

Understanding the Psychology of the Industrial Goods Buyer to Know When Price Does Not
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Abstract

Consumers often do not understand the factors responsible for price or how those factors contribute to the overall cost of a good or service. As a result, those consumers do not always behave logically in regard to making buying decisions for those goods and services.

Consequently, suppliers may lose orders due to price. The problem addressed by this study is that firms that focus too heavily on price when selling industrial commodity goods suffer negatively with respect to profitability. The purpose of this mixed method study was to investigate relevant non-price acquisition factors of industrial commodity goods sold by a goods supplier in east Tennessee, and to uncover a hierarchy of acquisition needs that buyers of such goods may seek to satisfy when awarding bids to suppliers. If the marketer of industrial goods better understood how industrial goods buyers perceive price relative to other important factors of acquisition, that marketer could exploit such knowledge in an attempt to increase his or her firm's profitability, thus developing a solution to the initial problem of losing an order due to price. To answer research questions, interviews and an online survey were utilized. Ten participants were recruited to complete a questionnaire interview; and 165 participants responded to an online survey. In regard to research questions concerning lead time, product quality, the helpfulness of salespeople, and price, there was a statistically significant relationship between each variable and the likelihood of being awarded a bid for industrial commodity goods. Moreover, price was the least important factor in the online survey and tied as the least important factor in the interviews. The implication is that firms can successfully be awarded bids for industrial commodity goods without focusing too heavily on price. Future research should explore to what extent gender might play a role with regard to the attitudes of buyers and to what extent factors of acquisition are important to those buyers.

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Chapter 1: Introduction

The psychology of the industrial commodity goods buyer is such that they, along with other consumers, often believe that selling prices are not necessarily fair prices (Ratchford, 2014). Some believe that relatively higher prices are less fair than relatively lower prices. This may possibly be due to a misunderstanding of what factors generate price. Consumers often do not understand the factors responsible for price (Ferguson, 2014); they do not understand how these factors contribute to the overall cost of a good or service. Thus, there often appears a disconnect in the marketplace with regard to what consumers deem as fair prices and market prices that are actually derived as a result of the interactions between supply and demand.

For instance, consumers do not always think and behave logically with regard to purchasing decisions. If a consumer did not understand price, or appreciate the factors that make up price, one would not expect that consumer to act logically in regard to buying decisions implemented that pertain to a good or service associated with that price. In the marketplace, sellers often lose out on sales because of the considerations afforded by consumers with regard to cost (Friend, Curasi, Boils, & Bellenger, 2014). Consumers do not fairly consider cost factors. Also, the seller could be excessively attentive to price when the buyer is not. The seller might assign a higher level of importance to price than the buyer does. Nonetheless, price is important (Alavi, Wieseke, & Guba, 2016); and, consumers often evaluate a product's price relative to its quality and other monetary benefits (Kapferer, Kilppert, and Leproux, 2014).

While consumers are sensitive to price, they are less sensitive to price under certain conditions. For instance, research shows that compulsive consumers are less sensitive to price than consumers that are not compulsive (Kukar-Kinney, Ridgeway, & Monroe, 2012). Research also shows that consumers assume that there is a direct relationship between the quality of a

good and the price of that good. Firms that can quell the price concerns of its customers can be profitable (Lymeropoulos, Chaniotakis, & Soureli, 2013). Since happy customers are usually more satisfied with pricing strategies, vendors have an incentive to make their customers happy. Therefore, if a seller could exploit the benefit of a product to a customer, there might be greater potential for a sale to be made to that customer. Since firms that focus too heavily on price can suffer negatively with respect to profitability, research that identifies non-price related benefits associated with the acquisition of goods would be beneficial to the field in which those goods are sold.

Statement of the Problem

The problem addressed by this study is that firms that focus too heavily on price suffer negatively with respect to profitability. Firms can lose orders on pricing when price becomes the central focus of a sale; and, the vendor cannot compete on price against a lower cost alternative. Firms that focus too heavily on the selling price of a good can experience a negative effect on the profitability of that good (Parthiban, Zubar, & Katarak, 2013). If the only tool a firm has that it can use as leverage over its competition is price, then, as the firm lowers its price, it has a more difficult time covering minimal operational margin requirements.

If the prices of goods represent an important factor of acquisition to the buyer (Alavi, et al., 2016) then the buyer is going to weigh such costs relative to potential benefits in regard to buyer-supplier collaboration associated with the acquisition of industrial commodity goods (Botes, Niemann, & Kotzé, 2017). As a result, some competitors will lose their bids because of price (Kapferer, Kilppert, and Leproux, 2014). Many firms seemingly lose such bids because of price, and not necessarily because of other mitigating factors such as quality, product availability, or service after the sale. While price may not always be the most important factor,

price is usually an important factor (Alavi, et al., 2016). For instance, total revenue is made up of unit costs plus unit profits multiplied by the quantity of units sold. Thus, the only ways to increase profitability on the sale of such products are to decrease product costs, increase per-unit selling prices, increase the number of units sold, or employ a combination of the aforementioned strategies. Firms would economically benefit by being able to identify opportunities where non-price factors of acquisition exist. Thus, research is needed to help identify relevant non-price acquisition factors of industrial commodity goods.

Purpose of the Study

The purpose of this quantitative and qualitative study was to investigate such relevant non-price acquisition factors of industrial commodity goods. The study sought to uncover a hierarchy of acquisition needs that buyers of industrial commodity goods may seek to satisfy when awarding bids for such goods to suppliers. Moreover, this study sought to uncover instances where goods can be offered at prices that are potentially higher than those offered by competitors by exploiting the importance of other factors of acquisition. This study surveyed buyers of industrial commodity goods in the Tennessee market; and also surveyed those who influence buying decisions for such products in that market. This study contributed to the body of knowledge by studying factors such as product availability, product quality, price, and technical expertise.

Conceptual Framework

The conceptual perspective for this research is one that is derived from an understanding of the psychology of the buyer of industrial goods and how these buyers perceive price. If the marketer of industrial goods better understood how industrial goods buyers perceived price relative to other important factors of acquisition, that marketer could exploit such knowledge in

an attempt to increase his or her firm's profitability. Thus, the marketer could develop a solution to the initial problem of losing an order due to price.

