Green Gains Green: A View of How Sales is Affected by Sustainability and Innovation In A B2B Setting

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GREEN GAINS GREEN: A VIEW OF HOW SALES ARE AFFECTED BY
SUSTAINABILITY AND INNOVATION
IN A B2B SETTING

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Dedication

For my mother, Sylvia, and my grandmother, Eloisa. You always taught me to try to achieve more in life. You sacrificed so much, and I will always be extremely grateful for all you have done for me. Without you, Mom and Mema, I would not have reached such an immense achievement. For you taught me that to try is to succeed.
GREEN GAINS GREEN: A VIEW OF HOW SALES ARE AFFECTED BY SUSTAINABILITY AND INNOVATION IN A B2B SETTING

by

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DISSERTATION

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Abstract

The dissertation topic that I have chosen to study places both a prominent topic currently making waves in marketing with the field of marketing that has quickly become my specialty and my focus of research going forward. I have chosen to study green and sustainable measures that organizations currently put into practice along with how those sustainable initiatives affect the sales and revenue of that organization. The context of the study is in business-to-business (B2B). Specifically, this current research takes place in a new context that has seldom seen research in the current decade, as most of the research on environmental sustainability and sustainability related to sales has taken place in the business-to-consumer sector. In addition to studying the effects of sustainability on sales, the last part of the current research focuses on a new form of sustainable innovation that can help organizations to create a seller/buyer dyad for new relationships that will help to increase sales revenue.

The first paper concerns three different facets of sustainability and how selling organizations can use sustainability as a strength that would help the entire organization perform better relative to competitors, especially those that were not as committed to sustainability. The three facets, based on previous theoretical work, are the sustainability effort, reporting effort, and the compliance effort that the seller controls when marketing products to potential customers. Sustainability effort is an objective measure and has to do with the amount spent on sustainability initiatives from the organization as compared to the revenue generated by the organization as a whole. Compliance effort shows the range of sustainable initiatives that the seller is willing to undertake. Does the selling organization simply follow the law or does the organization go above and beyond what is required to be a truly responsible organization? Reporting effort takes a look at how information is disseminated to potential customers. This is
a range of how vague or specific the results of sustainable initiatives are reported out to potential customers. The theoretical viewpoints of institutional theory and organizational theory lead us to believe that these three facets will lead to differences in overall company image. Furthermore, this company image would then lead to changes in the purchase intention for customers. Also, since I am studying the seller/buyer dyad, we also interject a level of trust that can form between the buyer and the seller as a relationship is formed. I take a look at how trustworthiness of the salesperson can moderate the effect between company image and final purchase intention for customers.

The second paper is engrainged in a branch of equity theory called the value pricing model and presents a new way of how sustainable innovation can lead to the perceive value of products and subsequently, the purchase intention from the customer. The perceived value pricing model has been widely studied but is also now placed in a novel context that can help to explain much of the changes in product preferences when it comes to environmentally sustainable buying in a B2B context. Specifically, I discuss the principles of frugal innovation and how sustainability in frugal innovation can lead to the perceived value of products for the customer. There are three facets of frugal innovation, including focusing on core functionalities, reduction of cost to both the seller and the customer, and creation of a frugal ecosystem that encompasses the entire selling organization that can all lead to changes in the perceived value of products that the seller is marketing to potential customers.
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Chapter 1: The Time Has Come for a Sustainable Discussion: A View of Organizations and their Sustainable Efforts on Potential Customers

Introduction

More often we see in advertising and marketing campaigns that companies try to push the environmental attributes of their products or showcase the image of the organization as a whole as more sustainable and environmentally aware. As such, researchers within the past few years have dedicated considerable time and attention to developing models to reveal how sustainability initiatives that have become part of the identity of companies have led to changes in performance (Eccles, Ioannou, Serafeim 2014; Gupta, Rudd, Lee 2014; Wagner 2015).

Past research has addressed several aspects of introducing sustainability into the overall marketing strategy, the use of message communication to both inside and outside stakeholders, and efforts to close the gap between consumers’ beliefs and actual sustainable buying behaviors (McDonagh and Prothero 2014; Kumar and Christodouloupolou 2014; Davari and Strutton 2014). Previous studies in this area of interest serve as a strong foundation for this current research, which attempts to ascertain the variables that make a significant contribution to sustainability along with the context in which these variables are present.

One of the main tenets of sustainability is “green” marketing which revolves around the marketing strategies companies use to implement processes and products that are meant to help the environment. Green marketing is defined as the marketing and advertising that emphasizes the environmental friendliness of a product and the organization that sells those products (Manrai et al. 1997). Attributes such as degradability, recyclability, lower pollution et cetera are considered to be environmentally friendly (Elkington 1998).
There is a current need for organizations to turn their operations and sales towards sustainability or “green” operations. Many companies have heeded the call to improve their operations to address environmental issues by becoming more sustainable. The International Energy Agency, an intergovernmental organization with a presence around the globe, recently put a figure on the amount that is needed to stop and reverse the destruction that has happened over the last century due to poor manufacturing processes with minimal regulatory oversight. The amount that organizations, both small and large, must contribute collectively is $45 trillion, or just over a trillion dollars every year for the next 42 years to stop and then reverse the destruction that has happened over the last century due to poor manufacturing processes with minimal regulatory oversight (Kanter 2008). This is more than the total GDP of many industrialized nations. In fact, the executive director of the International Energy Agency, Nobuo Tanaka, called publicizing the figure as the first step in a global energy revolution. He called for immediate policy action to completely transform the way organizations operate and conduct their business (Kanter 2008).

The good news is that more organizations are turning toward green initiatives and have done so for the past few years. An example of a company that is just now starting to see the fruits of its labor is Bank of America. In 2007, Bank of America announced a 10-year, $20 billion business initiative to support clean energy usage, address climate change globally, and reduce the demand for natural resources in their operations (Hoffman 2008). Before these initiatives, Bank of America was seen as a wasteful company not aware of the impact such a large company could have on the environment. However, now it is seen as one of the most sustainable companies in the world, fully reaping the rewards that come with this designation (Razin 2016). Importantly, the company has hinted that its profits after going green and as a
direct result of their green initiative have risen between 8%-10% over the course of those 10 years where sustainability became a priority (Egan 2018, Heimer 2018). However, sustainability efforts are important because customers themselves expect them.

A recent survey found that 88% of people in the United States believe that taking care of the earth is a top priority (Sena 2019). Closely associated with this, a 2013 study claims that 71% of people in the United States consider the environment as a factor when shopping. This means that an overwhelming majority of people are interested in entering this movement toward green living (Sena 2019). However, the ability to properly evaluate the benefits that come from sustainability and the green movement has been ambiguous. Despite some notable exceptions such as the Bank of America experience discussed earlier, it is not yet clear how most companies benefit from sustainability and the green movement. Perhaps, this lack of clarity in how sustainability efforts might lead to real and substantial benefits might be due to the inconsistency in the metrics used to measure the results of sustainability efforts. In fact, such evaluations have often been conducted using any readily available data to the researchers (Delmas and Blass 2010). Thus, sustainability research encompasses several unexplored dimensions. Therefore, it is difficult to get a clear consensus on the effectiveness of such efforts in terms of producing results that are both beneficial to the environment and to the companies themselves.

Previous research has focused more on matching the reporting standard of corporations to the actual performance on the sustainable initiatives themselves (Delmas and Blass 2010). There has seldom been research on matching the communication, reporting, and performance on sustainability initiatives to increases or decreases in a potential customer’s intent to purchase that can take place as a result of these initiatives. Ultimately, companies must show that such initiatives have a positive impact on revenues, although such return on their investment in
sustainability might not be available for a long time. Therefore, using proxies such as purchase intentions might allow us to capture today what sustainability might bring tomorrow in terms of revenues. This is a gap that might impact marketing strategies a company undertakes to increase revenues (Gilley et al. 2000).

An investigation into the link between sustainable initiatives and performance of the organization is important because a report from 2014 shows that 55% of consumers across 60 countries are willing to pay higher prices for goods from environmentally conscious companies (Kim 2015). For those companies, this can be a big opportunity to tap into the mind of the consumer and sell products based on the green wants and desires of potential consumers. What this might suggest is that companies might be able to charge higher prices for environmentally safe products as long as they can convey the right messages to these potential customers and then be able to actually capture their business. Going green could actually result in higher relative profits as long as such efforts are not also offset by corresponding increases in expenses to put forward a green marketing mix.

This current study examines whether promoting environmental attributes of single products and the environmental attributes of the company itself can indeed bring a return on the investment that these companies make by pursuing green marketing strategies. This study also attempts to show that there are different components included in the story of sustainable initiatives. What remains to be seen is how higher fiscal performance can be generated through communication of green marketing expenditures including expenditures on making products more sustainable, compliance with organizations with oversight organizations, use of voluntary programs aimed at decreasing the company’s environmental footprint, and the reporting of green initiatives and the results of those initiatives.
Theoretical Development

Sustainability in organizations has been a strategy for companies to show their current customers and potential customers that they are operating at a certain level of responsibility for the environment, planet, and other people. However, the perceptions of customers about sustainability are based on how the selling organization is communicating their sustainable initiatives (Elkington 1998). There can be differences based on how the selling organization is complying with sustainable initiatives set forth either by themselves or set forth due to government action. Differences can also exist based on how much effort the organization is really expending to truly make a difference in the world and in society. Customers may be able to categorize companies on their sustainability efforts based on their perception of different organizations and their products (Johnson and Zinkhan 2015) and can ultimately have an effect on the performance of those companies in terms of sales and revenue (Ataman and Ülengin 2003).

A search of the literature over several years has shown that there are some distinct facets to sustainability and how sustainability is communicated to customers (Süpke et al. 2009; Godemann and Michelsen 2011; Newig et al. 2013). While the literature on sustainability is currently on the rise in many marketing circles, many of the articles available do not offer a comprehensive view of how sustainability has been communicated in the past. Research has touched on the financial impact that sustainability measures have on an organization, how organizations are perceived when they follow and do not follow compliance initiatives set forth by either the organization itself or from a governing body, and how organizations are able to communicate their success in sustainability efforts to affect the behavior of their customers.
Therefore, this study takes a much more comprehensive view than previous research to examine three different facets of sustainability that will affect how the company is perceived by its customers and how this may ultimately affect the performance of the selling organization, which communicates its green marketing efforts.

**Institutions**

The underlying premise that is used to support the relationships in this current study has been previously used to understand the need for organizations to follow rules and belief systems that are prevalent in the environment in which they are operating. I posit that institutional theory (Powell and DiMaggio 1991) will help set the underlying framework for the reason that institutions follow the wave of green products and marketing that has been so prominent over the last several years. I will drill down even further later in this study, but first, I must elaborate on how organizations need to follow the status quo in order to survive.

Institutional theory (Powell and DiMaggio 1991) tells us that, in order to survive, organizations must conform their operations to the rules and belief systems that are the most prominent in the business environment in which they are currently operating. Furthermore, Powell and DiMaggio (1991) build on the work of Meyer and Rowan (1977) to introduce the concept of institutional isomorphism. Institutional isomorphism means that an organization will try to become similar in form or structure to the surrounding environment in which it operates. In other words, an organization will try to mimic what other organizations do depending on the business environment. With the business environment being predominantly engaged in green products and in green practices at the current time, organizations will follow suit and also engage in manufacturing and selling green products while trying to show stakeholders in that same
environment that they are engaged and responsible in their operations (Nguyen and Slater 2010). The question that I am trying to answer with this current study is what levels of green practices and green operations reporting practices will help to make an impact on the bottom line of a company, if at all. Therefore, I move to another organizational theory that shows that organizations have a need to pair these green operations with a drive for higher revenue and more profits in the long run.

Organizations

A driving force for the need for organizations to pursue higher revenues comes from Organizational Theory (Likert and Bowers 1969; Waldo 1978; Jones 2013). This theory tells us that organizations have the need to accomplish a common goal for all members of that organization. In this case, the goal would be to have a healthier bottom line by increasing revenue through higher sales of their products, which in turn equates to more commission dollars in the pockets of the salespeople (Elkington 1998; Jones 2013). Furthermore, organizational theory takes into account the interplay between individuals and the organization itself. This includes the interplay between internal employees and external customers of that organization and the political and cultural environment that is part of that interplay between stakeholders of the organization. Since the current environment consists of green practices and a green product mindset, the internal stakeholders of that organization would need to interact with their customers in this green environment in order to reach their end goal of increasing sales and increasing the revenue for the company as a whole. Again, the question raises the concern of the level of green marketing, reporting, and complying to those green initiatives that would create the best chance for reaching that end goal.
Three Facets of Sustainability

Sustainability effort is one of the facets of communicating sustainability and is defined as how important environmental initiatives are as part of company operations (Brown et al. 1987). It can be measured as how an organization can communicate the sustainable initiatives that they have committed to and the results that come from those initiatives. It is a measure of different facets of sustainability the organization puts into their overall sustainability program and what they get out of the sustainable measures that they have committed to in their communications to potential customers (Brown et al. 1987; Morelli 2011). This outcome affects how customers perceive that organization and how that organization can leverage their efforts for greater company image and success (Johnson and Zinkhan 1990). Sustainability effort helps to show that awareness for the environment and awareness of the need for environmental controls in operations is prominent within the structure of an organization’s overall operations. This also helps to communicate to customers that the selling organization is willing to spend more effort to operate at a more responsible level while still providing the right products and customer service to their customers.

Sustainability Effort- Communication

Communicating the efforts of sustainability and compliance with environmental efforts is key for an organization that is trying to gain potential business. However, there are differences in what is communicated and how it is communicated to potential customers. As mentioned above, there are differences if a seller has the ability to affect the perceived company image in
the mind of potential customers. In either case, there are some methods to dealing with this perception.

When customers are able to attribute their efforts to the seller’s internal efforts, the sustainability communication designed and distributed by the company itself about its sustainable and environmental efforts helps to create a positive image to potential customers (Morsing 2006; Van de Ven 2008). One approach could be to build a virtuous corporate brand, which means making an explicit promise to the stakeholders and potential customers that the corporation excels with respect to their sustainability endeavors (Van de Ven 2008).

Compliance Effort- Voluntary Measures

A second facet of sustainability is the compliance effort that is put forth by the organization. This is defined as putting forth effort in terms of only complying with laws or regulations of a governing body, or if the organization is willing to go above and beyond and create a voluntary program to increase their sustainability efforts on their own (Derkx and Glasbergen 2014). An example of this would be an organization complying with federal laws on waste management with no other sustainable programs in place. This would be an organization on the lower end of the compliance spectrum in that that are just following the rules and do not want to put forth more effort and time to make their organization perceived as being more sustainable (Komives and Jackson 2014). An organization on the higher end of the spectrum would be one that follows part of all of the United Nations 21 Sustainability Initiatives. These are voluntary initiatives that companies can implement and can do so at their own cost and on their own time, thus effectively making this an organization that wants to create a better environment based on their own beliefs (Derkx and Glasbergen 2014). In other words, this
organization goes above what is regulatory and instead chooses a way of operating that helps to enhance the environment. It is the hope of this organization that this perception by customers will lead to a favorable company image.

