062	.162**	1.000	-.102**	0.021	-0.045	-.140**	-0.018
		Sig. (2-tailed)	0.072	0.000		0.003	0.541	0.197	0.000	0.611
		N	829	829	829	829	829	829	829	829
	CSR	Correlation Coefficient	-0.037	.144**	-.102**	1.000	.411**	.467**	.590**	.547**
		Sig. (2-tailed)	0.282	0.000	0.003		0.000	0.000	0.000	0.000
		N	829	829	829	829	829	829	829	829
	Customer Driven	Correlation Coefficient	-0.039	.161**	0.021	.411**	1.000	.684**	.417**	.564**
		Sig. (2-tailed)	0.265	0.000	0.541	0.000		0.000	0.000	0.000
		N	829	829	829	829	829	829	829	829
	Employee Driven	Correlation Coefficient	-0.032	.072*	-0.045	.467**	.684**	1.000	.512**	.620**
		Sig. (2-tailed)	0.355	0.038	0.197	0.000	0.000		0.000	0.000
		N	829	829	829	829	829	829	829	829
	Competition	Correlation Coefficient	-0.009	0.050	-.140**	.590**	.417**	.512**	1.000	.599**
		Sig. (2-tailed)	0.795	0.150	0.000	0.000	0.000	0.000		0.000
		N	829	829	829	829	829	829	829	829
	Suppliers	Correlation Coefficient	-0.059	.154**	-0.018	.547**	.564**	.620**	.599**	1.000
		Sig. (2-tailed)	0.089	0.000	0.611	0.000	0.000	0.000	0.000	
		N	829	829	829	829	829	829	829	829

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Full Relationships Correlations – Region 4 (From Table 18)

			Industry	Organization	Role	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Industry	Correlation Coefficient	1.000	-0.023	-0.084	-0.011	-0.059	-0.084	-0.027	-0.027
		Sig. (2-tailed)		0.713	0.177	0.857	0.343	0.177	0.670	0.667
		N	261	261	261	261	261	261	261	261
	Organization	Correlation Coefficient	-0.023	1.000	.188**	.168**	.191**	.183**	.160**	.239**
		Sig. (2-tailed)	0.713		0.002	0.007	0.002	0.003	0.009	0.000
		N	261	261	261	261	261	261	261	261
	Role	Correlation Coefficient	-0.084	.188**	1.000	-0.038	0.085	0.077	-0.104	0.055
		Sig. (2-tailed)	0.177	0.002		0.539	0.170	0.217	0.095	0.373
		N	261	261	261	261	261	261	261	261
	CSR	Correlation Coefficient	-0.011	.168**	-0.038	1.000	.336**	.430**	.595**	.553**
		Sig. (2-tailed)	0.857	0.007	0.539		0.000	0.000	0.000	0.000
		N	261	261	261	261	261	261	261	261
	Customer Driven	Correlation Coefficient	-0.059	.191**	0.085	.336**	1.000	.605**	.326**	.527**
		Sig. (2-tailed)	0.343	0.002	0.170	0.000		0.000	0.000	0.000
		N	261	261	261	261	261	261	261	261
	Employee Driven	Correlation Coefficient	-0.084	.183**	0.077	.430**	.605**	1.000	.378**	.515**
		Sig. (2-tailed)	0.177	0.003	0.217	0.000	0.000		0.000	0.000
		N	261	261	261	261	261	261	261	261
	Competition	Correlation Coefficient	-0.027	.160**	-0.104	.595**	.326**	.378**	1.000	.601**
		Sig. (2-tailed)	0.670	0.009	0.095	0.000	0.000	0.000		0.000
		N	261	261	261	261	261	261	261	261
	Suppliers	Correlation Coefficient	-0.027	.239**	0.055	.553**	.527**	.515**	.601**	1.000
		Sig. (2-tailed)	0.667	0.000	0.373	0.000	0.000	0.000	0.000	
		N	261	261	261	261	261	261	261	261