Perceptions of price could play an influential role in the decision-making process if those perceptions are based on misinformation. Rondan-Cataluña and Martin-Ruiz (2011) found that a substantial difference sometimes exists between what a consumer believes to be a fair price of a good or service and that consumer's understanding of the nature of that good or service. Whether or not price increases were implemented by retailers or manufacturers also contributed to the relative understanding of price fairness (Rachford, 2014). Ferguson (2014) found that consumers often lack a functional understanding of various price factors; and that such misunderstandings often contributed to consumers' perceptions of price fairness. Thus, consumers often adopt a notion of perceived fairness with regard to prices and how such prices are evaluated.

Cultural dimensions of consumer psychology might exist as well. For instance, Van Winter and Liebrez-Himes (2015) found that U.S. buyers of software services focused more on price than German buyers and were more inclined to source internationally if such sourcing resulted in overall lower costs; whereas, German buyers preferred quality and vendor attitude. Gender is also an element of consumer ideology that should be studied. Swift & Gruben (2000) looked at gender differences when weighting vendor selection criteria within the chemicals, electronics, and transportation industries and found that women seemed to rely more on product dependability and support than men. Women also placed more emphasis on geographic proximity and warranty availability than men. Marketers could exploit culture and gender in an attempt to increase profitability.

Firms invest resources in order to earn customer business. For instance, banks seek to increase profitability by altering customer behavior by educating their customers on how they create value (Persson, 2013). Banks also restructure their fees so as to be perceived more fairly and to manage price sensitivity levels of their customers (Lymperopoulos, Chaniotakis, & Soureli, 2013). Other firms increase profitability by implementing price discrimination strategies in order to influence buying behaviors in competitive markets (Mahmood, 2014). The theory behind the research is not to focus on price in order to become a low-cost provider; rather, the theory is to better understand how price becomes a significant driver that generates those sales, and to better understand the economic effect that buyer psychology has with respect to price.

Nature of the Study

The methodology of the research is qualitative and quantitative in nature and is best described as a convergent parallel mixed methods design. This design is a simple mixed methods design in that it involves the separate collection of qualitative and quantitative data. Data are analyzed independently, and then compared to determine if and how the results relate with and confirm to each other (Creswell, 2014).

This study, in the same way, relied on interviews conducted with buyers and an online survey of buyers of industrial commodity goods. Information derived through exploratory research methods facilitated the understanding of how buyers regard price. Since observational methods of research allow the researcher to use qualitative research methods in order to describe behavior, methods that utilize naturalistic observations in order to develop a methodological approach to analyzing data were employed. An online survey allowed information to be

gathered for statistical analyses so that statistically significant relationships could be identified between variables.

Naturalistic observation is the act of observing phenomena in a natural setting so that the context of the phenomena can also be understood (Cozby & Bates, 2012). When a researcher conducts research through naturalistic observation, research subjects are presented in their natural setting. As such, research utilizing this approach is conducted in the field as opposed to in a laboratory environment. This type of observation can occur during a one-on-one interview. If a buyer is interviewed in his or her natural setting, observations of this buyer could be beneficial in terms of understanding how the buyer is motivated with regard to specific tasks. Understanding such motivational factors could help in the quest of understanding the psychology of that buyer. Moreover, identifying such characteristics might make it easier for the observer to identify similar patterns while making other observations.

Once phenomena are understood, theories explaining the phenomena can be exploited and researched more effectively and efficiently. This continued research could lead to answers to research questions originally posed to address the problem. Thus, the natural environment contributes to the quality of the data collected in a way that a laboratory environment could not.

During the interview, the interviewee was asked generalized and open-ended questions in an attempt to allow him or her to become a participant in the field observation process. Participant observation can be used to quickly determine what works and what does not work in regard to contemplating solutions (Dahlke, Hall, & Phinney, 2015). In this way, participant observation could be used in a way to strengthen theory development.

The purpose of the interview was to learn how price is important to the buyer. The answers to interview questions provided an insight into the buyer's frame of mind so that what

was important to the buyer could be determined. Once there is an understanding of what is important to the buyer, marketers could exploit such understanding in an attempt to prevent the loss of potential orders due to price.

Research Questions

The study developed research questions that would be used to assess factors that are important in the process of acquiring industrial commodity goods. The answers from these questions were used to establish a hierarchy of those factors. Research questions addressed factors of acquisition such as product availability, product quality, knowledge of the firm's salesforce, and price.

The research questions for the qualitative portion of the study were as follows:

Interview Q1. How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods?

Interview Q2. How important is a product's specifications and general level of quality when deciding to whom to award a contract for industrial commodity goods?

Interview Q3. How important is the level of knowledge and helpfulness of the inside sales staff when deciding to whom to award a contract for industrial commodity goods?

Interview Q4. How important is price when deciding to whom to award a contract for industrial commodity goods?

Survey questions were also asked, and those responses were gathered into a spreadsheet. Each recipient was asked a yes or no question as to whether or not they are a purchasing manager, purchasing agent, buyer, product engineer, or if they have some degree of decision influence over industrial goods purchased by their organization. If the answer was no, their response was deleted from the spreadsheet. The recipients were then asked another yes or no

question regarding whether or not they awarded a contract to TEK. For the remaining survey questions, recipients were asked to please note whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with a series of statements. The statements appeared as the following research questions:

Survey Q3. Lead time is an important factor in determining to what company to award a bid for industrial goods.

Survey Q4. Product quality and product specifications are important factors in determining to what company to award a bid for industrial goods.

Survey Q5. The level of knowledge and helpfulness of a firm's salespeople is an important factor in determining to what company to award a bid for industrial goods.

Survey Q6. Price is an important factor in determining to what company to award a bid for industrial goods.

The hypotheses explored by the study through the research questions were:

Survey H1. There is a positive relationship between the importance of lead time and the likelihood of winning a bid for industrial goods.

Survey H2. There is a positive relationship between quality / specifications and the likelihood of winning a bid for industrial goods.

Survey H3. There is a positive relationship between the level of knowledge and helpfulness of the sales people and the likelihood of winning a bid for industrial goods.

Survey H4. There is a negative relationship between price and the likelihood of winning a bid for industrial goods.