**Compliance Effort- Green Claims**

Sustainability in the eyes of consumers means that the organization that needs to identify themselves as green producers and sellers of products that will help the environment. It needs to make certain claims and disseminate information that will help show customers that the selling organization goes beyond what is required and institutes their own sustainable goals. Previous studies have shown that green claims by themselves have had a powerful effect in promoting the association of an organization with care for the environment (Olsen et al. 2014). However, studies have also shown that green claims are just a part of the story that organizations can use to assert their position as green sellers. A seminal study by Manrai et al. (1997) showed that when green claims made by an organization were paired with the country of origin of products, the interaction of consumers listening to these green claims and being aware of the country of origin of these products affected the product evaluation in terms of its greenness and company image in terms of its awareness of the environment. There was a threshold though. The strength of the claim can cause the reverse effect to happen. If the claim was too strong or too weak, then the effects were actually the opposite of what was expected. In this case, the green claim worked in conjunction with another factor that ultimately affected the customer. In this current research, I also make the assertion that these green claims work in conjunction with other parts of sustainability to tell the overall story of the organization so that customers can judge the organization as green or non-green for themselves.
While the claims work to make consumers aware that the organization is alert and cares for the environment, these claims and their strength also work in conjunction with other information that the company disseminates that will have an effect on the company image that can ultimately affect sales.

Compliance Effort- Message Strength

Another aspect in which organizations disseminate information and report on the impact that their environmental initiatives have involves the strength of the message itself. Message strength is defined as the extremity in the claims that the organization makes known to customers (Olsen et al. 2014). On one end of the spectrum, we have messages that are low in strength in that they mention one or two easily attainable goals for the organization, over a long time period. On the other end of the spectrum, we have messages that are high in strength in that they have a wide variety of goals that are not easily attainable in a short time period (Goldberg and Hartwick 1990). In the study by Goldberg and Hartwick (1990), strength of the message had a significant interaction with the image of the organization that was disseminating that message. In the Goldberg and Hartwick (1990) study, their findings allowed them to find the information that was being propagated by organizations to be credible or not credible, which transferred over to the organization in terms of the image that the organization was portraying.

Reporting Effort

A third facet of sustainability is the way that sustainability initiatives are reported. Many organizations have reports, whether they are annual, semi-annual, or dedicated solely to sustainability efforts. Within these reports, there can be a variety of ways in which the
organization can report the results of their sustainability efforts. One example would be to make a statement from upper management that says that carbon (CO₂) emissions have been cut steadily year over year without giving any factual numbers or objective information that can help those who are reading these reports see that there has truly been a significant impact on CO₂ emissions.

On the other side of the spectrum, there are those organizations with reports that have full objective measures to show that there has been a significant impact in their CO₂ emissions initiatives or for the rest of the initiatives as well (Derkx and Glasbergen 2014). This difference between each side of the spectrum may lead to differences in how the overall organization is perceived in the mind of customers and potential customers that they are trying to attract.

**Reporting Effort- Specific and Vague Claims**

In addition to the claims made by the selling organization, the reporting done by the organization to show customers and stakeholders in the company that their impact on the environment can be either specific with real and objective information or vague with subjective and opinionated findings. The work of Kangun, Carlson, and Grove (1991) indicate that consumers are able to distinguish between specific and vague claims. Furthermore, positive claims that had objective information and were more specific resulted in positive perceptions of the products and the organization that sold those products. In the same way, those claims that were subjective and were vaguer resulted in more negative perceptions of the product and the selling organization (Davis 1993). This means that organizations should be adopting more objective and specific ways to disseminate their information and the final results of their green marketing campaigns. However, when paired with the amount spent on green marketing and the effort of setting up voluntary programs or simply falling into compliance may lead to a different
scenario. As we have seen, when claims are paired with different metrics as in the study by Manrai et al. (1997), these could lead to very different results.

Company Image

Company image refers to the impression of a particular company held by any segment of the customers and potential customers that a company serves (Spector 1961; Margulies 1977; Topalian 1984; Kennedy and Sherril 1993). Company image is ultimately decided from the viewpoint of the customer. Two other related facets of company image which are corporate personality and corporate identity, are more directly controllable by the organization. Although company image is defined as being outside the direct control of the corporation, the corporation can influence and shape company image by the corporate identity it chooses to project (Johnson and Zinkhan 1990). This identity is shaped by the sustainability initiatives that the company follows or creates itself, the level of compliance that they follow, and how they circulate this information to the public and to customers.

Green Positioning

Going green can have significant effects on the sales that a company is able to generate as well as how they gain new customers. Research by Raska and Shaw (2012) show that consumers can have a skeptical approach when it comes to interpreting a firm’s environmental initiatives and that their responses can be based on the brands that the organization sells. One of the most prominent findings was that physical branding of the product, including the green claims on the product, makes a difference, as well as how the environmental initiatives are presented to them (Raska and Shaw 2012). Therefore, the branding of the products presents an
opportunity for the organization to make their products salient in the minds of consumers along with the green initiatives that are on that branded product. However, there is an interaction between this branding and the presentation of these green initiatives. If the organization selling those products is able to position themselves as a major player in the green industry from the dissemination of information through branding, then they will have an advantage over their competitors that do not have this positioning power. However, if the presentation of these green initiatives does not allow for customers to fully understand the benefits of these green initiatives of the selling organization, then consumers and new potential customers will have a less favorable view of the selling organization. The brand has to become prominent in the minds of consumers from the correct message sent from that selling organization.

**Societal Initiatives**

A firm’s societal initiative also should be taken into account. A societal initiative is defined as a plan laid out by an organization that outlines ways to improve the lives of others or the organization itself (Becker-Olsen et al. 2006). This societal initiative can also include green plans laid out by the organization, both for voluntary and for compliance purposes. Prior research suggests that consumers evaluate firms they are connected with differently when they attribute a firm’s green and non-green initiatives to motivations to help others (e.g. help the poor, assist with community development, raise awareness for a specific cause such as a physical or mental illness) as opposed to motivations to help themselves (e.g. to increase profits, increase revenue, or increase the market share of a particular brand). When motivations are considered self-serving, positive attitudes toward firms are likely to decrease; whereas when motivations are deemed to help others, positive attitudes are more likely to increase (Becker-Olsen et al., 2006).
In addition, when the motives of the organization are meant to help others and improve the lives of others rather than helping solely the organization, they can have a stronger impact on the final evaluation from the customer on the organization. When motivations are meant to help others, customers tend to evaluate a firm more positively, even if their initial reaction raised questions about the firm’s motivations before evaluation of that organization (Foreh and Grier 2003).

However, firms need to be especially careful of how they communicated their motives to customers. Prior research has found that customers evaluate the motivations of firms as more self-serving if the green initiatives of these companies is more aligned with the core business of the organization (Ahluwalia et al., 2000, 2001, Peters 2010). What has not been studied in the past includes how voluntary and involuntary programs can have different effects on the evaluation of the organization in the minds of customers. This research helps to put this into perspective to understand the need for organizations to create programs themselves voluntarily to serve others.

H1: The perceived communication of sustainable initiatives will be positively related to company image.

H2: The perceived sustainable compliance efforts will be positively related to company image.

H3: The perceived specificity of sustainable results will be positively related to company image.
Figure 1.1: Chapter 1 Theoretical Model

Purchase Intention

The purchase intention of the customer can be significantly affected by the image of the company. However, there are also some antecedents that have been found in previous research in addition to the antecedents that are used in this current research. A previous study by Ko et al. (2013) summarizes previous findings and shows that corporate images consist of three factors: social responsibility, product image, and corporate reputation. Of the three factors of corporate image, all factors of product image, corporate reputation, and social responsibility have a significant effect on the purchase intentions of customers. However, in the Ko et al. (2013) study, corporate image was found to be affected by antecedents such as the product reputation and product quality in other studies. In fact, in these studies, social responsibility had an indirect significant effect as a meditator that subsequently drove corporate image and purchase intentions of customers. The finding of these studies show that firm are able to build corporate images on a basis of green marketing. In this research, I use three forms of social responsibility including sustainable efforts, reporting efforts of sustainable results, and compliance efforts, to make the
assertion that each one can directly contribute to increase positive company image and in turn, increase purchase intention on the part of the customer.

Furthermore, once antecedents have been established, I now turn to the outcome that can result from the establishment of a corporate image that is green and cares for the environment and the people. Within the context of green marketing, the concept of corporate image also applies to corporate association, in which socially responsible programs strongly affect consumers' hallmarks of corporate image, and in turn corporate outcome and the willingness of customers to purchase products from that organization (Berens et al. 2005; Ellen, Webb, Mohr, 2006). Therefore, an important point of green marketing within an organization is to establish a favorable corporate image construct determined by consumers. In turn, there will be positive outcomes from this corporate image that will translate into sales of products and services for the company (Yoon et al. 1993).

There have been multiple studies on corporate image that indicate a positive relationship between corporate image and purchase behavior or loyalty (Miles and Covin 2000; David et al. 2005; Keh and Xie 2009; Kang and Yang 2010). A culmination of these studies allows us to use two complementary theoretical viewpoints to show how corporate image can have a significant effect on the purchase intentions of customers.

The first of these involves a positive view of products that results from corporate image. A study by Herbig and Milewicz (1995) suggests that the more favorable the corporate image is on the part of the customer, the more the likelihood the consumer evaluates the product offerings of the green company positively, which suggests the importance of corporate image in purchase behavior. This favorable view on the products should then lead to higher intent to purchase those products by the customer (Ko et al. 2013).
The second of these theoretical viewpoints comes from a study done by Ha (1998). This viewpoint works with reducing the difficulty of purchase decisions rather than trying to increase the positive perception of the products. This point of view tells us that corporate image is a critical predictor of purchase intention for multiple products and services including but not limited to electronics, insurance, stocks, and automobiles. Favorable corporate image in the minds of the customer may reduce the difficulty of purchase decisions, thus allowing for easier sale of products and services to customers (Yoon et al 1993; Ha 1998).

Whether companies are trying to increase the positive perception of products or reduce the difficulty of purchase decisions, in green marketing, researchers focus on the consumers' perception of corporate image as a consequence of corporate social responsibility activities. Corporate reputation regarding environmental initiatives significantly influences consumers' decision making to purchase a product of the company due to viewing that company in a favorable way (Drumwright 1994). Previous studies show that customers’ awareness of a company's environmental activities is more likely to generate a positive attitude toward that company (Jeong 2006; Sen, Bhattacharya, and Korschun 2006; Yoon and Suh 2003). The awareness of those environmental initiatives can cause the consumer to form a more favorable image with the company which then leads to a greater likelihood that the consumer makes a purchase (Drumwright 1994).

Corporate image is a critical predictor of purchase intention in the way that the product-related corporate image makes consumers reduce risks of purchase decision (Ha 1998). In addition, corporate reputation increases a consumer's purchase intention of the product. Such understanding the effectiveness of green marketing may help consumers develop a strong trust.
toward the company as well as its product quality, ultimately accomplishing greater business and sales performance (Yeung and Ramasamy 2008).

H₄: Perceived organizational company image is positively related to purchase intent.

**Trustworthiness of the Salesperson**

At the forefront of marketing, there needs to be exchange between a buyer and a seller. Trust is an element that helps to facilitate this exchange between parties (Swan and Nolan 1985). Work summarized by Schurr and Ozanne (1985) in the behavioral sciences holds two assertions concerning the trustworthiness of the salesperson. The first is that trust leads to a constructive dialogue and cooperation, which facilitates goal clarification, exchange of information, and commitment to follow through with agreements. The second assertion takes an opposite approach. This assertion tells us that mistrust arouses defensive behavior, such as evasive communications, which conceal the true nature of the relationship between the buyer and the seller. In this case, mistrust would not facilitate exchange of information or goods between parties. Gaining customer trust is a worthwhile goal for an industrial salesperson.

A seminal study by Kotler (1984) shows that personal selling is evolving towards the salesperson as a "relationship manager" who is able to build strong ties with important customers. The key actors in the process are the salesperson and the organizational buyer. Relationship marketing theory tells us that organizations recognize the long-term value of customer relationships and extend communication which helps to facilitate continued business operations with one another (Morgan and Hunt 1994). In fact, relationship marketing can contain several dimensions that help to facilitate exchanges and purchases based on the view of
the salesperson and the organization which I will discuss in the subsequent section (Jackson 1985; Dwyer Schurr and Oh 1987; Gronroos 1990; Ganesan 1994). Trust increases as the customer gains the impression that the salesperson is dependable, honest, competent, customer-oriented, and likeable. This in turn helps to facilitate the business relationship that will help both the buyer and the seller (Swan, Trawick, and Silva 1985).

The Holistic Organization

Now as I have discussed, the individual salesperson and their fit within the relationship marketing framework, I also present an updated view of relationship marketing that encompasses the view of the organization as a whole. There are two different types of relationship theory that exist. The first is a network-based or more interorganizationally-oriented relationship management, meaning that relationship management now extends to encompass the entire organization, rather than just the individual person representing that organization. In this way, as the buyer judges the overall selling organization for the seller’s sustainable practices, then the buyer is able to make the decision to engage with that organization or continue a relationship with that organization (Möller and Halinen 2000). Also, as the trust for the organization as a whole continues to increase, then this will lead to an increase in positive perception of the seller and increase in purchase intent on the part of the buyer (Swan, Trawick, and Silva 1985; Möller and Halinen 2000). The positive relationship aspects between buyer and seller can also be attributed to the organization and not just a single person within that organization. This helps to set the precedence that purchase intention can be affected by the image in which a company portrays itself.
In addition to the relationship marketing framework, the Gronroos conceptualization includes the empirical verification of the mediating role of overall relationship satisfaction in the formation of a long-lasting relationship (Gronroos 1990). The effects of trust and commitment are also verified that show that these attributes are necessary for increasing the intent of a buyer to engage with an organization. The study integrates the concepts of trust and commitment, demonstrating the benefits of investing in relationships. In this model, trust is built on the buyers' view of the business in a holistic way (Caceres and Paparoidamis 2007).

H₅: Perceived trustworthiness of the salesperson strengthens the relationship between company image and purchase intent.

Methodology

In addition to the empirical study presented later in this article, I conducted interviews with people responsible for B2B purchasing in a variety of industries. I felt that in order to better understand sustainability in the novel context that this overall study is placed, I would need to understand the focus of B2B purchasers pertaining to sustainability in physical products and the sustainability in the overall company from which they purchase, while increasing my understanding of their strategic plans for their entire supply chain. I was able to talk with 10 purchasers who worked in purchasing physical manufactured goods for resale. While talking to these purchasers, I found that their focus on buying sustainable goods had risen in recent years and a few of them also mentioned that their need for sustainability throughout their supply chain was also a very much needed aspect that they needed to increase strategically over the next few years to rightfully compete with their direct competitors and others in the same market. This
leads me to believe that introducing or increasing sustainability is at the forefront of the selling businesses so that these sellers can be on the same level as their potential buyers when it comes readily offering products that are environmentally sustainable. This supports the theoretical view that sellers will follow suit to make sure that they are all on the same playing field when it comes to how they are viewed in the eyes of potential customers when it pertains to being a sustainable company that offers green or green-like products (Powell and DiMaggio 1991). Therefore, I undertake the following empirical study to help support this theoretical view.

**Scales**

The scale for sustainability effort was first introduced by Belkaoui and Karpik (1989). However, the scale was updated later in 2006 as part of an effort to improve the scale for future research (Brammer and Pavelin 2006). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree, with 7 items. The scale showed high reliability using Cronbach’s Alpha at .94. I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.75. The CFA model shows good fit (CFI= 0.90, RMSEA= 0.01) (Hair et al. 1998).