**. Correlation is significant at the 0.01 level (2-tailed).

Full Relationships Correlations – Industry 1 (from Table 28)

			Industry	Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Industry	Correlation Coefficient									
		Sig. (2-tailed)									
		N	186	186	186	186	186	186	186	186	186
	Organization	Correlation Coefficient		1.000	0.089	-0.049	0.011	.202**	0.050	0.093	0.138
		Sig. (2-tailed)			0.228	0.506	0.880	0.006	0.499	0.207	0.061
		N	186	186	186	186	186	186	186	186	186
	Role	Correlation Coefficient		0.089	1.000	0.061	-0.045	0.046	0.052	-0.071	0.029
		Sig. (2-tailed)		0.228		0.408	0.544	0.530	0.484	0.334	0.690
		N	186	186	186	186	186	186	186	186	186
	Region	Correlation Coefficient		-0.049	0.061	1.000	-0.080	-0.122	-0.115	-0.002	-0.069
		Sig. (2-tailed)		0.506	0.408		0.277	0.098	0.117	0.979	0.349
		N	186	186	186	186	186	186	186	186	186
	CSR	Correlation Coefficient		0.011	-0.045	-0.080	1.000	.402**	.477**	.490**	.480**
		Sig. (2-tailed)		0.880	0.544	0.277		0.000	0.000	0.000	0.000
		N	186	186	186	186	186	186	186	186	186
	Customer Driven	Correlation Coefficient		.202**	0.046	-0.122	.402**	1.000	.685**	.439**	.504**
		Sig. (2-tailed)		0.006	0.530	0.098	0.000		0.000	0.000	0.000
		N	186	186	186	186	186	186	186	186	186
	Employee Driven	Correlation Coefficient		0.050	0.052	-0.115	.477**	.685**	1.000	.514**	.569**
		Sig. (2-tailed)		0.499	0.484	0.117	0.000	0.000		0.000	0.000
		N	186	186	186	186	186	186	186	186	186
	Competition	Correlation Coefficient		0.093	-0.071	-0.002	.490**	.439**	.514**	1.000	.601**
		Sig. (2-tailed)		0.207	0.334	0.979	0.000	0.000	0.000		0.000
		N	186	186	186	186	186	186	186	186	186
	Suppliers	Correlation Coefficient		0.138	0.029	-0.069	.480**	.504**	.569**	.601**	1.000
		Sig. (2-tailed)		0.061	0.690	0.349	0.000	0.000	0.000	0.000	
		N	186	186	186	186	186	186	186	186	186

**. Correlation is significant at the 0.01 level (2-tailed).

Full Relationships Correlations – Industry 4 (from Table 29)

			Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Organization	Correlation Coefficient	1.000	0.100	-.236**	.206**	0.111	.211**	0.112	.230**
		Sig. (2-tailed)		0.160	0.001	0.003	0.120	0.003	0.116	0.001
		N	199	199	199	199	199	199	199	199
	Role	Correlation Coefficient	0.100	1.000	0.073	0.003	0.065	-0.062	-0.132	-0.008
		Sig. (2-tailed)	0.160		0.304	0.971	0.363	0.383	0.064	0.908
		N	199	199	199	199	199	199	199	199
	Region	Correlation Coefficient	-.236**	0.073	1.000	0.061	-0.106	-0.079	.139*	-0.079
		Sig. (2-tailed)	0.001	0.304		0.391	0.135	0.265	0.050	0.267
		N	199	199	199	199	199	199	199	199
	CSR	Correlation Coefficient	.206**	0.003	0.061	1.000	.402**	.502**	.498**	.592**
		Sig. (2-tailed)	0.003	0.971	0.391		0.000	0.000	0.000	0.000
		N	199	199	199	199	199	199	199	199
	Customer Driven	Correlation Coefficient	0.111	0.065	-0.106	.402**	1.000	.634**	.330**	.539**
		Sig. (2-tailed)	0.120	0.363	0.135	0.000		0.000	0.000	0.000
		N	199	199	199	199	199	199	199	199
	Employee Driven	Correlation Coefficient	.211**	-0.062	-0.079	.502**	.634**	1.000	.484**	.654**
		Sig. (2-tailed)	0.003	0.383	0.265	0.000	0.000		0.000	0.000
		N	199	199	199	199	199	199	199	199
	Competition	Correlation Coefficient	0.112	-0.132	.139*	.498**	.330**	.484**	1.000	.564**
		Sig. (2-tailed)	0.116	0.064	0.050	0.000	0.000	0.000		0.000
		N	199	199	199	199	199	199	199	199
	Suppliers	Correlation Coefficient	.230**	-0.008	-0.079	.592**	.539**	.654**	.564**	1.000
		Sig. (2-tailed)	0.001	0.908	0.267	0.000	0.000	0.000	0.000	
		N	199	199	199	199	199	199	199	199