Significance of the Study

This study is important in that it shed light on how important various factors of acquisition are to the industrial goods supplier when determining to whom to award a bid for the supply of industrial goods. For instance, it can be accepted as a given that industrial buyers care about price, product lead time, product quality, and the level of helpfulness and technical expertise of sales associates. That a buyer has access to a finite amount of funds means that he or she will be concerned with price at some point. That a project engineer or project manager has a tentative schedule in place during which time a particular project must be completed means that the buyer will be concerned with lead time at some point. That a project engineer or project manager has determined the type of materials needed for a particular project means that the buyer will be concerned with the quality of those materials acquired at some point. Therefore, the level of helpfulness and technical expertise of the firm's sales associates will aid the buyer in determining whether or not the goods presented for consideration will suffice.

Thus, the marketer of such goods is not concerned with whether or not the aforementioned factors of acquisition are important; rather, he or she is interested in how such factors of acquisition are important to the buyer. In this study, the researcher uncovered how various buyers regard price, lead time, product quality, and the level of helpfulness and technical expertise of the industrial goods buyer. The researcher also looked for other factors of importance insofar as a buyer may hold them to be of importance as well.

From an applied perspective, suppliers of industrial goods will gain insight into a buyer's motives. This understanding will help the supplier to compete more strategically as he or she tries to earn business. As the marketer better understands the motivations of the buyer, he or she can deliberately craft the attributes of his or her product offerings to correspond with the product

demands of the buyer. The potential is a win-win scenario. The buyer successfully acquires the materials for the completion of the project; and, the supplier successfully earns the business of a gratified customer.

Definitions of Key Terms

Most terms used are common to the industrial commodities industry. However, to avert ambiguity, terms relevant to this research are defined by the researcher and noted below.

Availability of Salespeople. The availability of salespeople is a customer service metric that refers to how quickly and efficiently inside and outside sales team members respond to customer questions and concerns, and the overall level of communication experienced by the customer during the entire order fulfillment process (customer service, 2006).

Lead Time or Availability. A product's lead time or availability is the total time, in terms of calendar days, between the receipt of an order placed by the customer with the vendor and the delivery of the product by the vendor to the customer (lead time, 2011).

Price. Price is the purest expression of value (Robertson, 2007), and includes the money value of the basis of the seller's cost of producing and selling a good (price, 2006). As such, it includes the total cost to the buyer, in terms of dollars; and includes the selling price of the product, freight costs, and expedite fees, if any, less any discount due to the customer as a result of payment terms.

Product Quality. Product quality refers to the material composition utilized, and the fabrication techniques implemented by specific manufacturers in accordance with various third-party manufacturing specifications demanded by customers, as such relate to form, fit, and function of goods in the industrial commodities industry (quality control, 2018).

Product Specifications. Product specifications are guidelines established by third-party industry authorities, such as the International Organization for Standardization (ISO), the American Society of Mechanical Engineers (ASME), and the American Society for Testing and Materials (ASTM), and are used to determine the conformity of goods to be used in various customer applications where such requirements are invoked (product specification, 2016).

Technical Expertise. Technical expertise refers to the breadth of product knowledge and product understanding held by both inside and outside sales representatives, and the level of service offered by both groups (Henderson, 2017).

Summary

Understanding the psychology of the industrial goods buyer is paramount to formulating a successful strategy of supplying goods to that buyer. If the marketer assumes that price is the most important factor, and then formulates a strategy around price, such a strategy could have negative effects economically. Thus, the purpose of this study was to gain an understanding of how buyers regard non-price factors of acquisition. By understanding how buyers regard non-price factors of acquisition, the marketer could gain insight as to how to more effectively market his or her products to the buyer.

Chapter 2: Literature Review

The purpose of the study was to explore meaningful acquisition factors valued by buyers of industrial commodity goods. As buyers of such goods meander through the acquisition process, various aspects of the process can be interpreted as a hierarchy of needs. This study sought to identify that hierarchy in order to uncover instances where industrial commodity goods could be successfully offered at prices that are not necessarily the lowest. This study surveyed buyers of industrial commodity goods who participate in the Tennessee industrial market. This study also surveyed those who influence such decisions. The aforementioned contributed to the body of knowledge by focusing on factors of acquisition such as product availability, product quality, price, and technical expertise.

Documentation

The literature review compilation consisted of search terms that were used in order to obtain a listing of sources that were in line with the desired topic. EBSCOhost and ProQuest databases offered through Northcentral University were primarily used. The main area of interest of this paper is in vendor selection criteria, and how such criteria can be exploited so as to maximize profitability on goods and services offered to buyers that satisfy the aforementioned criteria. The goal was to identify opportunities where buyers select vendors in instances where price is not the most important factor. Thus, when searching for sources related to these ideas, one should search for relevant word combinations applicable to these ideas. For instance, a search of “consumer buying behavior of industrial goods” delivered results that included an article by Liu, My, and Leach, (2013) that explained some effects of technology with regard to the vendor selection process. A search of “vendor selection criteria of industrial inventory” yielded an article by Parthiban, Zubar, and Katarak (2013) in which a SWOT strategy was

discussed in the evaluation process of determining to which vendors to award business. A search of “price and vendor selection of contracting goods” returned results that included an article by Watjatrakul (2014) in which weighted averages of various selection criteria with regard to price were used in determining to which vendor to award business.

A search of “vendor selection criteria” originally produced a list of sources that were too broad. A search of “vendor selection criteria where price is not a factor” produced a list of sources; however, the sources did not appear to address the importance of price. Therefore, a further search needed to take place so that the relative importance of various selection criteria could be examined. A continued effort was needed with regard to searching for sources related to a particular interest, such as on which factors should a bidder focus that will maximize profitability while simultaneously allowing the bidder to remain competitive. Table 1 provides a summary of the keyword searches employed for the literature review.