**Compliance Effort**

The compliance effort scale was a fairly long scale that needed further analysis to create a more parsimonious scale in what it was truly going to be measuring as part of the study (Hair et al. 1998). The scale that was used came from the work of Coopers & Lybrand (1993) and
Bebbington et al. (1994) and originally contained 10 items. Both an EFA and CFA were performed to reduce the items in the scale. The final reduced scale contained 3 items, which allowed the model to not be over or under identified (Byrne 2010). The reduced scale showed high reliability using Cronbach’s Alpha at .92. The final scale contained items that measured both the message strength and the green claims for the future that the selling company would disseminate to potential customers. The scale was a 7-point Likert-type scale. All items loaded significantly on their respective factors above 0.60 (CFI= 0.90, RMSEA= 0.01) (Hair et al. 1998, Peterson 2000).

**Reporting Effort**

The scale for reporting effort was first introduced by Sinclair and Walton (2003). However, the scale was recently updated to include 7 total items (Vartiak 2016). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed high reliability using Cronbach’s Alpha at .94. I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.70. The CFA model shows good fit (CFI= 0.90, RMSEA= 0.01) (Hair et al. 1998).

**Company Image**

The scale for company image was first introduced by Zeithaml, Berry, and Parasuraman (1996) with an update to the final items by Brewer and Hensher (1998). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed
high reliability using Cronbach’s Alpha at .89 with 6 items in the final scale. I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.50, which shows that these factor loadings, even while lower than others for the different scales used, leads to overall better model fit, especially in a sustainability research context (Peterson 2000; Truong and McColl 2011; Chahal, Dangwal, and Raina 2014). The CFA model shows good fit (CFI= 0.90, RMSEA= 0.01) (Hair et al. 1998).

Salesperson Trustworthiness

The salesperson trustworthiness scale was adapted from the longer trustworthiness scale introduced by Lau and Chin (1993). The full scale included over 25 items and further analysis was needed to reduce the scale to a more manageable size through factor analysis (Hair et al. 1998). An EFA and CFA were performed to reduce the items in the scale. The final reduced scale contained 6 items, which is acceptable for a model with these number of constructs (Byrne 2010). The reduced scale showed high reliability using Cronbach’s Alpha at .94. The final sale contained items that emphasized the character of the salesperson to build a lasting relationship with the customer in order to extend communication and facilitate continuing transactions between the buyer and seller (Morgan and Hunt 1994). The scale was a 7-point Likert-type scale. All items loaded significantly on their respective factors above 0.50 (CFI= 0.90, RMSEA= 0.01) (Hair et al. 1998; Peterson 2000).
**Purchase Intention**

The scale for purchase intention was first introduced by Spears and Singh (2004) with an update to the final items by Chen and Chai (2010). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed high reliability using Cronbach’s Alpha at .87. I conducted both an EFA and a confirmatory factor analysis CFA using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.60. The CFA model shows acceptable fit (CFI= 0.90, RMSEA= 0.01).

**Pretesting**

The first action done for the survey was to gauge to see if the items and their meanings were able to be understood by those participants taking the survey. The first platform for gathering data for pretesting that I decided to use was Amazon MTurk. Amazon MTurk allows for quick, high-quality responses from people in the role of purchasing and marketing from a variety of different industries in the United States and abroad. However, for this pretest, I decided to limit the sample to marketing employees in a purchasing role in the United States, since this sample was being used for exploratory purposes. MTurk yielded 75 usable responses. No issues were reported in clarity or understanding from both the individual and the pretesting participants. The feedback was positive and no major changes to the survey were needed.

An EFA and CFA was performed on the pretest data. The CFA showed emerging success model fit with a CFI of .87 and an RMSEA of .11. However, for pretesting and with a low sample size compared to the number of constructs for the overall model, these model fit
statistics were emerging for support in the overall model (Fan, Thompson, and Wang 1999, Westland 2010).

The structural model was also run in SPSS AMOS Graphics (v26). The overall model fit also showed emerging promise with a CFI of .87 and RMSEA of .10. The path from Sustainability Effort to Company Image was significant (coefficient= .499, p<.05). However, in the pretest, Compliance Effort and Reporting effort did not show significant paths to Company Image. The path from Company Image to Purchase Intent was significant (coefficient= 1.142, p<.05). The moderation effect from Trust was also significant (coefficient= .425, p<.05). With these emerging and promising results, I felt that a sample of high-quality data with an appropriate sample size would bring out the full significance of the overall model.

**Full Sample- Sampling Procedure**

The data used to study the model was collected through a Qualtrics panel survey of B2B purchasers in the United States. A variety of industries were included to extend the generalizability of the results of the study. Only industrial purchasers were included in the study. Sales managers, salespeople, and other employees with a relation to sales were not included in the final sample. Demographic information for the salespeople were collected. The range of income was from a yearly salary of below $50,000 a year to above $200,000. Experience also ranged from less than 5 years to more than 20 years in a salesperson role.

**Final Sample**

The final surveys were distributed to 265 potential participants. However, there were some responses that were not usable for the study. Using a screening question to make sure that
purchasing was the primary responsibility of each respondent, I reduced 265 participants to 185 participants. After reducing the sample for respondents failing two attention-check questions, straightlining their answers (e.g. answering a 7 on the Likert scale all the way through), or taking less than 5 minutes to answer the survey, the final sample of usable responses totaled 174 (66% response rate).

Measurement

Table 1 reports the statistics for the factor analysis. All measures showed good reliability. Table 1 also shows the average variance extracted (AVE) for each of the constructs. The high AVEs relative to the squared correlations in Table 2 tells us that there is discriminant validity among the constructs (Dawson 2014). Table 2 shows the factor correlations among the 6 extracted factors.

Table 1.1: Chapter 1 Factor Analysis

<table>
<thead>
<tr>
<th>Factor Analysis</th>
<th>Factor Loading</th>
<th>Cronbach's Alpha</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sustainability Effort</strong> - With respect to my main supplier’s efforts in environmental sustainability, my supplier:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>publishes an environmental report.</td>
<td>0.782</td>
<td></td>
<td>0.940</td>
<td>0.736</td>
</tr>
<tr>
<td>CEO/president has signed the environmental policy.</td>
<td></td>
<td>0.758</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has transparency guidelines for sustainable information.</td>
<td></td>
<td>0.936</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has clear sustainability initiatives.</td>
<td></td>
<td>0.938</td>
<td></td>
<td></td>
</tr>
<tr>
<td>has sustainability improvement targets.</td>
<td></td>
<td>0.880</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reports actual sustainability performance numbers.</td>
<td></td>
<td>0.893</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
sustainable performance results are verified by a third party.  

| Compliance Effort- With respect to my main supplier's environmental compliance, my supplier |
|------------------------------------------|------------------|------------------|------------------|
| follows only legally imposed environmental requirements.                        | 0.920            | 0.502            | 0.742            |
| only sets sustainability goals that are easily attainable.                       | 0.620            |                  |                  |
| sets only short-term goals.                                                       | 0.760            |                  |                  |

<table>
<thead>
<tr>
<th>Reporting Effort- With respect to my main supplier's reporting of environmental initiatives and results, my supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>reports authentic goals of operations regarding how they affect the supplier's environmental impact.</td>
</tr>
<tr>
<td>reports unbiased goals of operations regarding how they affect the supplier's environmental impact.</td>
</tr>
<tr>
<td>uses specific measures when reporting environmental impact.</td>
</tr>
<tr>
<td>reports specificity of information that is needed when collaborating with financial institutions.</td>
</tr>
<tr>
<td>provides data that will satisfy lobby group concerns.</td>
</tr>
<tr>
<td>reports sustainability results in a competitive manner as compared with other companies.</td>
</tr>
<tr>
<td>helps shareholders/investors track progress over time.</td>
</tr>
</tbody>
</table>

<p>| Company Image- Please tell me your level of disagreement or agreement with the following aspects of your main supplier:     |
|---------------------------------------------------------------|------------------|------------------|------------------|
| Buying stock in that supplier would be a good investment.        | 0.890            | 0.531            | 0.871            |</p>
<table>
<thead>
<tr>
<th>Statement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The supplier often introduces innovations.</td>
<td>0.447</td>
</tr>
<tr>
<td>The supplier’s higher management is committed to the organization.</td>
<td>0.533</td>
</tr>
<tr>
<td>That supplier has appealing advertising of products/services.</td>
<td>0.520</td>
</tr>
<tr>
<td>I have heard/experienced positive things about this supplier.</td>
<td>0.808</td>
</tr>
<tr>
<td>That supplier is my first choice for high quality products/services.</td>
<td>0.522</td>
</tr>
</tbody>
</table>

**Purchase Intent** - Please describe your overall feelings about any supplying company with respect to purchasing goods.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will engage with a supplier with high environmentally sustainable goals.</td>
<td>0.714</td>
</tr>
<tr>
<td>I intend to buy products from a supplier with high environmentally sustainable.</td>
<td>0.630</td>
</tr>
<tr>
<td>I have high purchase interest for any products that come from a supplier with future environmental goals.</td>
<td>0.806</td>
</tr>
<tr>
<td>I will buy products from a supplier that has awareness of current environmental issues.</td>
<td>0.829</td>
</tr>
<tr>
<td>I have high purchase interest for any products that come from a company with environmental goals for the future.</td>
<td>0.847</td>
</tr>
</tbody>
</table>

**Trustworthiness** - With respect to the salesperson from the main supplier that you interact with:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The salesperson will admit the disadvantages of the product and/or service.</td>
<td>0.510</td>
</tr>
<tr>
<td>The salesperson would not try to convince me to buy more product, even if he/she thinks it is more than a wise customer would buy.</td>
<td>0.743</td>
</tr>
</tbody>
</table>
The salesperson will not tell me that a situation is beyond their control when it is not. 0.789
The salesperson does not break the law, no matter how trivial the consequences may be. 0.691
The salesperson abides by all laws. 0.817
The salesperson does not make more promises than what they can deliver. 0.719

Table 1.2: Chapter 1 Factor Correlations

<table>
<thead>
<tr>
<th>Correlation</th>
<th>SustainEffort</th>
<th>CompEffort</th>
<th>ReportEffort</th>
<th>CoImage</th>
<th>PurchaseIntent</th>
<th>Trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>SustainEffort</td>
<td><strong>0.736</strong></td>
<td>0.071</td>
<td>0.792</td>
<td>0.550</td>
<td>0.441</td>
<td>0.214</td>
</tr>
<tr>
<td>CompEffort</td>
<td>0.267</td>
<td><strong>0.502</strong></td>
<td>0.120</td>
<td>0.062</td>
<td>0.030</td>
<td>0.024</td>
</tr>
<tr>
<td>ReportEffort</td>
<td>0.890</td>
<td>0.347</td>
<td><strong>0.728</strong></td>
<td>0.564</td>
<td>0.444</td>
<td>0.259</td>
</tr>
<tr>
<td>CoImage</td>
<td>0.742</td>
<td>0.248</td>
<td>0.751</td>
<td><strong>0.531</strong></td>
<td>0.523</td>
<td>0.516</td>
</tr>
<tr>
<td>PurchaseIntent</td>
<td>0.664</td>
<td>0.174</td>
<td>0.666</td>
<td>0.723</td>
<td><strong>0.642</strong></td>
<td>0.265</td>
</tr>
<tr>
<td>Trust</td>
<td>0.463</td>
<td>0.154</td>
<td>0.509</td>
<td>0.718</td>
<td>0.515</td>
<td><strong>0.557</strong></td>
</tr>
</tbody>
</table>

Notes: Intercorrelations are presented in the lower triangle of the matrix. Average Variance Extracted for each scale is depicted in boldface on the diagonal. Squared correlations are given in the upper triangle of the matrix.

**Structural Equation Modeling**

I use Structural Equation Modeling (SEM) as the method to test the relationships in the model. The overall model presented earlier has several different potential relationships including overall main effects, mediating influences, as well as moderating influences. I analyzed the effects of the overall model using structural equation modeling (Wright 1934; Pearl 1998; Sivo et al. 2006, and Hu and Bentler 1999). Each of our constructs has indicators that allow measurement of the overall latent construct. This method is preferred because it estimates the multiple and interrelated dependence in a single analysis. The structural model was analyzed using SPSS AMOS v26.
**Common Method Variance**

A concern of common method variance came up during the process of measurement analysis and analysis of the CFA before the final structural equation model was produced and scrutinized. I used the marker variable method in the analysis to determine if there was common method variance (Simmering et al. 2015). I collected data on the construct of Green Customer Loyalty and allowed this construct to be related to the final overall endogenous variable of Purchase Intention in the structural model. According to Simmering et al. (2015) the marker variable should not have significant influence on the endogenous variable or in the relationships in the overall model. The model did not change model fit with or without the marker variable included in the model (fit indices including CFI and RMSEA also did not change) and the overall relationships between constructs also remained the same, meaning that the marker variable did not affect the overall model or the relationships in the model. Therefore, I can conclude that there is no common method variance in the analysis (Simmering et al. 2015).

**Control Variables**

Control variables in the study were also used to find any differences among sales employees. The control variables included gender, income amount, length of working in a purchasing role, and length of tenure with the current company. Overall, the control variables were not significant in the structural model and show no support for differences among the different purchasing employees. Therefore, my findings are generalizable to multiple industries with purchasers with different professional experience, income, and across genders.
Results

The overall structural model provided excellent fit (CFI=0.92, RMSEA=0.01) (Marsh, Kit-Tai, and Grayson 2005; MacDonald and Ho 2002; Hair et al. 2012). No modifications including the use of modification indices were used to make changes to the model since the overall model had excellent fit with the proposed structural model from the previously mentioned theoretical views (Schreiber et al. 2006; Hazen, Overstreet, and Boone 2015).

Sustainability Effort and Company Image

As hypothesized, I find support for the first hypothesis of the model (H1) (coefficient=0.209, p<.05). The analysis showed the relationship between Sustainability Effort and Company Image to be a significant, positive effect. In this way, I am able to show that communication in support of green initiatives and sustainability helps to increase the positive company image of the seller as it pertains to the viewpoint from the potential buyer. The seller is willing to spend more effort to make their product offerings greener and to meet the needs of their buyers (Brown et al. 1987; Morelli 2011).
Compliance Effort and Company Image

Compliance Effort from the selling company contains any voluntary measures that the seller is willing to put in place along with how that selling company is communicating those measures out to potential buyers. However, one of the main questions that this current research is trying to answer is do these voluntary measures and the message claims and strength they come with make a significant difference in how a potential buyer will view a seller.

I do not find support for H2 in that compliance effort does not make a significant difference in company image (coefficient= -0.001, p>.05). Through this finding, I show that voluntary measures as compared to regulatory measures that are part of the sustainable blueprint of the seller as well as the claim content and strength of the message do not make a difference in the mind of the potential buyer. They do not significantly affect the image of the selling company in a B2B setting.

Reporting Effort

I find support for the third hypothesis of the model (H3) (coefficient=0.331, p<.05). The analysis showed the relationship between Reporting Effort and Company Image to contain a significant, positive effect. There are differences between the vague and specific reporting of sustainable initiatives with potential buyers liking the specific measures that sellers report out. These seller disseminated reports of specific measures help to increase the positive company image of the seller. This finding supports the theoretical view that potential customers are able to distinguish between vague and specific sustainability measures reported along with the ability to discern between objective and subjective information reported by sellers and in this way the
specific measures with objective information resulted in an increase in the positive company image of the seller (Kangun, Carlson, and Grove 1991; Davis 1993).