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Full Relationships Correlations – Industry 5 (From Table 30)

			Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Organization	Correlation Coefficient	1.000	.177**	-0.091	0.061	.155**	.112*	-0.046	.129**
		Sig. (2-tailed)		0.000	0.055	0.205	0.001	0.019	0.335	0.007
		N	441	441	441	441	441	441	441	441
	Role	Correlation Coefficient	.177**	1.000	0.012	-.149**	0.049	-0.038	-.161**	-0.009
		Sig. (2-tailed)	0.000		0.796	0.002	0.305	0.422	0.001	0.855
		N	441	441	441	441	441	441	441	441
	Region	Correlation Coefficient	-0.091	0.012	1.000	-0.017	-.134**	-.106*	-0.005	-0.078
		Sig. (2-tailed)	0.055	0.796		0.721	0.005	0.026	0.912	0.103
		N	441	441	441	441	441	441	441	441
	CSR	Correlation Coefficient	0.061	-.149**	-0.017	1.000	.368**	.472**	.642**	.546**
		Sig. (2-tailed)	0.205	0.002	0.721		0.000	0.000	0.000	0.000
		N	441	441	441	441	441	441	441	441
	Customer Driven	Correlation Coefficient	.155**	0.049	-.134**	.368**	1.000	.717**	.356**	.577**
		Sig. (2-tailed)	0.001	0.305	0.005	0.000		0.000	0.000	0.000
		N	441	441	441	441	441	441	441	441
	Employee Driven	Correlation Coefficient	.112*	-0.038	-.106*	.472**	.717**	1.000	.425**	.571**
		Sig. (2-tailed)	0.019	0.422	0.026	0.000	0.000		0.000	0.000
		N	441	441	441	441	441	441	441	441
	Competition	Correlation Coefficient	-0.046	-.161**	-0.005	.642**	.356**	.425**	1.000	.525**
		Sig. (2-tailed)	0.335	0.001	0.912	0.000	0.000	0.000		0.000
		N	441	441	441	441	441	441	441	441
	Suppliers	Correlation Coefficient	.129**	-0.009	-0.078	.546**	.577**	.571**	.525**	1.000
		Sig. (2-tailed)	0.007	0.855	0.103	0.000	0.000	0.000	0.000	
		N	441	441	441	441	441	441	441	441

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Full Relationships Correlations – Industry 6 (from Table 31)

			Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Organization	Correlation Coefficient	1.000	.248**	-.138*	0.047	0.032	-0.003	0.025	0.095
		Sig. (2-tailed)		0.000	0.019	0.424	0.591	0.962	0.670	0.108
		N	288	288	288	288	288	288	288	288
	Role	Correlation Coefficient	.248**	1.000	0.083	-0.089	-0.044	-0.043	-.161**	0.046
		Sig. (2-tailed)	0.000		0.160	0.131	0.456	0.464	0.006	0.433
		N	288	288	288	288	288	288	288	288
	Region	Correlation Coefficient	-.138*	0.083	1.000	-.128*	0.015	-0.090	-0.049	-0.041
		Sig. (2-tailed)	0.019	0.160		0.030	0.801	0.126	0.412	0.490
		N	288	288	288	288	288	288	288	288
	CSR	Correlation Coefficient	0.047	-0.089	-.128*	1.000	.408**	.410**	.555**	.464**
		Sig. (2-tailed)	0.424	0.131	0.030		0.000	0.000	0.000	0.000
		N	288	288	288	288	288	288	288	288
	Customer Driven	Correlation Coefficient	0.032	-0.044	0.015	.408**	1.000	.601**	.419**	.567**
		Sig. (2-tailed)	0.591	0.456	0.801	0.000		0.000	0.000	0.000
		N	288	288	288	288	288	288	288	288
	Employee Driven	Correlation Coefficient	-0.003	-0.043	-0.090	.410**	.601**	1.000	.523**	.570**
		Sig. (2-tailed)	0.962	0.464	0.126	0.000	0.000		0.000	0.000
		N	288	288	288	288	288	288	288	288
	Competition	Correlation Coefficient	0.025	-.161**	-0.049	.555**	.419**	.523**	1.000	.567**
		Sig. (2-tailed)	0.670	0.006	0.412	0.000	0.000	0.000		0.000
		N	288	288	288	288	288	288	288	288
	Suppliers	Correlation Coefficient	0.095	0.046	-0.041	.464**	.567**	.570**	.567**	1.000
		Sig. (2-tailed)	0.108	0.433	0.490	0.000	0.000	0.000	0.000	
		N	288	288	288	288	288	288	288	288

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Full Relationships Correlations – Industry 7 (from Table 32)

			Organization	Role	Region	CSR	Customer Driven	Employee Driven	Competition	Suppliers
Spearman's rho	Organization	Correlation Coefficient	1.000	.156*	-0.127	.148*	.162*	0.042	0.015	0.099
		Sig. (2-tailed)		0.030	0.078	0.039	0.024	0.562	0.837	0.170
		N	195	195	195	195	195	195	195	195
	Role	Correlation Coefficient	.156*	1.000	0.020	-.169*	0.035	0.038	-.164*	-0.061
		Sig. (2-tailed)	0.030		0.779	0.018	0.624	0.603	0.022	0.397
		N	195	195	195	195	195	195	195	195
	Region	Correlation Coefficient	-0.127	0.020	1.000	0.026	-0.086	-0.029	-0.005	-0.020
		Sig. (2-tailed)	0.078	0.779		0.720	0.233	0.684	0.949	0.778
		N	195	195	195	195	195	195	195	195
	CSR	Correlation Coefficient	.148*	-.169*	0.026	1.000	.320**	.451**	.555**	.599**
		Sig. (2-tailed)	0.039	0.018	0.720		0.000	0.000	0.000	0.000
		N	195	195	195	195	195	195	195	195
	Customer Driven	Correlation Coefficient	.162*	0.035	-0.086	.320**	1.000	.620**	.307**	.494**
		Sig. (2-tailed)	0.024	0.624	0.233	0.000		0.000	0.000	0.000
		N	195	195	195	195	195	195	195	195
	Employee Driven	Correlation Coefficient	0.042	0.038	-0.029	.451**	.620**	1.000	.487**	.589**
		Sig. (2-tailed)	0.562	0.603	0.684	0.000	0.000		0.000	0.000
		N	195	195	195	195	195	195	195	195
	Competition	Correlation Coefficient	0.015	-.164*	-0.005	.555**	.307**	.487**	1.000	.625**
		Sig. (2-tailed)	0.837	0.022	0.949	0.000	0.000	0.000		0.000
		N	195	195	195	195	195	195	195	195
	Suppliers	Correlation Coefficient	0.099	-0.061	-0.020	.599**	.494**	.589**	.625**	1.000
		Sig. (2-tailed)	0.170	0.397	0.778	0.000	0.000	0.000	0.000	
		N	195	195	195	195	195	195	195	195

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

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