Table 1
Summary of keyword searches for literature review

Database	Keywords	Search Limiters
EBSOhost & Proquest	Consumer buying behavior of industrial goods	Scholarly, Peer reviewed, 2013-2018
EBSOhost & Proquest	vendor selection criteria of industrial inventory	Scholarly, Peer reviewed, 2013-2018
EBSOhost & Proquest	price and vendor selection of contracting goods	Scholarly, Peer reviewed, 2013-2018
EBSOhost & Proquest	vendor selection criteria where price is not a factor	Scholarly, Peer reviewed, 2013-2018

Conceptual Framework

The guiding conceptual framework of this study involves an understanding of the psychology of the consumer and the potential economic effects of that psychology. This framework encompasses the theory behind how price is perceived and how such perceptions can

sway consumers based on, for instance, issues of fairness. Culture and gender dimensions are considered as how each may contribute to such perceptions. This will all culminate into an understanding of the importance of various factors of importance in the acquisition of industrial commodity goods. Most of the terminology used within the study include commonly referred to terms that have been adopted by the industrial commodity industry. However, in order to circumvent uncertainty and vagueness, a few terms that are relevant to this research have been defined in Chapter 1, and are again noted below.

Price is a term used and refers to the total cost to the customer, in terms of dollars. Price includes the selling price of the product, plus freight costs, plus expedite fees, if any, less any discount due to the customer as a result of payment terms. Price is regarded as the direct monetary investment that a firm will make with regard to the acquisition of a particular good or service. The assumption about price with respect to this study was that price is a factor of the acquisition process and will be important to the buyer. In that regard, price was studied through the framework of uncovering how buyers assign importance to price relative to other factors of acquisition.

The lead time of an item is another term that is used and refers to the availability of that item. Lead time is the total time, in terms of calendar days, between the receipt of an order by the vendor from the customer and the receipt of the product by the customer from the vendor. The assumption about lead time with respect to this study was that lead time is a factor of the acquisition process and will be important to the buyer. In that regard, lead time was studied through the framework of uncovering how buyers assign importance to lead time relative to other factors of acquisition.

The quality of a product is another term that is used and refers to the material composition utilized, and the fabrication techniques implemented by specific manufacturers in accordance with manufacturing specifications demanded by customers as such relate to form, fit, and function of goods in the industrial commodities industry. The assumption about product quality with respect to this study was that product quality is a factor of the acquisition process and will be important to the buyer. In that regard, product quality was studied through the framework of uncovering how buyers assign importance to product quality relative to other factors of acquisition.

The specifications of a product is another term that is used and refers to guidelines that have been established by third party industry authorities, such as the International Organization for Standardization (ISO), the American Society of Mechanical Engineers (ASME), and the American Society for Testing and Materials (ASTM). Standards created by these organizations are used to determine the conformity of goods to be used in various customer applications where such requirements are invoked. The assumption about product specifications with respect to this study was that product specifications is a factor of the acquisition process and will be important to the buyer. In that regard, product specifications was studied through the framework of uncovering how buyers assign importance to product specifications relative to other factors of acquisition.

The technical expertise of sales personnel is another term that is used and refers to the breadth of product knowledge and product understanding held by both the inside and outside sales representatives. Technical expertise also involves the level of service offered by both the inside and outside sales representatives. The assumption about technical expertise with respect to this study was that technical expertise is a factor of the acquisition process and is important to

the buyer. In that regard, technical expertise was studied through the framework of uncovering how buyers assign importance to technical expertise relative to other factors of acquisition.

The availability of the salespeople is another term that is used and refers to how quickly and efficiently inside and outside sales team members respond to customer questions and concerns, and the overall level of communication experienced by the customer during the entire order fulfillment process. The assumption about the availability of salespeople with respect to this study is that the availability of salespeople is a factor of the acquisition process and will be important to the buyer. In that regard, the availability of salespeople was studied through the framework of uncovering how buyers assign importance to the availability of sales people relative to other factors of acquisition.

Firms award business to vendors based on a selection process whereby the firm attempts to obtain a cost benefit by purchasing from a particular seller. Focusing too much on cost factors can be disadvantageous financially (Parthiban, Zubar, & Katarak, 2013). Thus, a problem can occur when too much emphasis is placed on cost. Since revenue is a function of price, this research will seek to understand consumer psychology with respect to price and the economic effects that result from such attitudes.

The basis of this study was the embodiment of a conceptual framework whereby the psychology of consumers was studied with regards to its resulting economic effects. Thus, in order to understand that a focus on price could be a problem, one must first understand how a focus on price could be a problem. One problem regarding price lies with perceptions regarding price. For instance, is a particular price necessarily a fair price?

Consumers perceive price in various ways; however, perceptions of price could negatively affect suppliers if such perceptions were based misinformation. For instance, there is

a difference between what a consumer believes to be a fair price of a good or service and that consumer's understanding of the nature of that good or service (Ferguson, 2014; Rondan-Cataluña and Martin-Ruiz, 2011). Some consumers adhere to a belief that selling prices are often higher than perceived fair prices (Bolton, Warlop, & Alba, 2010); and, some consumers do not understand how retailers and wholesalers are motivated to change prices (Rachford, 2014). As a result, consumers establish for themselves a so-called fair price; and, they often adopt a notion that market prices higher than those fair prices are deemed unfair; while, prices at or below those fair prices are deemed fair (Bolton et al., 2003).

There are cultural perceptions of price. Software buyers in the United States, for instance, focus on price; while, German buyers focus more on quality and vendor attitude (Van Winter & Liebreiz-Himes, 2015). There are also price perceptions based on gender. Female buyers rely more on product dependability and support and less on price than male buyers (Swift & Gruben, 2000).

The theory guiding this research is that although perceptions of price might be relative, those perceptions can be still be swayed. According to one economic theory, luxury goods typically sell at profit margins higher than those of normal goods (Yeoman & McMahon-Beattie, 2006; Socha, 2007). That is because consumers of such goods are more interested in the bells and whistles of product perks; rather than on practicality and function. By understanding consumer relationships more, a firm could discover avenues through which it could become more profitable.

Also, while consumers are sensitive to price increases, such sensitives often lead to unfavorable attitudes toward such increased prices; however, vendors that are sensitive to those issues, and then address those specific concerns with their customers, are able to successfully

increase prices, even during uncertain economic times (Ferguson, 2014). Therefore, even though consumers are sensitive to price increases, they can be acceptant of price increases under particular instances. Thus, the applied nature of this research included effectively identifying such instances.