**Company Image and Purchase Intention**

One of the benefits of using structural equation modeling to study the overall model of constructs is that, while I am able to show that as sustainability effort and reporting effort were both significant contributors to company image, I am also able to show that company image is a significant contributor to increased purchase intention. I did find support for H4 in that positive company image leads to an increase in purchase intention (coefficient = .833, p<.05). This supports the overall model in showing that as sustainability effort and reporting effort help to increase the positive company image, this will in turn translate to an increase in the purchase intention of the buyer. This finding supports the theoretical view that as a buyer starts to perceive the seller as environmentally responsible, the buyer is more willing to increase their purchase behavior toward the seller (Herbig and Milewicz 1995). This newfound reputation for the seller now helps to ease the buyers’ disinclination to consider to purchase from the seller that the buyer originally knew nothing about in terms of the seller’s overall repertoire of sustainability (Drumwright 1994; Hartmann and Apaolaza-Ibáñez 2012). This new favorable image of the company now becomes the predictor that purchase decisions now become less difficult for the buyer. In the same way, favorable company image fosters an easier sale of physical products to buyers (Gürhan-Canli and Batra 2004). What is even more interesting is that as the buyer becomes more at ease purchasing from the seller, the level of trust between buyer and seller also tends to increase (Ha 1998).
Moderation

I conducted an analysis of the potential moderating effects of salesperson trustworthiness on the relationship between company image and purchase intention. I used the approach laid out by Aiken and West (1991). The main tenet of moderation also comes from Aiken and West in the following form:

\[ Y = b_1X + b_2Z + b_3XZ + b_0 \]

where: \( Y \) = continuous dependent variable, 
\( X \) = continuous independent variable, 
\( Z \) = dichotomous independent variable, 
\( XZ \) is the interaction term calculated as \( X \) multiplied by \( Z \), 
b0 is the intercept, 
b1 is the effect of \( X \) on \( Y \), 
b2 is the effect of \( Z \) on \( Y \), and 
b3 is the effect of \( XZ \) on \( Y \).

If the results of the regression equation indicate that the interaction term, \( b_3 \), is significant, then this indicates a statistically significant moderated relationship between company image and purchase intention (Robinson et al. 2013; Dawson 2014).

In order to find if the interaction term is significant, I performed two different moderation methods for a clear picture of the possible moderation that would come from salesperson trustworthiness.

Two-Group Moderation Test

The first of these moderation methods is the two-group method meant to find significant differences between the model Chi-square (\( \chi^2 \)) when the moderation path is restricted as compared to when it is not restricted. The first step was to create a group of high and low salesperson trustworthiness based on the answers given in the survey. This was done by creating
an aggregate measure of salesperson trustworthiness in SPSS and binning the data into two separate groups for use in SPSS AMOS. The next step was to create two groups in SPSS AMOS for high and low salesperson trustworthiness and calculate the model estimates across the groups as normal. Each of the paths in the model was then restricted with a regression weight of 1 to form a baseline model for comparison. The parameter of salesperson trustworthiness was then freed to find the change in the $\chi^2$. If there was a significant change in the $\chi^2$ from the baseline model and the model with the freed parameter, then this would indicate moderation and the interaction term $b3$ would be significant.

**Multiplicative Moderation Test**

The second method for studying the possible moderation from salesperson trustworthiness is the multiplicative method. This method requires multiplication of the standardized variables that will be interacting. In this case the two variables are Company Image and Salesperson Trustworthiness. Then in SPSS AMOS, I created a model with the two exogenous variables of Company Image and Salesperson Trustworthiness and one exogenous variable of Company Image times Salesperson Trustworthiness as the interaction term. All of these variables had paths that led to the endogenous variable of Purchase Intent. If the path from the interaction term ($b3$) is significant in the model, then there is moderation that is coming from Salesperson trustworthiness.

**Results of Moderation**

The baseline model for the two-group method had a $\chi^2$ of 1891.3 (df= 688). The model with the freed parameter to test the moderation had a $\chi^2$ of 1736.4 (df= 686). When both of these
\( \chi^2 \) values were put into SAS v9.4, and run through a \( \chi^2 \) difference test, there were no significant differences between the two \( \chi^2 \) values.

The multiplicative run of moderation showed that there was no significant moderation effect from the interaction term (coefficient = .026 p > .05).

Therefore, the interaction term in the moderation equation (b3) is not significant and therefore presents no moderation from Salesperson Trustworthiness (Aiken and West 1991; Robinson et al. 2013; Dawson 2014). While these findings show that there is no moderation when buyers think of the salesperson trustworthiness, there are some novel insights that we can gain from these findings that I will discuss in later sections.

**Discussion**

The findings from the first three constructs of the model show us some novel insights into the way that potential customers view a selling organization when it comes to the level of sustainability at which the organization is operating. Sustainability effort and reporting effort both make a significant contribution to improving the positive company image of the seller. If we were to break each of these down, we can see what information is most important to the customer. Sustainability effort and reporting efforts both disseminate information to the customer that shows objective and actionable sustainable measures. This information contains hard numbers that show the impact of sustainability measures implemented by the seller. Now turning to compliance effort, the customer does not seem to hold who instituted the sustainable measures come to be important. To the customer, it does not matter if the seller is following sustainability measures imposed on them by the government and other public institutions or if these measures were voluntarily put into place. In addition, the strength of this message along with the content of
the message of where these initiatives came from does not make a significant difference in the mind of the customer. The results of this model tell us that customers want to see end results and metrics that show that the seller is being sustainable and that the customer can now buy products from a company that can show its sustainable impact with objective information. Where this sustainability comes from does not make a difference and does not significantly increase the positive image of that selling company.

Another insight that can be taken from the results coming from the first three constructs of the model is that sellers can now see that even if they have voluntary sustainable measures in place and can get this information out in the form of marketing their own sustainable initiatives to customers, this still won’t have a significant effect on the positive company image that the seller is trying to gain. In other words, the seller can use many financial resources and programs they voluntary implement and it won’t make a difference to the customer. In these terms, the seller is being wasteful with resources and the seller might think of alternative ways to increase company image such as putting more resources into reporting objective information and disseminating information that would help the customer see that the seller is environmentally responsible. In this case, the customer would rather buy their products from a company that they view as sustainable, regardless of how that company came to be sustainable.

**Company-centric Mentality**

Along with this mentality from the buyer that relies on objective information about the seller, there are also some other novel insights that concern a company-centric mindset on the part of the buyer. From the overall model, the significant effect on company image and purchase intent comes from the company level view of information that is disseminated concerning the
performance of the overall company as compared to how an individual from that company may have any impact on the mindset of the buyer. In other words, the buyer is affected through the information that concerns how the overall seller is performing when it comes to their sustainability and in turn the buyer is not affected by the individual representative of that seller. This is a novel insight in that much of the research that I have found in the past shows that the individual salesperson can make a difference in the mind of the buyer. However, in this context of sustainability and B2B transactions, there is a new view from the seller that is different from previous studies where sustainability was not part of the overall theoretical and empirical structure.

The findings that I have presented seem to follow the stakeholder theoretical view that places corporate-level communication at the forefront of how effective a company can be at starting and keeping relationships between themselves and potential buyers (Polonsky 1995). In this case, corporate-level communication concerns how buyers and sellers are in contact with each other with little regard to the individual representative of the seller. In fact, past literature has shown that advocates of corporate-level communication tell us that while a seller and a buyer are forming a potential relationship between the each other, it is the communication about the company itself that can strengthen or weaken this relationship (Duncan and Moriarity 1998). In other words, it is the overall view of the seller that can make a difference in the mind of the buyer, which translates to a more company-centric approach to processing information about the seller. Furthermore, this corporate-level information dissemination also helps to avoid conflicting messages that could come from the individual salesperson (Gilly and Wolfenbargar 1998). This is very much needed in the current context where sustainability initiatives and the results that come from these initiatives need to be clearly communicated to the potential buyer so that they
can have greater faith that the seller is truly a sustainable company (Kemper and Ballentine 2019).

There is a prominent study by Laczniak and Murphy (2012) that also supports this theoretical view to the context of sustainability. The authors show that the communication between two entities should take place at more of a macro level or in this case, the corporate-level. Furthermore, when talking about how pro-environmental or sustainable a company currently is in terms of their “triple bottom line”, this mentality that communication should consist of corporate-level information should be at the forefront of starting and continuing a relationship between a seller and a potential buyer (Laczniak and Murphy 2012; Bhattacharya 2010; Elkington 1998).

**Theoretical and Managerial Implications**

As the market evolves into a market where sustainable products take precedence over products that are not sustainable, the institutional isomorphism effect starts taking place in which the seller will try to conform their operation to better serve both the customers and have a high fit within this new market (Powell and DiMaggio 1991). As the seller tries to morph into creating a more positive company image, they should be weary of how they should undertake this process. From the results, communication of sustainability and reporting of measures will cause this wanted effect of higher positive company image. Yet, the message and the claims made in the message may not have the significant effect that the seller would hope for in the end whey trying to increase their positive company image.

As the seller tries to transform their company image by fitting their operation with this new market, one approach that they might take is that they will try to make their sustainability
commitment and results salient in the minds of both stakeholders and potential customers. While there is theoretical support for this approach through the claims made and the strength of the message to potential customers that will help build a virtuous corporate image, the theoretical view is not supported within the sustainability context in that the internal effort from the seller within their compliance effort will not lead to higher company image (Van de Ven 2008).

This view is supported by the theoretical view presented by Manrai et al. (1997). This seminal study showed that the message along with the claims made and the strength of the message could lose its overall power or even helpfulness when paired with other information coming from the seller. This means that as we take a look at the overall model, compliance information may stand alone as a way to increase company image, but not when paired with both the communication on initiatives or the reporting of sustainable results to the buyer. In a real-world situation, there would be numerous types of information coming from an organization to disseminate information on sustainability measures especially when trying to change into a new market role of being environmentally sustainable. Therefore, this model is more generalizable to a broader context to show that when multiple types of information are disseminated about a company, compliance effort will not significantly effect company image and managers should be especially weary of this when planning their execution strategy for entering the new green market with the resources they have at their disposal (Timsit et al. 2015).

**Managerial Implications**

One implication that can come from the findings is that when managers of the selling company are trying to increase their positive company image, there are some tactics that are effective and some that are not so effective. One tactic that managers should stay away from in a
B2B context is to create their own voluntary measures of sustainability and push these out to the customers as a way that the company is being more environmentally responsible. These have no significant effect on company image and would more than likely be of higher cost to the company (Jones et al. 2008). In turn, the company would not get a return on their investment and instead would face a higher opportunity cost in which they could have invested their resources and effort into more communication about their initiatives and more concentration on reporting their results of their sustainability initiatives (Kumar et al. 2012).

Another insight that managers can gain from these results is that the individual salesperson can have a complex relationship with the buyer when it comes to the traits of the salesperson. A central tenet of relationship building in sales is having trust and especially trust coming from the person that is offering products to the buyer (Morgan and Hunt 1994; Ganesan and Hess 1997). However, in this model and in this B2B context in sustainability, there is no significant effect from the trustworthiness of the salesperson on the intent of the buyer to purchase products from the seller. The seller is more interested in the image that the overall seller is portraying that will trickle down the supply chain to the business buyer that will then be transferred to the final end user (Lambert and Cooper 2000). In other words, the seller is more interested in what the overall company has to offer instead of what the individual salesperson has to offer in terms of their sustainability image that will transfer to the business buyer (Kumar, Teichman, and Timpernagel 2012).

**Limitations and Future Research**

The previous work of Manrai et al. (1997) comes to light in that sometimes green claims may not have the effect of increasing company image and instead might also cause a negative
effect on company image to occur. There is a negative coefficient in the compliance to company image relationship. Even if that coefficient is not significant, this negative coefficient can show the effects leaning towards telling us that green claims and the strength of that message may start to have a negative effect on company image. Furthermore, Manrai et al. (1997) said that these green claims needed to work in conjunction with other factors that could affect the customer. Therefore, compliance effort on its own will not affect the customer, but instead, the three separate factors of sustainability effort, compliance effort, and reporting effort may, together, stop any negative effect from compliance effort and holistically positively effect company image (Goldberg and Hartwick 1990; Manrai et al 1997). One of the limitations of this study is that there needs to be more in-depth research about what other sustainability strategies may have this reverse effect on the overall model or may interact with one of both of sustainability effort and/or reporting effort. Further insights into this phenomenon using this current model might help to guard against unwanted negative effects on company image and in turn lower sales.

Another limitation of the current study concerns other salesperson traits that may have a significant interaction with company image. While I picked trust as a basis for an interaction in this model due to trust being a central staple in the sales literature, there may be some other factors that may have a significant effect on company image that could lead to further insights on the company and salesperson relationship with potential buyers.

Future research on this topic could concern a model that is more product-based concerning how the actual product offerings can have significant effect on the overall sales for the B2B seller. Subsequent research can focus on the sustainability of products and how this can create more value for the customer and hopefully hedge against the reverse effects of sustainable information dissemination that could backfire on the selling organization.
Other subsequent research can focus on the effects of sustainable efforts over time as a working relationship between a seller and a buyer starts to take shape. This current research is a snapshot of how potential buyers will start to purchase goods from sustainable sellers or sellers that market themselves as sustainable. A longitudinal study could offer greater insights into the relationship and how sustainability affects purchase intention over time.

**Conclusion**

Sustainable marketing practices have been at the forefront of recent institutions by organizations due to the fact that sustainability is becoming a very much needed part to compete in a changing market for products that are both healthy for the bottom line and healthy for the environment (Elkington 1998; Lim 2016). The findings from this current research help to start the conversation on how sellers in a B2B environment are able to start affecting change in how potential customers view them. Sellers now have the power to increase their company image through communicating their sustainability, including how the entire organization takes a holistic approach to being more sustainable and offering products that are more sustainable to meet the needs of potential customers. Sellers are also able to increase their positive company image by reporting specific and objective results of their sustainability initiatives for the company and the products that they offer. In both of these ways, the seller is able to have control over the actions they take to increase their positive image and turn this positive image into more revenue for the company.

However, the seller must also be sure to take the appropriate actions when first committing to sustainable measures and how to implement them into different facets of the organization. While the intentions of the seller may be in the right place, the use of voluntary
sustainable initiatives in a B2B setting does not help contribute to higher positive company image. Therefore, any of these measures would be wasteful to the company as they do not make a significant difference when it comes to the seller-buyer relationship in B2B selling.

Sustainability is a very much needed conversation in that sustainable measures for the company and the products they offer has become a topic at the forefront of marketing literature and the sales landscape (McDonagh 1998; McDonagh and Prothero 2014). It is through this current research that I hope that subsequent marketing research can continue this conversation on how sustainability and the decisions that organizations make can trickle down the supply chain to create better overall seller-buyer relationships while creating a healthier financial environment for all parties involved.
Chapter 2: Frugality Can Be Central to Product Success: A View of Frugal Innovation, Perceived Value, and Purchase Intention

Introduction

The great part of living in times of a consumer-centric economy is two-fold. Sellers are able to serve their customers by finding and offering what the customers want. Customers are also able to tell sellers what types of products they want and what features should be a part of those products. In other words, seller and customers are able to have back and forth communication to find the solutions that would be best, especially when trying to build long term relationships. However, to fully achieve customer centricity, sellers must be able to extract meaningful insights across the customer lifecycle with actions that will help to increase the value that the customer perceives as part of the products that the seller has to offer. Getting to a successful relationship with customers is about delivering value to each individual customer to maximize revenue, increase future sales opportunities, and to gather useful feedback from customers to better serve their needs in the future (Morgan et al. 2019).