This research sought to uncover instances where buyers may be inclined to pay more for particular goods and to gain a better understanding of those instances. Thus, understanding the importance of factors of acquisition aided in this endeavor. Given the problem that many companies frequently lose out on potential orders for industrial goods due to pricing alone, and not due seemingly to other mitigating factors, price is not always the deciding factor. This attitude is also not a new one. A 1994 study by the National Association of Purchasing Management concluded that price was not the most important attribute in supplier selection; and that price was often chosen second to quality or availability by survey participants (Wilson, 1994). While the global economic competitive realities of 2018 are not necessarily the same as they were in 1994, it would still be profitable to uncover conditions under which the sale of industrial goods could yield higher margins. If price still is not the deciding factor, consumers could be convinced to pay more for a particular good.

Attitudes About Price

Consumers often believe that selling prices are unfair (Bolton, Warlop, & Alba, 2003; Ratchford, 2014; Tripathi, 2017). Bolton et al. (2003) found that consumers often do not understand factors that determine price. Moreover, consumers often adopt a notion of perceived fairness with regard to prices and how such prices are evaluated. The study found that market prices higher than so-called fair prices were deemed unfair; while, prices at or below so-called fair prices were deemed fair. Consumers often derive a notion of fair prices based on estimated

vendor costs plus some degree of reasonable profit. Research showed, however, that two out of three consumers underestimated vendor costs primarily because they did not appreciate inflationary effects on various inputs of production. The study also found that, even when given historical prices and current prices, consumers were unable to compute percentage increases of current prices over historical prices and then apply such percentage increases to current prices accurately in order to calculate future prices. If market prices are higher than perceived fair prices, consumers will often label such as gouging. Perceptions of price appear to be more emotional than logical (Lee, Bolton, & Winterich, 2017).

In Ratchford (2014), the researcher found that whether or not price increases are implemented by retailers or manufacturers contributes to the relative understanding of price fairness. In Tripathi (2017), the researcher found that small increases are interpreted as fair; whereas, larger increases were interpreted as greedy. Consumers are often ignorant of factors of price with regard to price increases resulting from decreased product supply, increased demand, or increased variable costs (Ratchford, 2014). Ratchford (2014) also revealed that price increases advanced by retailers when accompanied by increases in demand are considered more unfair than price increases advanced by manufacturers. The study also reveals that price increases advanced by manufacturers when accompanied by decreases in supply are considered more unfair than price increases advanced by retailers. Manufacturers that raise prices because of cost increases are deemed fairer than retailers raising prices because of the same factors. The study concludes that while consumers are cognizant of factors that affect price; consumers are inconsistent with regard to how they apply such factors to the supply chain.

Consumers look for fairness in the supply chain. In Qin, Mai, Fry, and Raturi (2016), researchers explored the effects of fairness concerns on supply-chain decision making and

production costs. The study begins with an explanation of a behavioral economic assumption that holds that supply-chain agents are rational and that they work to realize long-term gains. This theory also maintains that fairness is not necessarily a part of the logic since influential participants like Wal-Mart are responsible for decreases in supplier profits. The researchers' literature review explored how people care about giving and receiving fair treatment.

Researchers created a conceptual model of their experimental study. In the study, supply-chain profit is assumed to consist of supplier profit as a function of wholesale price and retailer profit as a function of retail price. Bounded rationality contributes to profitability since the supply chain agent is limited by the information he or she has when making decisions that contribute to profitable outcomes. In addition to that bounded rationality, fairness concerns also contribute to the supply-chain profit. However, private cost information influences the fairness concern. The purpose of the study is to learn how private cost information influences fairness concerns.

Researchers administered a game among undergraduate business students where participants acted as suppliers and retailers. One experiment included humans as both suppliers and retailers; while, another experiment included humans and a computer as either the supplier or retailer. Researchers concluded empirically that human participants favored a fair transaction when cost information was known; however, when information was unknown, fairness was suppressed, and selfishness prevailed with regard to how to establish retail prices when supplier costs were unknown.

Computer participants, conversely, had no appreciation for the idea of fairness. However, pricing outcomes from computer participants were closer to the outcomes from human participants during scenarios where more information was known. Therefore, as researchers

concluded, the supply chain performed more efficiently and fairly when more information was known.

Consumers also believe that relatively higher prices are either unfair or less fair than relatively lower prices (Tripathi, 2017). This is because they lack a functional understanding of various factors that affect price (Ferguson, 2014; Rondan-Cataluña, & Martin-Ruiz, 2011). Rondan-Cataluña and Martin-Ruiz (2011) helps to explain consumers' attitudes toward price. This study explains that consumers often think illogically; therefore, a qualitative study would aid the researcher in understanding how such consumers think. Consumers often do not understand factors of cost that are associated with the price of an item. The scarcity of raw materials and the chemistry of such raw materials, for instance, can have an adverse effect on the cost of such material. The special nature of machining and tooling required to produce an item can also have an adverse effect on the cost of that item. The study also concludes that the type of product also matters with respect to price. The intangibility of services further complicates the consumers' understanding of various price factors. Understandings of price are more emotional than logical. The study is important in that understanding how consumers regard price should influence the way a marketer presents his or her goods to a consumer for consideration.

As such, they often do not appropriately appreciate factors that contribute to price, such as lead time, quality, and service. If consumers do not understand factors that contribute to price, their buying decisions with regard to such phenomena may not be advantageous to the seller. Consumers with an illogical understanding of price will make illogical buying decisions as they contemplate such pricing. Sellers often lose out on a sale because of cost considerations (Friend, Curasi, Boles, & Bellenger, 2014). The seller may be overly focused on price when the buyer is not. Friend, et al. (2014) found three typical reasons for losing out on a sale: adaptability,

relationship-potential, and cost considerations. The study notes that existing literature does not adequately address the problem associated with process-based determinants of sales failures with regard to the context of key accounts. The study also notes attributions biases that can arise from data streamed from the salesperson, sales manager, and selling firm. The study involved 35 interview cases involving failed sales proposals. All of the reasons for the sales failures can be traced to adaptability, relationship-potential, and cost. Some cases involved instances where the firm could not adapt to stringent requirements outside of the normal ability of the firm. Some cases involved instances where the firm did not have effective relationships with the buyers of considering firms. Some cases involved bids that were lost due to price. The study could prove beneficial if firms could find ways to become more adaptable; and if firms could find ways to build stronger customer relationships.

There is also a drive to focus on how suppliers regard price (Hinterhuber, 2017a). Hinterhuber (2017a) is an editorial that explores the micro-foundation of pricing. The editorial begins with a definition of micro-foundation as individual decision-makers within an organization. A relatively new idea to the field of decision-making is the notion that organizations, as individual entities, do not make decisions; rather, individuals within organizations make decisions. These individual decision makers are the micro-foundations within the foundation of the organization. The importance of the concept is to develop an understanding of strategic management theory through a behavioral approach. Through this approach, researchers can learn more efficiently how the traits of individuals shape activities that relate to pricing. The purpose of the editorial was to highlight activities used to derive value through the exploitation buyer behaviors.

A review of micro-foundations in management practices found that banks, for instance, learned that personnel behavior was driven more by personality traits than by bonuses. This is helping behavioral profiling to become more popular than placement testing in certain industry segments. Other studies were reviewed where value quantification capabilities were positively related to firm performances in industrial markets. Convincing industrial buyers that the total value of a product purchased is worth more than the numerical price for that items allowed suppliers to realize higher margins. Still other studies explored so-called purchase decision regret. Purchase decisions were studied that exhibited action bias. The finding was that the regret of not acting was greater than the regret of acting.

Other studies were analyzed that examined price perception. One study highlighted how comparative price promotions positively affect revenue. Vertical price promotions were more effective than horizontal price promotions. Another study examined value-based pricing where multi-product price response maps were used to study competitive simulations. Another study examined barriers to implementing such value-based pricing strategies. All of the studies examined helped to progress the understanding of the micro-foundation perspective.

Nonetheless, price is important (Alavi, Wieseke, & Guba, 2016). According to the Alavi et al. (2016), consumers attach an importance to price. This is called customer price importance (CPI). In the study, researchers profiled the business-to-consumer relationships established in the automobile retail sales industry. The study found that salespeople often overestimate the importance that a customer places on price when such customers have high product knowledge. This is because consumers evaluate a product's price relative to its value or benefit. Customers that have a relatively high degree of product knowledge assign a relatively low importance on price than customers with a relatively low degree of product knowledge. This study will help the

researcher to understand that price should not be the most important attribute of a product to users of that product if those users have a relatively high degree of knowledge of those products. Thus, a strategy of the marketer should be to increase the product knowledge of the buyer to whom the marketer markets the product. More research is needed to investigate the dynamics of price as it relates to price importance (Rahinel & Ahluwalia, 2015).

Not only is price important, profit is important as well. Many consumers regard profit as immoral and harmful (Bhattacharjee, Dana, & Baron, 2017). In Bhattacharjee et al. (2017), researchers examined seven studies that revealed the extent to which consumers regard profit as evil and unnecessary. Some studies profiled anti-profit views; whereas one study portrayed for-profit entities as doing more harm than good. Another study portrayed for-profit firms as deliberately inflicting harm on society; whereas, other studies sought to counter that viewpoint. The purpose of the study with regard to this literature review is to highlight just how negatively some attitude about price can be.

Many consumers, however, regard price positively and often evaluate a product's price relative to its benefits, such as quality (Kapferer, Kilppert, and Leproux, 2014; Shapiro, Dwyer, & Drayer, 2016). In Kapferer et al. (2014), researchers conducted a qualitative analysis of luxury prices. The psychology of the concept of luxury was explored in order to determine what constitutes luxury. A series of literature reviews were analyzed in order to study how people perceive prices relative to luxury items. Research showed that consumers associate quality with luxury; and that price was assumed to be higher relative to prices for non-luxury items. Moreover, over half of survey respondents believed that if the retailer of a luxury brand item were to reduce prices by 50% in order to reduce inventory so that they could make room for newer inventory, the reduced-price item would no longer be luxurious. The study offered no

generalization beyond the idea that luxury was a cultural notion. While industrial commodity goods are not luxury items, similar studies would offer insight into how price is perceived relative to other factors of acquisition. With regard to the aforementioned study, consumers valued quality with regard to product specifications, product durability, and services related to that product.

Consumers associate higher prices with higher quality; and consumers associate higher quality with higher prices (Shapiro et al., 2016). Also, compulsive consumers are less sensitive to price (Kukar-Kinney, Ridgeway, & Monroe, 2012). This study evaluated the relationship between a firm's propensity to purchase compulsively and its regard for price. The study utilized a survey of online customers of a clothing retailer. The researchers analyzed customers' purchase decisions based on the brand awareness and compulsiveness of those buyers. The study concluded with a generally understood conclusion that compulsive buyers are less concerned with price than non-compulsive buyers. The study did not represent a homogenous population. The survey sample consisted of an overwhelming majority of females; and only included online shoppers to the firm's store. The survey sample did not consist of any storefront participants. The study could still be useful in that it highlights attitudes of female buyers with regard to how they perceive prices based on the compulsiveness of their actions. The study also showed that there was a relationship between price knowledge and compulsive buying. This relationship could be exploited through further research.

Firms that can manage the price sensitivity of its customers can be profitable (Lymperopoulos, Chaniotakis, & Soureli, 2013). This study revealed that businesses attempt to manage price sensitivity levels of their customers. To illustrate, the study explained how banks restructured bank fees so that they would be perceived more fairly. Banks accomplish this by

maintaining a loyal customer base. Happy customers were more satisfied with pricing strategies implemented by the bank. A survey of 306 bank customers was conducted through interviews. The study found that customers unhappy with pricing structures were highly likely to switch banks than customers not as unhappy. The study provided an in-depth analysis of the effects of price satisfaction on a firm's customer base. The article is valuable since it highlights how firms can sell their pricing strategy in an attempt to be perceived more fairly. If a firm's price increase can be perceived fairly, then the firm will be more successful in implementing that price increase. An increase in prices could help the firm to become more profitable.

Happy customers are usually more satisfied with pricing strategies implemented by sellers than customers that are unhappy. Thus, vendors have an incentive to make their customers happy. Therefore, if a seller could exploit the benefit of a product to a customer, there might be greater potential for a sale to be made to that customer. Thus, research in this regard that identifies such opportunities would be beneficial to the field.