Part of the relationship between buyers and sellers in a B2B situation is that buyers view purchasing as a way to decrease their costs and to increase profits through the value of the products they sell to the final consumer (Anderson and Narus 1998). In order to better exploit this value creation for their own business success, business customers need to have an accurate understanding of what the final consumer (B2C consumer) wants and how to best deliver the product to that final consumer. In this way, the seller is able to create value for the B2B customer to pass on the final consumer (Anderson and Narus 1998). Without fully understanding the business customer, marketers can waste between 20%-35% of their marketing
budget on marketing products to the business customer will not have any interest in because they cannot pass on the value to the final consumer. Understanding the business customer and their value creation through purchasing is detrimental to being an effective marketer in a B2B setting (Unger 2016; Vermes 2019).

Past researchers have devoted considerable attention to developing and testing models of frugal innovation (Farooq 2017; Leliveld and Knorringa 2017; Tiwari et al. 2016; Weyrauch and Herstatt 2016). Frugal innovation is defined as developing products that have substantially lower costs, limited features, easy use, lower environmental impact, and better value (Zeschky et al. 2011a; Agarwal and Brem 2012; Brem and Ivens 2013; Bhatti and Prabhu 2019). This is not necessarily creating cheap products, but rather products that are in sync with what the customer needs and wants (Pisoni et al. 2018; Tiwari et al. 2016). If the customer does not need all the bells and whistles that some products do, then they may feel that they are paying for features that they don’t need and this can reduce the overall value of the product to the customer (Pisoni et al. 2018).

Previous research in this field has addressed several aspects of frugal innovation including defining and strengthening the theory of frugal innovation (Mukerjee 2012; Bhatti and Prabhu 2019), using frugal innovation within the context of developing countries (Basu et al. 2013; Soni and Krishnan 2014), and building models to expand frugal innovation to more areas of the globe (Zeschky et al. 2014; Hossain 2018).

However, in addition, frugal innovation encompasses several unexplored dimensions that lately have come to the forefront of frugal innovation research. Some of these unexplored dimensions appear to be important and worthy of investigation in the context of placing frugal innovation in a sustainability context. Another dimension that has been unexplored encompasses
placing frugal innovation in a business-to-business (B2B) context along with the endogenous variable of sales as the outcome from an overall model that places frugal innovation as a driver of sales.

Furthermore, previous empirical research has focused primarily on how products are created and what research and development has gone into the products themselves (Zeschky et al. 2011). Very little research if any has gone into seeing how these newly engineered products translate to revenue for selling organizations, especially in a B2B context.

In this study, I seek to fill this gap in the research that will help show how frugal innovation when paired with sustainability principles and actions from selling organizations will forge a new and updated manner of selling products that meet the needs and wants of customers. The study investigates the impact of two interrelated parts of frugal innovation that can lead to increased value for consumers which would be substantial cost reduction for the customer and better core functionalities contained within these frugal and sustainable products (Tiwari et al. 2016a; Weyrauch and Herstatt 2016a; Weyrauch and Herstatt 2016). In addition, a third element of frugal innovation, creation of a frugal ecosystem, also becomes part of the overall model. Creation of a frugal ecosystem includes the process of bringing more stakeholders on board to create a system of frugality that extends well beyond the selling organization (Ahuja and Chan 2016; Tiwari et al. 2016a; Weyrauch and Herstatt 2016). This can take much more effort and can have contrasting effects if other stakeholders become part of the frugal system. That is why I include this as a moderator in the model to find if the ecosystem is truly an integral part of the overall path from frugal products and sustainability to increased sales and success of the selling organization (Agarwal and Brem 2012; Bhatti and Ventresca 2013; Brem and Ivens 2013; Pansera 2013; Soni and Krishnan 2014; Zeschky et al. 2014).
Theoretical Development

One of the main tenets of frugal innovation is that the selling organization offers products that meet the specification and the needs of the customers (Rossetto et al. 2018). This means that the seller needs to make sure that there is some type of equilibrium between what is offered and what is expected. In other words, what the seller puts into the transaction and what the seller pulls out of the transaction has to achieve satisfaction and equity for both parties. This is where the overarching theory that drives the selection of the variables and the relationships starts to take shape. The explanation for these variables and relationships comes from the Perceived-Value Pricing Model, which evolved from a model of Equity Theory that correlates input to expected outcome. Where input and outcome are positively correlated, satisfaction is experienced by both parties. Where input and outcome are not correlated or negatively correlated, dissatisfaction is experienced (Kortge and Okonkwo 1993).

The Perceived-Value Pricing Model

The Perceived-Value Pricing Model can also be a tool for development of a model for establishing a viable range in negotiation of perceived value pricing. A study by Kortge and Okonkwo (1993) created a visual figure to show this relationship. In Figure 1, The Perceived-Value Pricing Model consists of a number of products Pi, correlated with a number of perceived value outcome prices Pv. Line AB represents the maximum and line CD the minimum input/outcome combinations that are satisfactory to the buyer/seller dyad. The area between line AB and line CD represents the “satisfaction zone” of the buyer/seller dyad where both the seller and buyer are satisfied in their transactions that meet the needs of the customer.
Illustration 2.1: Chapter 2 Zone of Satisfaction (Kortge and Okonkwo 1993)

However, one of the main points that this model also makes is that there is a threshold where the customer will become unsatisfied with the value of the products that they are receiving for the price that they are being charged by the seller. When this happens, the buyer/seller dyad now falls out of equilibrium and the customer will start to refuse to buy any more product from the seller and the relationship will start to die. In other words, there will be a decrease in purchase intention that results from a decrease of equilibrium in this buyer/seller dyad (Eggert and Ulaga 2002). This is also part of the current research that will help to find the effects on purchase intention using this theoretical viewpoint, along with the other variables and a moderator introduced into the overall model as well.

The perceived value that is perceived by the buyer can be made up of several elements such as buyer’s experience with the product, the physical functions of the product itself, warranty quality, channel deliverables, customer support, supplier’s reputation, and price (Eggert and Ulaga 2002). In most cases, the company must inform the customers of the additional value that
their product is offering and for what extra amount is being added onto the final cost to the customer. Durability, features, reliability, service, and warranty, along with other integral parts of a product can differentiate one product from the other and can be the deciding factor of what the customer is willing to pay for these product features (Tam 2004). In this case, since I am talking about frugality in products, customer value may come from an increase in function and a reduction of cost that will make the products easier to match what the customers need (Kortge and Okonkwo 1993).

Sellers try to enhance the perceived value in customer’s minds by adopting several marketing mix elements such as advertising, promotion, sales force, etc. This method suffers from several limitations. Sometimes a customer may suspect that the company has exaggerated about its product quality and services. Also, there is a segment of buyers who are price conscious and do not want to pay extra for a product (Tam 2004). The benefit of using this method is only effective when a company offers more value that its competitor (Eggert and Ulaga 2002). Many times, however, the customer is not aware of the cost incurred by the firm in producing the product, but what they do see is a product that now has the right functionality and the right price that creates the high value that the customers desire.

**Core Functionalities and Reduction of Cost**

Two of the central tenets of frugal innovation are a focus on the core functionalities of products as well as the reduction of cost to produce products. Core functionality means that the products that the seller offers to the customers have functionalities and performance features that are essential and compatible with the socio-economic context of markets with high resource-constraints while meeting market needs (Hart and Christensen 2002; Hart 2011; Ramani and
Mukherjee 2014; Soni and Krishnan 2014; Rossetto et al. 2018). In past literature, some of these features have emerged as product design (simple and affordable with fewer features), product functionality (easy-to-use and eliminating unessential functions), or product performance (maintaining enough quality to maximize value) (Brem and Wolfram 2014; Kumar and Puranam 2012a; Wooldridge 2010). Seminal work by Weyrauch and Herstatt (2016) define “focus on core functionalities” as a firm’s effort to bring together the dimensions that offer basic functions of a product, designed to be “easy-to-use” and “durable”.

Focus on reduction of costs relates to the lower-cost, resource constrained, manufacturing of a good that helps to reduce cost as much as possible and helps pass these cost savings on the customer. One of the drivers of this reduction in cost sometimes comes from the increasing pressure from low-cost competition forcing the seller to develop products to meet the needs of their consumers with scarce resources (Rao 2013; Angot and Plé 2015). There may not be a threshold level to consider as a “cost reduction”, or a “low-cost level,” because cost reduction depends mainly on each customer that perceives the cost reduction, but there should exist a resource-constraint situation which requires affordable, and lower priced products to fill the needs of customers with limited resources (Rossetto et al. 2018; Rao 2013; Weyrauch and Herstatt 2016, 2017). Through the seminal work by Weyrauch and Herstatt (2016, 2017) and Zeschky et al. (2011, 2014), “substantial cost reduction” is defined as a firm’s efforts to offer a “good value product”, with “organizational resources arranged” to provide “substantial cost reductions” in operational and organizational processes, with “economic manufacturing” enabling them to transfer these savings to final consumers.

I take a look at these parts of frugal innovation through the lens of B2B marketing and new product development. Specifically, frugal innovation should fall within the realm of
creating products that have the core function and correct cost to the customer, as well as creating these products using sustainability as a driver of this product development.

A theoretical view housed within product development includes the risk-value method of product development. The risk value method is based on understanding overall technical performance risk and its components. The approach integrates several concepts and methods, including technical performance measures (TPMs) and customer preferences (Browning et al. 2002). This view of product development tells us that sellers should be weary of the technical components of products as well as listening to the needs of customers when trying to develop the right mix of attributes for the final product. In the end, the main goal is to create value for the customer (Browning et al. 2002).

Product development seeks to create a design that has not existed before. Terms like “iterative” and “creative” can apply to new products. Designers may start with one design, find it deficient in several ways, and then change it based on the preferences of the customer on both the technical side and the final cost to the customer (Jindal et al. 2016).

The goal of the product development process is to create a “recipe” for producing a product that will create value for the customer (Browning et al. 2002). The recipe must conform to the requirements stemming from customer or market needs. The recipe includes the product, its manufacturing process, and its supply and distribution systems, including the environmentally responsible sourcing of materials to make that product. The development of these products and subsequently getting this information out to customers to let them know that there is a product that meets their needs and thereby creating more value for customers entails a myriad of activities working together to deliver the recipe.
Especially when dealing with new products, designers learn much along the way about what will and will not work. The aim is to create useful information, which should come from the buyer/seller dyad that will help to create the equilibrium between products features, price, and value. If I were to look at this through the view of the risk value method, I need this information to decrease the risk that the product will be something other than what is specified by the customer. It should improve confidence in the recipe.

The goal of product development is to produce a product recipe that conforms to requirements or acceptance criteria from the viewpoint of the customer. Developing these consumer products is a problem-solving and knowledge-accumulation process. Progress is made and value is added by creating useful information that reduces uncertainty on the part of the customer. It is also supposed to reduce dissonance for the customer by showing them that they are buying products that are frugally made with sustainability in mind. The correct features and the right price help to show that there are no unnecessary bells and whistles that will be costly to the customer or will be environmentally wasteful or harmful in the development of the final product. However, it is challenging to produce this information at the right time, when it will be impactful on the customer and will create value. This is where the overall model in the current research helps to find a pathway from frugality to value by encompassing a frugal ecosystem around this vital information.

The value of the product depends on how closely the core functions and cost of the product is to customer needs. Also, when talking about increasing sustainability in the production and sales of products, which has become a new requirement in both literature and practice, this helps to create more value to the customer as sustainability becomes more important to them (Swamy and Priya 2017; Schöggl et al. 2017).
Adding customer value can be a combination of doing the right activities and of getting the right information to the customer in the right place at the right time, which is where the selling organization and the salesperson make the difference (Browning et al. 2002). Hence, these new product offerings come from a combination of both the development of the physical product and the information that helps customers to purchase these products that are congruent with their needs.

H₁: Sustainable core product functionality is positively related to perceived product value.

H₂: A reduction in sustainable product cost is positively related perceived product value.

Figure 2.1: Chapter 2 Theoretical Model

Creating a Frugal Ecosystem

The core functionalities and the reduction of cost to the customer are part of a bigger system of frugal innovation that encompasses the entire selling organization. This is what
previous literature has called the frugal ecosystem (Pisoni et al. 2018). A frugal ecosystem is a “collaborative effort of an integrated corporate network of stakeholders geared towards engaging user communities for the creation and shared capture of value geared to the local and social needs of particular markets” (Rossetto et al. 2018 pg. 14; Adner and Kapoor 2010; Dedehayir et al. 2018; Tsujimoto et al. 2018). In other words, this is a collaborative effort in the buyer/seller dyad that helps to find the right information from customers that will help sellers to better serve the needs of those customers. In fact, an innovation ecosystem can be defined as a network of interconnected organizations, connected to a company or focal platform, which incorporates both the production and the use of suppliers and customers, which are used and appropriated for new value through innovation (Autio and Thomas 2019). In these networks, customers become the driving force of demand and stimulate new business capabilities (Autio and Thomas 2019). Included is the fact that customers are now pushing for more sustainable alternatives in the products that they plan to purchase in the near future (Rosca et al. 2017). In turn, sellers acquire a competitive advantage by recognizing the holistic value embedded in products and services delivered to customers (Ethiraj and Posen 2014; Dedehayir et al. 2018).

The frugal ecosystem integrates three major elements which are the socio-environment, the financial environment, and the physical environment. These three elements interact with a focus on sustainability (Brem and Ivens 2013). Past researchers identified a wave of “frugal innovations,” describing them as low-cost, ingenious, rapidly produced while creating a low carbon footprint (Pisoni et al. 2018). Therefore, I define a frugal ecosystem as a promotion of partnerships between stakeholders allowing the firm to optimize its capabilities to provide solutions that meet the environmental needs of consumers and by using environmental
sustainability in their production, innovation, and operational processes as a way to obtain benefits from open innovation processes (Rossetto et al. 2018).

In addition to the collaboration between the buyer and the seller, frugal innovation ecosystems refer to sets of organizations and institutional architectures, which cooperate and evolve in specific capacities for the creation of the perceived and produced value of products for consumption (Adner and Kapoor 2010; Autio and Thomas 2013). This means that the frugal ecosystem has the power to create value for customers. In addition, the seller has the ability to affect the perception of value by customers. A study by Dodds et al. (1991) indicated significant store treatment effects on consumers’ perceptions of product quality. However, past research has had conflicting views on the product qualities that drive the creation of value for customers.

The view that is taken from in this current research comes from the product-quality cue theory. This theory tells us that extrinsic and intrinsic cues from the product can have an effect on the perceived quality of a certain product (Teas and Agarwal 2000). As I study frugal ecosystems, I make the assertion that there is a broad view of what a seller can do to influence the perceived value that a customer can have for a certain product. These extrinsic and intrinsic cues play a part in this broad view and are controlled by the seller. These two types of cues can also include sustainable parts of the product and sustainability by the holistic organization as factors that influence the overall perceived value of a product that an organization is offering to potential customers (Rosca et al. 2017).

Extrinsic cues are product-related attributes-such as price, brand name, and packaging, which are not part of the physical product (Qasem et al. 2016). Therefore, the cost to the customer was one extrinsic cue that is part of the overall frugal ecosystem. If the entire organization were to interject a frugal ecosystem as their main method of operations, then price
would be one factor that could lead to differences in perceived value for customers of these new frugal products being offered by sellers. Past research has made the assertion that extrinsic cues, such as cost to the customer have significantly lead to increases in perceived value for the customer (Richardson et al. 1994; Teas and Agarwal 2000; Qasem et al. 2016). Theoretical rationales underlying an expected positive price-quality linkage can be based on expected market forces. Yet, pressures from customers limit firms’ opportunities to charge high higher prices for their products (Curry and Riesz 1988; Erickson and Johansson 1985; Lichtenstein et al. 1993). Within the realm of frugal products, reduction of cost for only features that are needed without extra product fluff becomes the pressure that will help drive the cost to the customer down.

However, other researchers have also made the assertion that intrinsic product cues also lead to changes in the perceived value of a product (Szybillo and Jacoby 1974; Hatch and Roberts 1985; Fiore and Damhorst 1992; Rosca et al. 2017). Intrinsic cues are product-related attributes which are part of the physical product (Qasem et al. 2016). An example of this can be a core functionality with frugal products. A common core functionality is the durability of the product itself (Goel and Singh 1997). Durability of products is important to customers and sellers can build durable products by controlling the degradation pattern. The degradation pattern can be controlled by the seller by changing the design of components such as the material, geometrical dimensions and tolerances, and manufacturing processes (Goel and Singh 1997). As this product cue changes for customers, there can be some fluctuation in value (Rosca et al. 2017).

However, this has to happen within a frugal ecosystem with all principles of both extrinsic and intrinsic features adding value to products offered by the seller. This also includes taking into account to what extent sustainable products are being manufactured and if these
sustainable products are also meeting the needs of the customers. This is all housed within this frugal ecosystem view that aims to add value through the extrinsic and intrinsic changes that meet the needs of customers. The frugal ecosystem view itself drives the changes in these cues that can have significant effects on the perceived value of a product. Researchers over the last several decades have also made the assertion that extrinsic and intrinsic cues are not exclusive in affecting perceived value, but rather can work in conjunction with one another to increase the value through cue related indirectly or directly to the product itself (Hatch and Roberts 1985; Fiore and Damhorst 1992).

H₃: Introduction of a frugal ecosystem with strengthen the relationship between sustainable core product functionality and perceived product value.

H₄: Introduction of a frugal ecosystem with strengthen the relationship between a reduction in sustainable product cost and perceived product value.

**Perceived Value and Purchase Intention**

Frugal innovation initiatives and creation of a frugal ecosystem strive to create more value for customers. When this value is created, the selling organization hopes that this will translate to higher demand for their products and, therefore, higher sales revenue. This relationship between value and the intention of the customer to purchase these goods comes from another type of innovation called value innovation. This theoretical view helps to show that increases in value can lead to higher demand for products and higher intent of customers to purchase the frugal products of the selling organization (Kim and Mauborgne 1999).
Value innovation is a process in which a company introduces new technologies or upgrades that are designed to achieve both product differentiation and low costs (Kim and Mauborgne 1999). Value Innovation is the simultaneous pursuit of differentiation and low cost, creating a leap in value for both buyers and sellers. The concept of Value Innovation is developed by W. Chan Kim and Renée Mauborgne (Kim and Mauborgne 1999; Kim and Mauborgne 2005). The changes implemented through value innovation create new or improved elements for a product, but also result in the reduction of cost by eliminating or reducing unnecessary aspects of the product itself, making these products more appealing to customers with the needs of products that place functionality above other aspects and reduced cost, which are synonymous with frugal product theory (Kim and Mauborgne 2005).

The goal of value innovation is to create demand for the products of the seller and change the market enough to render the competition irrelevant in that market (Priem et al. 2012). Previous research has observed that networks, firms, and managers are embedded in industry repertoires. These repertoires block the creation and realization of value innovation. It’s only through changes, such as adoption of frugal innovation principles, can this lead to increases in demand and overall sales for the organization (Matthyssens et al. 2006; Wooldridge 2010; Kumar and Puranam 2012a; Brem and Wolfram 2014).

Typical characteristics value creation in marketing and management research include clearly distinguishing value creation from value capture, emphasizing product markets as key sources of value-creation for firms, viewing consumer preferences as dynamic, and recognizing that the actions of the seller in response to the changing needs of customers drives value creation (Priem et al 2012). Past research shows that strategies based on consumer heterogeneity can result in competitive advantage (Matthyssens et al. 2006; Mele 2009; Priem et al. 2012;
Successful innovations can be consumer driven rather than resource or technology driven, and consumer knowledge can play a key role in entrepreneurial idea discovery. These findings from demand-side research indicate that future demand-side work for generating new knowledge useful to scholars and managers is very important in the current sales landscape. This can lead toward more integrated theories that can build on frugal innovation principles and would include both the demand side and the producer side of the value creation equation (Priem et al. 2012).

When this demand is created, this can transfer into intent to purchase the products. The buyer/seller dyad represents how the two entities work in conjunction with one another to both benefit from the final transaction of selling these new, innovative, and sustainable products. Because value to buyers comes from the product offering’s utility minus its price, and because value to the selling company is generated from the offering’s price minus its cost, value innovation is achieved only when the whole system of utility, price, and cost is aligned (Kim and Mauborgne 2005; Fosfuri and Giarratana 2009; and Berghman et al. 2012). In other words, there must be a cooperative effort from both the buyer and the seller to have the right information so that the right products are offered that meet the dynamic needs of the customers.

H₅: Perceived product value is positively related to purchase intention.

**Methodology**

In order to better understand the research problem, I decided to do some exploratory qualitative inquiry through interviews with several people who were directly involved in the product purchasing decisions in their own companies. I spoke with 10 purchasers who were
responsible for the purchase of physical products for both manufacturing and resale to the
general public. While talking to these purchasers, I found that their focus on placing
sustainability at the forefront of their purchasing duties had risen in recent years and a few of
them also mentioned that their need for sustainability within their company is seen as a strategic
way in which they can gain a competitive advantage and compete better against other companies
over many years. In fact, in several interviews, the purchasers mentioned that the company their
work for has strategically placed sustainable measures in all their activities as goals to hit for the
next 5 to 10 years. This tells me that sustainability is not only very much needed and a part of
the current business landscape, but that it is here to stay in terms of how it will help companies
compete within their industry and market with the products that they offer. This supports the
theoretical view that sellers need to offer physical products that will be compatible with the
socio-economic context of the changing market, which in this case would be a quick and
dynamic change to a market (Hart and Christensen 2002).

Scales

The scale for measuring the core functionality of products was first introduced by Rosetto
et al. (2018). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7)
strongly agree, with 3 items. The scale showed acceptable reliability using Cronbach’s Alpha at
.61. This fell in the acceptable range for this metric as a metric above .60 is needed to continue
with further analysis with SEM and the number of constructs involved (Cortina 1993; Byrne
2010). I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis
(CFA) using the data collected in both the pretest and the final sample, respectively. All items
loaded significantly on their respective factors above 0.50, which shows that these factor
loadings, can lead to overall good model fit, especially in a sustainability research context (Peterson 2000; Truong and McColl 2011; Chahal, Dangwal, and Rain 2014). The CFA model shows good fit (CFI= 0.92, RMSEA= 0.07) (Hair et al. 1998).

**Cost Reduction**

The cost reduction scale was a longer scale than the core functionality scale that needed further analysis to see if a moreparsimonious scale would emerge to better measure the cost reduction construct (Hair et al. 1998). The scale that was used came from Rosetto et al. (2018). The final scale contained 4 items, which allowed the model to not be over or under identified (Byrne 2010). The reduced scale showed good reliability using Cronbach’s Alpha at .78 (Cortina 1993). The scale was a 7-point Likert-type scale. All items loaded significantly on their respective factors above 0.55 (CFI= 0.92, RMSEA= 0.07) (Hair et al. 1998, Peterson 2000).

**Frugal Ecosystem**

The scale for creation of a frugal ecosystem was first introduced by Rosetto et al. (2018). The scale has 3 items to allow for proper identification in the model (Byrne 2010). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed high reliability using Cronbach’s Alpha at .79. I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.55. The CFA model shows good fit (CFI= 0.92, RMSEA= 0.07) (Hair et al. 1998).
Perceived Value of Products

The scale for company image was first introduced by Sweeney and Soutar (2001) with an update to the final items by Walsh et al. (2014) into the formal PERVAL scale as it is known today. The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed high reliability using Cronbach’s Alpha at .91 with 5 items in the final scale. I conducted both an exploratory factor analysis (EFA) and a confirmatory factor analysis (CFA) using the data collected in both the pretest and the final sample, respectively. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.65. The CFA model shows good fit (CFI= 0.92, RMSEA= 0.07) (Hair et al. 1998).

Purchase Intention

The scale for purchase intention was first introduced by Spears and Singh (2004) with an update to the final items by Chen and Chai (2010). The scale is a 7-point Likert-type scale ranging from (1) strongly disagree to (7) strongly agree. The scale showed high reliability using Cronbach’s Alpha at .90. I conducted both an EFA and a confirmatory factor analysis CFA using the data collected in both the pretest and the final sample, respectively. The final scale had 5 items. Both the EFA and the CFA in the final sample showed that all items had factor loadings above 0.65. The CFA model shows acceptable fit (CFI= 0.92, RMSEA= 0.07).

Pretesting

To look further into how survey taker would be able to decipher and comprehend the survey instrument, I felt that pretesting should be performed to mitigate any instances of confusion for each of the individual survey items. The platform that I used for this pretesting
was Amazon MTurk. Amazon MTurk allows for quick, high-quality responses from people in different roles in business. I chose participants that would fit the overall needed sample, which would be purchasers from a variety of different industries around the United States. MTurk yielded 75 usable responses. No issues were reported in clarity or comprehension from the participants. The feedback was positive from the participants and no changes to the survey were needed.

An EFA and CFA was performed on the pretest data. The CFA showed emerging success model fit with a CFI of .84 and an RMSEA of .11. However, with a low sample size compared to the number of constructs for the overall model, these model fit statistics can be seen as emerging for support in the overall model (Fan, Thompson, and Wang 1999, Westland 2010).

The structural model was run in SPSS AMOS Graphics (v26). The overall model fit also showed emerging promise with a CFI of .81 and RMSEA of .12. The path from Core Functionality to the Perceived Value of Products was significant (coefficient= .799, p<.05). However, in the pretest, Reduction of Cost did not show significant paths to the Perceived Value of Products (.258, p>.05). The potential moderator of Creation of a Frugal Ecosystem moderation effect also not significant in the pretesting model (coefficient= .379, p>.05). However, the path from the Perceived Value of Products to Purchase Intention was significant, telling me that there is support for frugal product theory within the product value and sales contexts (coefficient= .922, p<.05). With these emerging and promising results, I felt that a sample with an appropriate sample size would be better representative of the overall model.
Full Sample- Sampling Procedure

The data used to study the model was collected through a Qualtrics survey panel of B2B purchasers in the United States. Multiple industries were included in the study to increase the generalizability of the overall study. Only B2B purchasers were included in the study. Other employees with a relation to sales or other functional areas of the organization were not included in the final sample. Demographic information for the salespeople were collected. The range of income was from a yearly salary of below $50,000 a year to above $200,000. Experience also ranged from less than 5 years to more than 20 years in a salesperson role.

Final Sample

The final surveys were distributed to 265 potential participants. Since purchasing needs to be the primary responsibility of each respondent, I used a screening question to make sure that this was the case. I reduced 265 participants to 185 participants using this screening question. After reducing the sample for respondents failing two attention-check questions, straightlining their answers (e.g. answering a 4 on the Likert scale all the way through), or taking less than 5 minutes to answer the survey, the final sample of usable responses totaled 174 (66% response rate).

Measurement

Table 1 reports the descriptive statistics for the factor analysis. All measures showed acceptable to good reliability. Table 1 also shows the average variance extracted (AVE) for each of the constructs. The high AVEs relative to the squared correlations in Table 2 tells us that there is discriminant validity among the constructs (Dawson 2014). An AVE below .50 is acceptable as long as there is a higher composite reliability (above .50) and high factor loadings.
(above .50) as was the case with one of the constructs in the model (Fornell and Larcker 1981). Table 2 shows the factor correlations among the 6 extracted factors.

Table 2.1: Chapter 2 Factor Analysis

<table>
<thead>
<tr>
<th>Factor Analysis</th>
<th>Factor Loading</th>
<th>Cronbach's Alpha</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Functionalities</strong>- In the development of products my company has purchased from my supplier, my supplier has assigned great importance to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>focusing on core functions of the product rather than additional functionality.</td>
<td>0.442</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ease of product use.</td>
<td>0.341</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the question of durability of the product (does not break or spoil easily).</td>
<td>0.743</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reduction of Cost</strong>- In the development of products my company has purchased from my supplier, my supplier has assigned great importance to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>solutions that offer &quot;good value&quot; products.</td>
<td>0.574</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>significant cost reduction of the actual product.</td>
<td>0.640</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>create products that aim for the saving of organizational resources.</td>
<td>0.554</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>create products that aim for the rearrangement of organizational resources.</td>
<td>0.823</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Creation of a Frugal Ecosystem</strong>- In the development of products my company has purchased from my supplier, my supplier has assigned great importance to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>effective solutions to customers' social/environmental needs.</td>
<td>0.634</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Sustainability in the Operational Process</td>
<td>0.529</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnerships with My Company in the Operational Process</td>
<td>0.437</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Perceived Value of Products |  
|-------------------------------|-----------------------------|
| Please indicate your level of disagreement or agreement with the following statements concerning a product that you have recently purchased from your main supplier. The product: |  
| Has consistent quality. | 0.893 |
| Is well made. | 0.981 |
| Has an acceptable standard of quality. | 0.858 |
| Is one that my company would enjoy. | 0.657 |
| Would make my company want to use it. | 0.638 |

| Purchase Intention |  
|-------------------|-----------------------------|
| Please describe your overall feelings about any supplying company with respect to purchasing goods. |  
| I will engage with a supplier with high environmentally sustainable goals. | 0.663 |
| I intend to buy products from a supplier with high sustainable planning. | 0.758 |
| I have high purchase interest for any products that come from a supplier with future environmental goals. | 0.877 |
| I will buy products from a supplier that has awareness of current environmental issues. | 0.858 |
| I have high purchase interest for any products that come from a company with environmental goals for the future. | 0.888 |
Table 2.2: Chapter 2 Factor Correlations

<table>
<thead>
<tr>
<th>Correlation</th>
<th>CoreFunc</th>
<th>CostReduc</th>
<th>FrugalEcosys</th>
<th>PerceiveValue</th>
<th>PurchInt</th>
</tr>
</thead>
<tbody>
<tr>
<td>CoreFunc</td>
<td>0.510</td>
<td>0.789</td>
<td>0.635</td>
<td>0.906</td>
<td>0.293</td>
</tr>
<tr>
<td>CostReduc</td>
<td>0.888</td>
<td>0.300</td>
<td>0.694</td>
<td>0.669</td>
<td>0.425</td>
</tr>
<tr>
<td>FrugalEcosys</td>
<td>0.797</td>
<td>0.833</td>
<td>0.567</td>
<td>0.523</td>
<td>0.585</td>
</tr>
<tr>
<td>PerceiveValue</td>
<td>0.952</td>
<td>0.818</td>
<td>0.723</td>
<td>0.674</td>
<td>0.286</td>
</tr>
<tr>
<td>PurchInt</td>
<td>0.541</td>
<td>0.652</td>
<td>0.765</td>
<td>0.535</td>
<td>0.640</td>
</tr>
</tbody>
</table>

Notes: Intercorrelations are presented in the lower triangle of the matrix. Average Variance Extracted for each scale is depicted in boldface on the diagonal. Squared correlations are given in the upper triangle of the matrix.