About the Buyer

Vendors could gain favor in the eye of buyers if vendors better understood buyers' motivations. Buyers are often unwilling to gamble on uncertainties (Chew, Yi, Zhang, & Zhong, 2016). In this study, researchers studied humans in an incentivized laboratory setting and began with a review of the literature documenting correlations between education and behavioral anomalies. Of interest to the researchers was whether behavioral anomalies reflect true preferences or biases due to cognitive errors. This study found that high school graduates were less willing to gamble on uncertainties even if it meant the possibility of obtaining some type of significant benefit than college graduates. The study chronicled the decisions made by individuals when faced with instances of ambiguity and familiarity. Although subjects were

reluctant to make decisions in the presence of ambiguity, and less reluctant to make decisions in the presence of familiarity; subjects were more comfortable making decisions in the presence of either as long as uncertainties were derived from known probabilities and not unknown probabilities. Also, college graduates were more tolerant of risk than high school graduates. The framework of the study could be exploited to discover conditions under which vendors could gain the favor of buyers in the vendor selection process. If the seller could ascribe some type of known probability into the buyer's selection process and convince the buyer to accept that probability, the vendor could increase its chances of successfully closing a sale.

Vendors do not like uncertainties; rather they prefer known probabilities to unknown probabilities with regard to decision making strategies. They utilize such decision-making strategies in order to increase efficiencies. Increased efficiencies through innovation help to decrease uncertainty (Revilla, Rodriguez-Prado, & Cui, 2016). This study described how familiarity works for the vendor as well as for the buyer. As such, firms adopt an innovation strategy perspective that is either explorative or exploitative. This means that firms either focus on new products and new technologies; or, they focus on existing ones. Researchers in the study also examined high and low concentrations on either perspective. Researchers drew from three types of knowledge when developing an innovation: knowledge that a firm develops on its own, knowledge purchased through third-party sources, and knowledge derived from partnering with other organizations. Outsourcing is presented as an innovative technique employed by organizations to further its goals since it is the direct result of the acquisition of knowledge purchased through a third party. The study mentioned how Siemens utilized this strategy with regard to managing technological innovations and found that vendors that are more innovative have an easier time accommodating customer demands effectively and efficiently. This

phenomenon is possible, in part, because of the decentralization of authority that exists in the innovation process. Decentralized authority contributes to an atmosphere that is conducive to relatively quick changes in consumer focus. The study is important since employing innovations could contribute to an increase in a vendor's familiarity with itself; which, in turn, could contribute to an increase in the buyer's familiarity with that vendor.

And, uncertainties guide pricing strategies (Xu, Zuo, & Liu, 2015). This study explored theory through the use of mathematical computations; and, illustrated that uncertainties also have different implications on the procurement process depending on whether the uncertainty is during the pricing stage or the operational stage. The theoretical framework explored the viability of sourcing alternatives that may exist during the procurement and operational stages of a process. The study described how sourcing alternatives could prove beneficial to a vendor seeking to become one of these alternatives; however, the vendor wanting to become one of the study's described alternative vendors could not do so simply by utilizing the theoretical framework established through the mathematical computational models. The overall purpose of this study is to address the utilization of operational and pricing flexibility strategies in response to supplier uncertainties. Moreover, the study seeks to determine how such flexibility strategies are configured when faced with the need to locate a backup supplier and when such suppliers are capable of determining wholesale prices. The author documented instances where operational flexibility strategies were relevant, and where pricing flexibility strategies were relevant. A cost-versus-benefit threshold was examined in order to evaluate the effectiveness of each strategy.

Resolving uncertainties creates value (Narayanaswamy, Grover, & Henry, 2013). This study explained that because uncertainty translates into a certainty of loss and a certainty of control loss, reducing uncertainty creates value. This study advanced a conceptual framework

whereby investments were made in information technology in order to hedge against uncertainties. The study explored the successful management of information systems development (ISD) projects, the entire set of action items needed required to build an information system solution to a business problem. These projects often fail because the values and goals of all participants are rarely the same. As such, an ISD project is deemed a success if it finishes on time, at budget, and according to the original specifications.

The study began by noting common mistakes made in ISP projects. There is usually a mistake involving people whereby there is a lack of leadership and human resource inefficiencies due to tying people to late projects. There are also mistakes in the process involving unrealistic scheduling and insufficient risk management. There are also product and technology problems due to the desire to add unnecessary features and the inability of team participants to let a bad idea die. The study found simply that increased communication and cooperation resulted in a decrease in control loss. As such, the degree of uncertainty was decreased.

Although the study applies to a securities type of market, it can be applied to a goods market. The study is useful in that it offers an explanation of how uncertainty affects the buying process. The logic could be applied to the vendor selection process as vendors work to reduce uncertainty.

Therefore, vendors that can offer innovations to buyers should be able to increase sales if they decrease the probability of uncertainties to those buyers. Suppliers can utilize managerial innovations, for instance, in the supply chain in order to increase their competitive advantage over other suppliers (Lavastre, Ageron, Chaze-Magnan, & SPalanzani, 2014). This study advanced the idea of suppliers utilizing managerial innovations in the supply chain in an effort to increase competitiveness. The study evaluated the construction, purification, and validation of a

three-step methodological process with regard to analyzing collaborative planning, forecasting, and replenishment (CPFR) and vendor managed inventory (VMI) as two such managerial innovations. These innovative supply chain practices were then rated on a scale in order to determine the effectiveness of each. The study concluded that innovations were beneficial regardless of the type of environment; and further demonstrated that vendors could utilize innovations in order to be perceived favorably in the vendor selection process. The study is beneficial in that offers advice to the vendor regarding its competitiveness in the marketplace. If the vendor can increase its favorability in the eyes of buyers in the marketplace, that vendor increases its chance of winning bids for goods required of those buyers.