**Structural Equation Modeling**

I used Structural Equation Modeling (SEM) as the method to test the different relationships in the model. The overall model for this current study has several different potential relationships including main effects, mediating influences, as well as moderating influences. I analyzed the effects of the overall model using structural equation modeling (Wright 1934; Pearl 1998; Sivo et al. 2006, and Hu and Bentler 1999). Each of our constructs has multiple indicators that allow measurement of the overall latent construct. This method is preferred because it estimates the multiple and interrelated dependence in a single analysis. The structural model was analyzed using SPSS v27 and SPSS AMOS v26.

**Common Method Variance**

A concern of common method variance came up during the process of measurement analysis and analysis of the CFA before the final structural equation model was produced and scrutinized. I used the marker variable method in the analysis to determine if there was common method variance (Simmering et al. 2015). I collected data on the construct of Green Customer Satisfaction and allowed this construct to be related to the final overall endogenous variable of
Purchase Intention in the structural model. According to Simmering et al. (2015) the marker variable should not have a significant path to the endogenous variable or in the relationships in the overall model. The model relationships did not change and the model fit with or without the marker variable included in the model did not change (fit indices for the model including CFI and RMSEA did not change). This means that the marker variable did not affect the overall model or the relationships in the model. Therefore, I can conclude that there is no common method variance in the analysis (Simmering et al. 2015).

Control Variables

Control variables in the study were also used to find any differences among sales employees. The control variables included gender, income amount, length of working in a purchasing role, and length of tenure with the current company. Overall, the control variables showed no significant differences among them in the structural model and show no support for differences among the different purchasing employees. Therefore, my findings are generalizable to multiple industries with purchasers with different professional experience, income, and across genders.

Results

The overall structural model provided excellent fit (CFI=0.93, RMSEA=0.07) (Marsh, Kit-Tai, and Grayson 2005; MacDonald and Ho 2002; Hair et al. 2012). No modifications including the use of modification indices were used to make changes to the model since the overall model had excellent fit with the proposed structural model from the previously mentioned theoretical views (Schreiber et al. 2006; Hazen, Overstreet, and Boone 2015).
Core Functionality and Perceived Value

I find support for the first hypothesis of the model (H1) (coefficient=0.963, p<.05). The analysis showed the relationship between Core Functionality of the products offered and the Perceived Value they generate to be a significant, positive effect. Some of the features of products can be offered to potential customers as simple and affordable with less features and easy-to-use while eliminating unessential functions and keeping the product durable (Weyrauch and Herstatt 2016).

Reduction of Cost and Perceived Value

I find support for the second hypothesis of the model (H2) (coefficient=0.379, p<.05). This reduction of costs for products offered by the seller relates to the lower-cost, resource constrained, manufacturing of a good that helps to reduce cost as much as possible and helps pass the cost savings on the customer. This is one of the central tenets that will help the seller meet the needs of their customers with scarce purchasing resources. The correct features and the
right price help to show that there are no unnecessary bells and whistles that will be costly to the
customer or will be environmentally wasteful or harmful in the development of the final product.

However, according to the previous theoretical view, the seller would need to maintain
enough quality to maximize value (Brem and Wolfram 2014; Kumar and Puranam 2012a;
Wooldridge 2010). This finding helps support the theoretical view of the price and value area
in the Perceived Value Pricing Model (Kortge and Okonkwo 1993; Rao 2013; Angot and Plé
2015).

**Perceived Value and Purchase Intention**

I find support for the fifth hypothesis of the model (H5) (coefficient=0.655, p<.05). The
analysis showed the relationship between the Perceived Value of Products and Purchase
Intention to contain a significant and positive effect. This relationship between perceived value
and the intention of the customer to purchase these goods is supported by the theoretical view of
value innovation. As there is an increase in the perceived value of a product, this can lead to
higher demand for products and higher intent for customers to purchase the products of the
selling organization (Kim and Mauborgne 1999).

The changes implemented through value innovation create new elements for a product
through increased core functionality and an increase in the reduction of cost efforts by the seller.
This results in these products becoming more appealing to customers which increases the value
of the products and then translates to increase intent of the potential buyer to purchase these
products (Kim and Mauborgne 1999). These changes are synonymous with frugal product
theory and value creation (Kim and Mauborgne 2005).
Moderation

I conducted an analysis of the potential moderating effects of Creation of a Frugal Ecosystem on the relationship between Core Functionality and Reduction of Cost. I used the approach laid out by Aiken and West (1991). The main tenet of moderation also comes from Aiken and West in the following form:

\[ Y = b1X + b2Z + b3XZ + b0 \]

where: 
- \( Y \) = continuous dependent variable,
- \( X \) = continuous independent variable,
- \( Z \) = dichotomous independent variable,
- \( XZ \) is the interaction term calculated as \( X \) multiplied by \( Z \),
- \( b0 \) is the intercept,
- \( b1 \) is the effect of \( X \) on \( Y \),
- \( b2 \) is the effect of \( Z \) on \( Y \), and
- \( b3 \) is the effect of \( XZ \) on \( Y \).

If the results of the regression equation indicate that the interaction term, \( b3 \), is significant, then this indicates a statistically significant moderated relationship between Creation of a Frugal Ecosystem and Core Functionality and Creation of a Frugal Ecosystem and Reduction of Cost (Robinson et al. 2013; Dawson 2014).

In order to find if the interaction term is significant, I performed two different moderation methods for a clear picture of the possible moderation that would come from the creation of a frugal ecosystem in the selling organization.

Two-Group Moderation Test

The first of these moderation methods is the two-group method meant to find significant differences between the model Chi-square \((\chi^2)\) when the moderation path is restricted as compared to when it is not restricted. The first step was to create a group of high and low frugal
ecosystem based on the answers given in the survey. This was done by creating an aggregate measure of frugal ecosystem in SPSS and binning the data into two separate groups for use in SPSS AMOS. The next step was to create two groups in SPSS AMOS for high and low frugal ecosystem and calculate the model estimates across the groups as normal. Each of the paths in the model was then restricted with a regression weight of 1 to form a baseline model for comparison. The parameter of frugal ecosystem was then freed to find the change in the $\chi^2$. If there was a significant change in the $\chi^2$ from the baseline model and the model with the freed parameter, then this would indicate moderation and the interaction term b3 would be significant. This moderation test was performed for both of the proposed moderation relationships in the model.

**Multiplicative Moderation Test**

The second method for studying the possible moderation from frugal ecosystem is the multiplicative method. This method requires multiplication of the standardized variables that will be interacting. In this case the two variables are Reduction of Cost and Creation of a Frugal Ecosystem ($H_3$). The same moderation test was performed on the potential moderation from Core Functionality and Creation of a Frugal Ecosystem ($H_4$).

In SPSS AMOS, I first created a model with the two exogenous variables of Reduction of Cost and Creation of a Frugal Ecosystem and one exogenous variable of Reduction of Cost times Creation of a Frugal Ecosystem as the interaction term. All of these variables had paths that led to the endogenous variable of Perceived Value of Products. If the path from the interaction term (b3) is significant in the model, then there is moderation that is coming from the Creation of a Frugal Ecosystem.
As for the second proposed moderation effect, I created a model with the two exogenous variables of Core Functionality and Creation of a Frugal Ecosystem and one exogenous variable of Core Functionality times Creation of a Frugal Ecosystem as the interaction term. All of these variables had paths that led to the endogenous variable of Perceived Value of Products. If the path from the interaction term \( b_3 \) is significant in the model, then there is moderation that is coming from the Creation of a Frugal Ecosystem.

**Results of Moderation**

The baseline model for the two-group method for H₃ and H₄ had a \( \chi^2 \) of 1345.0 (df= 340). The model with the freed parameter to test the moderation for H₃ had a \( \chi^2 \) of 1084.8 (df= 338). The model with the freed parameter to test the moderation for H₄ had a \( \chi^2 \) of 1076.0 (df= 338). When these \( \chi^2 \) values for the baseline model and the two proposed moderation effects were put into SAS v9.4, and run through \( \chi^2 \) difference tests, there were no significant differences between the two \( \chi^2 \) values for H₃ or H₄.

The multiplicative run of moderation showed that there was no significant moderation effect from the interaction term (coefficient= .074 p>.05) for H₃. There was also no significant moderation effect from the interaction term for H₄ (coefficient= 0.086, p>.05)

Therefore, the interaction term in the moderation equation \( b_3 \) is not significant and therefore presents no moderation from Creation of a Frugal Ecosystem (Aiken and West 1991; Robinson et al. 2013; Dawson 2014). While these findings show that there is no moderation, there are some novel insights that we can gain from these findings that I will discuss in later sections.
Discussion

The results from the model show that there is a product-centric mentality that concerns how the seller can lead the drive to increase their sales through the differentiation of their products that create value for the potential buyer in a sustainable product context. The results of the overall model show that the seller is able to affect their sales through both changes in how the products function for the customer and the reduction in the superfluous features of the products offered to potential customers. In this view, the seller should have a product-centric mentality to serve their customers in the best way that they can serve them. This means that they need to create products that adhere to the needs and wants of the customer. The seller can take on the role of a “supply management” function to the customer (Sheth, Sisodia, and Sharma 2000). This will lead the seller to create offerings to the customer that will be customized to their preferences in both the product and the way that the overall company promotes their products to fit the needs of the B2B customer, which in turn will affect the sales to the final end user of the products (Sheth and Sisodia 1995). In other words, there will be changes in the marketing mix that sellers can actively pursue that will supply the customer with the products that the B2B customer will sell in a business-to-consumer (B2C) situation that will reflect back on the B2B customer in the supply chain.

Changes to product based on sustainable organizational design and total environmental management causes the seller to alter what they physically offer to their customers. This can lead to greater benefits for the seller both financially and competitively, which is the main area that the overall model strives to achieve (Shrivastava and Hart 1995). As the preferences for these new product offerings now lead the way for customers, a new market of frugal and sustainable products takes precedence over the original product market. This change can be seen as
representatives from selling companies now see that they need to change their offerings in order to better compete in this new market (Fraj-Andrés, Martinez-Salinas, and Matute-Vallejo 2009; Miles and Covin 2000; York 2009). This allows the seller to gain competitive advantage in the new market for frugal products that the customer now desires (Porter 1989; O'Shannassy 2008; Dangelico and Pujari 2010).

Creating Value for the Customer

The results from the study show that the seller is able to increase the perceived value of the products that are being offered to potential customers through this product-centric mentality. This supports the theoretical view of the Perceived Value Pricing Model in that the value and the pricing components of the model come from the value that is created in the core functionality of the new products and the pricing that is created in the reduction of the cost of the product to the B2B customer. These changes to the overall product value and pricing are meant to get the product into the zone of satisfaction that will benefit the buyer and the seller (Kortge and Okonkwo 1993). When this happens, this can transfer into intent to purchase the products. The buyer/seller dyad represents how the two entities work in conjunction with one another to both benefit from the final transaction of selling these new, sustainable, and frugal products. (Kim and Mauborgne 2005; Fosfuri and Giarratana 2009; and Berghman et al. 2012). In other words, there must be a cooperative effort from both the buyer and the seller to have the right product information so that the right products are offered that meet the dynamic needs of the customers.
A Limit to the Ecosystem

The non-supported moderation effects from Creation of a Frugal Ecosystem helps to increase the view that the buyers are more interested in the products than they are in the overall collaborative nature of the relationship between suppliers and buyers that can reverberate throughout the entire supply chain. While there is still collaboration needed on the products that the customers want, there seems to be a limit on this communication that does not go past product specifications and product preferences (Homburg, Workman, and Jensen 2000; Vorhies, Orr, and Bush 2011). This can help sellers to understand that they should focus more on the products themselves and serving their potential customers with this product-centric mindset (Brashear, Gebauer, and Kowalkowski 2012).

Theoretical and Managerial Implications

Frugal product theory shows us that changes in the core functionality and the reduction of cost to the customer will lead to increase perceived value for the customer. This is one of the major tenets of the product development process, especially in a B2B setting (Browning et al. 2002). This is achieved through the communication between the buyer and seller dyad (Jindal et al. 2016). However, this model has shown that there is some collaboration between the buyer and seller dyad that does not help to increase the perceived value of the products that the seller is offering. This is one implication that subsequent research can study in that there are some communication types between buyers and sellers in a B2B setting that will ultimately fall by the wayside in the efforts to increase the value of the product offerings of the seller (Sharmelly and Ray 2018). The theoretical view used in this study helps to put this collaborative communication of buyer and seller needs at the forefront of the business relationship. However, an implication
should be that there is a limit to the collaboration between each party that will not increase value and this limit comes in the form of creating a frugal ecosystem in the supply chain between the buyer and the seller (Brem et al. 2020).

Another implication that comes from this current research is that frugal product theory tends to focus on the value that is created from the actions of the seller to change the products offered and through the collaboration in the buyer and seller dyad (Weyrauch and Herstatt 2016). However, this current research helps to make the connection from creating that value to the actual intent to purchase the products from the actual customer. This current study helps to extend the theoretical significance of why frugal product theory is very important in the current marketing landscape in that it creates opportunities for organizations to compete with higher prospects for sales (Porter 1989; O'Shannassy 2008). Therefore, this current research pushes this value creation by the seller through to create a change in the actionable behaviors on the part of the potential buyer.

Managerial Implications

As with most product offerings, managers should be looking to best serve the needs of their customers. However, when it comes to products that have the core functions that the customer is looking for or the reduced price for the reduced functions that the customer would rather have than a full blown product with unwanted features, managers of the selling company should create a collaborative environment between themselves and the buyer to create the necessary products that the customer wants. When looking at how value is created for the customer, there is a proper mix of the features and price that will ultimately make the buyer want to purchase these products from the seller. This current research shows that the more
collaboration between the seller and the buyer, the more likely it is for the customer to purchase
the product from the seller, due to the seller creating value by taking care of the needs of the
customer.

Managers involved in the product development process should be aware that frugal
product theory and the implications drawn from the use of this theoretical view in their product
creation process can help to create higher sales in a B2B setting. What is even more interesting
is that direct changes to the products that they offer will also have this same effect on sales
(Jones et al. 2005). This means that the seller has flexibility in how fast they can generate new
sales as a product of how quickly and cost efficiently they can create changes to their own
products (Radas and Shugan 2005). This would help in continuing to create new opportunities
for more sales and to better serve customers in a dynamic and sometimes tumultuous business
relationship environment.

**Limitations and Future Research**

One of the limitations of this current study concerns the stage of relationship between the
buyer and the seller. Throughout this study, I have mentioned that the products that are offered
to potential customers usually contain product changes that are dynamic with changes that
manifest to what the customer needs and wants. What is not included in this study is how this
relationship between the buyer and seller will change over time, especially when an established
relationship become part of the mix. As with any business relationship, there are added elements
such as trust that could alter the results of the overall model (Morgan and Hunt 1994; Ganesan
and Hess 1997).
Another limitation that could be looked into with subsequent research concerns when the creation of a frugal ecosystem can be implemented in the overall model. If, instead, I was to move creation of a frugal ecosystem to later in the model, would this construct have an interaction with the perceived value of products? In other words, does value need to be created before the amount of collaboration between the buyer and the seller reaches this point. This also relates to my first point in that deeper collaboration between the buyer and seller also may first need to be established before the level of collaboration in the supply chain can support inclusion of a frugal ecosystem.

Conclusion

Creation of frugal and sustainable products that better fit with the needs and wants of customers is the central aim of this current study. What is even more important as part of this research is that the overall theoretical basis and implications come from a new and interesting subfield of marketing that takes into account both product development principles and value creation principles. Perhaps this new view into product development may be able to support some of the more pressing issues that organizations face in this changing and dynamic business landscape and especially in a B2B setting.

Even going further, I place frugal product theory in conjunction with sustainability principles as a result of these customer requirements for more frugal products. I hope that this research will start the conversation on how creation of sustainable products and frugal products can work hand in hand with one another. In this way the seller is able to create value through both sustainable products with the added value that comes from the new and innovative frugal features that meet the needs of the B2B customer (Lacoste 2016; Patala et al. 2016).
Sellers need to extract understanding about the wants and need of the customer as much as possible and use this information to offer the best options to their customers so that the customer can both make a purchase and keep making purchases from the seller. However, this can only be done when value is created in both the products that the seller offers and the value of the seller itself to the customer, especially as the relationship between each party in the buyer-seller dyad continues to grow throughout time (Crosby and Johnson 2001; Hanssens and Pauwels 2016; Morgan et al. 2019). In this way, both the seller and buyer will both be able to prosper.
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Appendix A: IRB Exempt Determination Letter

Institutional Review Board
Office of the Vice President for Research and Sponsored Projects
The University of Texas at El Paso IRB
PWA No: 000051224
El Paso, Texas 79968-0587
P: 915-747-7693 E: irb@utsa.edu

Date: July 7, 2020
To: Justin Munoz
From: University of Texas at El Paso IRB
Study Title: [1618283-2] The Impact of Sustainable Practice Communications on the Purchase Intention of Customers In A B2B Setting
IRB Reference #: College of Business - Marketing & Management
Submission Type: New Project
Action: EXEMPT
Review Type: Exempt Review
Approval Date: July 7, 2020
Expiration Date: July 6, 2022

The application for the above referenced study has been reviewed. This study qualifies as exempt from review under the following federal guidelines. 45 CFR 46.101(d)(2)

If institutional data (secondary or other) will be used for this research project please verify with the applicable department that such data may be used. Additional institutional clearances and approvals may be required. Accordingly, the project should not begin until all required approvals have been obtained.

Exempt protocols do not need be renewed. Please note that it is the Principal Investigator's responsibility to resubmit the proposal for review if there are any modifications made to the originally submitted proposal. This review is required in order to determine if "Exemption" status remains.

This exemption does not relieve the investigators of any responsibilities relating to the research subjects. Research should be conducted in accordance with the ethical principles as outlined in the Belmont Report.

You should retain a copy of this letter and any associated approved study documents for your records.

We will put a copy of this correspondence on file in our office.

If you have any questions, please contact the IRB Office at irb@utsa.edu or Christina Ramirez at (915) 747-7693 or by email at cramirez22@utsa.edu. Please include your study title and reference number in all correspondence with this office.

Sincerely,

Dr. Lorraine Torres, Ed.D, MT(ASCP)
IRB Chair

- 1 -
Appendix B: Construct Definitions and Original Scales

Chapter 1

Sustainability Effort (Objective Data)

Definition: Sustainability effort is one of the facets of communicating sustainability and is defined as how important environmental initiatives are as part of company operations. It is measured as the amount of money in dollars that is spent on sustainability initiatives as compared to the revenue that is brought into the organization.

Scale: (Objective) Amount spent on “green” initiatives/ sales revenue

Compliance Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)

Definition: Compliance effort is defined as both the claims made by a selling organization and the strength of those claims to customers that will help show customers that the selling organization goes beyond what is required and institutes their own sustainable goals.

Scale: 1. My company follows green initiatives for voluntary reasons rather than just to follow legally imposed requirements.

2. My company introduces green initiatives because they want to be more environmentally sustainable and go beyond meeting their legal obligations.

3. My company disseminates information on green initiatives to have the most environmentally sustainable buyer-seller relationship possible with its customers.

4. My company’s sustainable goals are not easily attainable.

5. My company’s sustainable goals are set in a short time period.

6. My company does its due diligence in choosing which areas of the business to focus on when introducing new sustainability initiatives.

Source: Bebbington et al. (1994); Coopers & Lybrand (1993)

Reporting Scale A (7-point Likert, 1= strongly disagree -> 7= strongly agree)

Definition: Reporting effort is defined as the reporting done by the organization to show customers and stakeholders in the company that their impact on the environment can be either specific with real and objective information or vague with subjective and opinionated findings.
**Scale:** 1. My company reports environmental goals to provide a “true and fair” view of operations.

2. My company reports their environmental impact data with enough specificity to satisfy external stakeholders in the business community.

3. My company reports their environmental impact data with enough specificity to satisfy the required information that is needed by collaborating financial institutions.

4. My company reports sustainability initiative results in a way to satisfy environmental lobby group concerns.

5. My company reports sustainability initiative results that would allow personnel within the company to make adjustments to goals to compete with other companies at becoming the most sustainable seller.

6. My company reports sustainability results in a way that would help shareholders/investors track progress over time.

*Source: Sinclair and Walton (2003); Vartiak (2016); KPMG (1993)*

**Company Image Scale (need to be transformed into 7-point Likert, 1= strongly disagree -> 7= strongly agree)**

**Definition:** Company image refers to the impression of a particular company held by any segment of the customers and potential customers that a company serves.

**Scale:** 1. Buying company stock is a good investment

2. Company often introduces innovations

3. Higher management is committed to the organization

4. Appealing advertising of products/services

5. I have heard/experienced positive things

6. First choice for high quality products/services

*Source: Zeithaml, Berry, and Parasuraman, 1996; Brewer and Hensher 1998*

**Trustworthiness of the Salesperson (7-point Likert, 1= strongly disagree -> 7= strongly agree)- 4 factors of trustworthiness**
**Definition:** Trust increases as the customer gains the impression that the salesperson is dependable, honest, competent, customer-oriented, and likeable. This in turn helps to facilitate the business relationship that will help both the buyer and the seller.

**Scale:** ***(R)- need to reverse score**

**Commitment**
1. The relationship that I have with a salesperson is something I am very committed to.

2. The relationship that I have with a salesperson deserves my maximum effort to maintain.

3. The relationship that I have with a salesperson is something I intend to maintain indefinitely.

**Courage**
1. When conflicts arise between a salesperson and my firm, the salesperson will intervene.

2. When conflicts arise between a salesperson and my firm, even if the salesperson is in the right, the salesperson will not place me in a disadvantaged position.

3. When conflicts arise between a salesperson and my firm, the salesperson will defend themselves but for both parties to benefit

4. I will agree with the salesperson when they are correct in their claim against my company.

**Character**

**Honesty**
1. The salesperson will admit the disadvantages of the product and/or service

2. The salesperson would not try to convince me to buy more product, even if he/she thinks it is more than a wise customer would buy.

3. The salesperson will not tell me that a situation is beyond their control when it is not.

**Law-abidance**
1. The salesperson does not break the law, no matter how trivial the consequences may be.

2. The salesperson abides by all laws

**Dependability**
1. The salesperson does not make more promises than what they can deliver.

**Responsibility**
1. The salesperson will discuss his or her needs with me.
2. The salesperson and I should gain equally from this relationship.

3. The salesperson has the customer’s best interest in mind.

4. The salesperson brings a customer with a problem together with a product and/or service that helps him or her solve that problem.

5. The salesperson tries to satisfy the customer rather than selling as much as they can sell.

6. The salesperson is well informed of the process by which a customer reaches a decision.

**Competence**

1. The salesperson wants their products and/or services really benefit a customer.

2. The salesperson is an excellent source of information for a customer.

3. The recommendations of the salesperson are able to solve the problems of a customer.

4. The salesperson gives a customer an accurate expectation of what the product and/or service will do for them.

5. The salesperson completely understand a customer’s needs.

6. The salesperson will show the customer exactly how the product and/or service may be used.

7. The salesperson tries to help a customer achieve his or her goals.

8. The salesperson is able to offer the product and/or services that is best suited to the customer’s problem.

9. The salesperson understands how general business and economic trends affect the ability of their company’s products and/or services to meet a customer’s needs.

10. The salesperson can identify who the main competitors are for my product and/or services.

11. The salesperson adds value to the customer.

*Source: (Lau and Chin 1993)*

**Purchase Intention Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)**

**Definition:** The purchase outcome can result from the establishment of a corporate image that is green and cares for the environment and the people. Within the context of green marketing, the concept of corporate image also applies to corporate association, in which socially responsible programs strongly affect consumers' hallmarks of corporate image, and in turn corporate
outcome and the willingness of customers to purchase products from that organization (Berens et al. 2005; Ellen, Webb, Mohr, 2006). Therefore, an important point of green marketing within an organization is to establish a favorable corporate image construct determined by consumers. In turn, there will be positive outcomes from this corporate image that will translate into sales of products and services for the company (Yoon et al. 1993; Wu and Chen 2014).

**Scale:** Please describe your overall feelings about a supplying company with respect to their sustainable initiatives.

1. I will definitely consider doing business and engaging with a company with high environmentally sustainable goals.
2. I definitely intend to buy products from a company with high environmentally sustainable initiatives.
3. I have high purchase interest for any products that come from a company with environmental goals for the future.
4. I will definitely buy products from a company that has awareness of current environmental issues.
5. I will probably buy products from environmentally sustainable companies over companies that are not environmentally sustainable.

*Source: (Spears and Singh 2004; Chen and Chai 2010)*

**Chapter 2**

**Purchase Intention Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)**

**Definition:** The purchase outcome can result from the establishment of a corporate image that is green and cares for the environment and the people. Within the context of green marketing, the concept of corporate image also applies to corporate association, in which socially responsible programs strongly affect consumers' hallmarks of corporate image, and in turn corporate outcome and the willingness of customers to purchase products from that organization (Berens et al. 2005; Ellen, Webb, Mohr, 2006). Therefore, an important point of green marketing within an organization is to establish a favorable corporate image construct determined by consumers. In turn, there will be positive outcomes from this corporate image that will translate into sales of products and services for the company (Yoon et al. 1993; Wu and Chen 2014).

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4. I will definitely buy products from a company that has awareness of current environmental issues.

5. I will probably buy products from environmentally sustainable companies over companies that are not environmentally sustainable.

Source: (Spears and Singh 2004; Chen and Chai 2010)

Core Functionality Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)

Definition: Core functionality means that the products that the seller offers to the customers have functionalities and performance features that are essential and compatible with the socio-economic context of markets with high resource-constraints while meeting market needs

Scale: Think about the products that you purchase from your supplier and point out the level of agreement of the company with the following statements concerning the functionality of those products. In the development of products your company has purchased, your supplier has assigned great importance to….

1. focus on core functionality of the product rather than additional functionality

2. ease of product use

3. the question of durability of the product (does not break or spoil easily)

Source: (Rosetto et al. 2017)

Cost Reduction Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)

Definition: Focus on reduction of costs relates to the lower-cost, resource constrained, manufacturing of a good that helps to reduce cost as much as possible and helps past these cost savings on the customer. One of the drivers of this reduction in cost sometimes comes from the
increasing pressure from low-cost competition forcing the seller to develop products to meet the needs of their consumers with scarce resources

**Scale:** Think about the products that you purchase from your supplier and point out the level of agreement of the company with the following statements concerning the cost of those products. In the development of products your company has purchased, your supplier has assigned great importance to….

1. solutions that offer "good value" products
2. significant cost reduction of the actual product
3. create products that aim for the saving of organizational resources
4. create products that aim for the rearrangement of organizational resources

*Source: (Rosetto et al. 2017)*

**Frugal Ecosystem Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)**

**Definition:** A frugal ecosystem is a “collaborative effort of an integrated corporate network of stakeholders geared towards engaging user communities for the creation and shared capture of value geared to the local and social needs of particular markets”

**Scale:** Think about the products that you purchase from your supplier and point out the level of agreement of the company with the following statements. In the development of products your company has purchased, your supplier has assigned great importance to….

1. efficient and effective solutions to customers' social/environmental needs
2. environmental sustainability in the operational process
3. partnerships with my company in the operational process

*Source: (Rosetto et al. 2017)*

**Perceived Value of Products Scale (7-point Likert, 1= strongly disagree -> 7= strongly agree)**

**Definition:** The perceived value of the products is the demand from customers that have been created through new or improved elements for a product, but also results in the reduction of cost by eliminating or reducing unnecessary aspects of the product itself, making these products more appealing to customers with the needs of products that place functionality above other aspects and reduced cost, which are synonymous with frugal product theory.
Scale: Please indicate your level of agreement with the following statements concerning a product that you have recently purchased from your main supplier. The product:

1. has consistent quality
2. is well made
3. has an acceptable standard of quality
4. is one that my company would enjoy
5. would make my company want to use it
6. would make stakeholders in my company feel good
7. is reasonably priced
8. offers value for money
9. is a good product for the price
10. would help my company to feel socially acceptable
11. would improve the way my company is perceived
12. would make a good impression on other people

Source: (Sweeney and Soutar 2001; Walsh et al. 2014)- PERVAL Scale
Curriculum Vita

Prior to joining the doctoral program at UTEP, I spent several years as a sales training manager and technical training manager in the business-to-business sector in a private logistics company. I find that the knowledge that I gained in this private industry has been an enormous help while working on my doctorate. I placed most of the issues that I faced as a sales training manager at the forefront of my research agenda in order to add to the sales literature and to help future managers that face similar issues.

As a doctoral student, my main areas of concentration are in both (business-to-business) B2B and (business-to-consumer) B2C sales in both my research and in the classes that I have taught in the past and the one I am currently teaching. My research focuses on increasing the sales performance for salespeople and improving the effectiveness of training to allow these salespeople to increase revenue for the organization as a whole, which in turn, creates higher individual commissions and a higher quality of life for salespeople as a whole. My research has allowed me to present several empirical research articles at national marketing conferences. Currently, I have several presentations of papers at the American Marketing Association (AMA) Summer and Winter Conferences as well as the annual Academy of Marketing Science (AMS) Conference that have taken place over the last three years. These presentations have been in the sales and B2B track in all three of these conferences.

I have an extensive research agenda with various topics in sales. I have a forthcoming paper in 2021 in a major B2B marketing journal. I have several papers that have gone under review in the past few months. Most of these papers are at major marketing journals that cover selling and sales management topics while the others are at major marketing journals that cover a wide range of topics. I have also been actively involved in special research opportunities at other universities across the United States that have allowed me to not only learn from other faculty members, but also to develop new research articles.

I have taught various topics in marketing ranging from product pricing to relationship building between salespeople and customers in both a B2B and B2C setting. Most of the classes that I instruct are comprised of sales and selling management topics. During the first two years in my doctoral program, I was also able to help improve the curriculum of several undergraduate and graduate level courses under guidance from the faculty. I have also contributed to other doctoral level courses as a teaching aide for faculty at UTEP.

I am also an active member of the PhD Project as a Hispanic doctoral student, which has also added to my entire experience in my doctoral program as there are additional resources that I have been able to partake in throughout each semester that I feel have helped increase the quality of my overall research.

Thank you very much for reading this research. I hope that it will have an effect on future researchers as well as those that can put it into practice with their own employees.

What we do in life, echoes in eternity,

Justin R. Munoz, MBA
PhD Candidate
The University of Texas at El Paso
Contact Information: jrmunoz2218@gmail.com