Thus, research could help to substantiate this notion. While buyers are sensitive to price (Ferguson, 2014) and sensitive to price increases (Martos-Partal, & González-Benito, 2013), vendors need a strategy whereby goods can be sold during times where prices have increased. Ferguson (2014) found that consumers often lack a functional understanding of various price factors; and that such misunderstandings often contributed to consumers' perceptions of price fairness. Customers do not understand the effects that various phenomena associated with the supply chain have on prices of products derived from that supply chain. This makes customers sensitive to price increases. The study found that while consumers were sensitive to price increases, such sensitives often led to unfavorable attitudes toward such increased prices. Vendors that were sensitive to those issues, and then addressed those specific concerns with their customers, were able to successfully increase prices, even during uncertain economic times. Therefore, even though consumers are sensitive to price increases, they can be acceptable to price increases under particular instances. This study is important in that the applied nature of such research could mean that effectively identifying such instances would serve as increased

profit opportunities. In Martos-Partal and González-Benito (2013), the researcher studies the motivations of store-loyal customers. One of the main findings of the study is that consumers who are store-loyal are less sensitive to price than consumers who are not store-loyal.

Consumers who were loyal to a particular store were more tolerant of price increases than consumers who were not necessarily loyal to that store. The study examined a theoretical perspective whereby motivations and benefits of the shopping experience contribute to store-loyal behavior derived from cost savings and the pleasure of the experience. Some consumers had positive emotional connections to particular stores so that the experience created customer value. The study also examined a methodological perspective whereby consumers' abilities to find product substitutes and their ability to stay loyal to a budget contributed to the notion of being store-loyal. The notion of store-loyalty could have been skewed since some patrons were loyal because of convenience only.

If a vendor focuses too heavily on price, profitability could be challenged (Berman, 2015). This study found that many low-cost competitors that focused heavily on price often experienced profitability challenges. These profit challenges could be overcome through an employment of higher prices by firms that were more experienced in the marketplace and by those that were more adequately funded. The study offered a competitive response checklist consisting of questions that a competitor needs to answer before determining which competitive strategy to implement. Strategies include waiting and watching, holding existing prices firm, matching on price, or developing a rebranding strategy. The study found that the profitability for new market participants was relatively higher than the profitability for incumbent market participants in that a supplier that is new to a market could benefit from participating in that market. The study profiled strategies implemented by Aldi, Vizio, and Southwest Airlines as

each has successfully competed against low-cost providers in their respective industries. Since each of the aforementioned industries are different, the strategy could be applied as well to the industrial goods market.

Thus, vendors that focus too much on price struggle financially. If vendors focus too little on price, orders could be lost as suppliers risk losing their competitive advantages. Since there are inadequate theories that explain such sales-related phenomena (Johnson, 2015), the industry would benefit from research that could possibly identify areas where goods could be successfully sold without an obsessive focus on price. Johnson (2015) introduces a concept known as grounded theory. So-called borrowed theories are often used to propose theoretical relationships between sales and sales management. This study argues the superiority of grounded theory over borrowed theories. Grounded theory was developed by sociologists in order to encourage the discovery of theory from data. This is essentially a data analysis strategy whereby a comparative analysis is utilized to assess similarities and differences of data derived from case studies utilizing qualitative research designs. This methodology contributes to theoretical concepts associated with sales research and how those concepts fuel considerations for new research designs. A qualitative research design would allow the researcher to develop theoretical insight into the phenomena identified by the quantitative approach. This insight could be gained through naturalistic observation, which is the act of observing phenomena in a natural setting. This study is important as it explains that there are undeveloped research areas yielding inadequate theories that explain sales-related phenomena.

Needs of Consumers

In order to successfully offer goods to consumers, sellers must learn the needs of those consumers. Supply chain capabilities can be evaluated so as to determine a hierarchy of needs of

those capabilities (Agarwal, & Vijayvargy, 2013). This study described the importance of decision-making methodologies in the vendor selection process of suppliers in the food industry; and draws some information from a 2012 study. The study analyzes an Analytic Hierarchy Process (AHP) and Analytic Network Process (ANP). The research team examined cost, service, quality, cycle time, the supplier profile, risk, and relationships against an AHP framework and against a network problem (ANP) structure. Both the AHP framework and ANP structure are utilized to formulate decisions through a so-called super matrix of suppliers. Both are ways to measure intangible factors of acquisition; and to evaluate the importance of such factors. Various decision factors are weighted in order to determine a hierarchy of needs within a decision matrix. The study advances the notion that while AHP and ANP approaches are complimentary; they address different levels of the vendor selection process so as to effectively evaluate the capabilities of the supply chain.

This hierarchy of needs will strategically affect decisions in the vendor selection process; and help to prioritize vendor selections (Perić, Babić, & Veža, 2013). This study reveals that a buyer might utilize an analytic hierarch process (AHP) to help prioritize vendor selections. This study recognizes the importance of the importance of the supply chain in the flour industry. As such, the selection of a vendor is important in the purchasing process. AHP is used in the vendor selection process for solving multiple objective linear programming (MOLP) models. The solving of these models provide quantifiable weights that can be assigned to various criteria present in the vendor selection process. This methodology is tested through an example involving the vendor selection process of a bakery. A sensitivity analysis was then used in order to derive a viable solution from the process. The AHP method allows the buyer to efficiently prioritize vendors. This study is important in that it can help buyers prioritize vendors. If a

vendor were to exploit the process, that vendor could become the vendor for which the buyer is looking.

Moreover, quantitative studies through surveys could be valuable with regard to aiding in the understanding of the flow of information in the vendor selection process (Borgonovo & Plischke, 2016). This study examines how numerical experiments can aid the researcher in determining probabilities with regard to various phenomena. Mathematical models were used to increase the sophistication of analyzing the sensitivity of investigating study parameters. The study profiles how changes to parameters affect results based on a mathematical understanding of those parameters. The theory behind the study is the notion that the life of a corporation can be positively affected by decisions made from codes derived from decision support models. Quantitative methods that assign values to various abstract notions of uncertainty and variations of other abstract parameters were used to create so-called information-based sensitivity measures. These computational methods are meant to absolve management from some of the burdens associated with the decision making process by improving the communication of various issues to management. The study is beneficial in that it could help with the flow of information in the vendor selection process.

These quantitative studies describe how different approaches to opposing design methods can find complementary relationships (Landrum & Garza, 2015). This study examines similarities and differences in qualitative and quantitative research methods; and, describes how different approaches to opposing design methods can find complementary relationships. The study also discusses, among other topics, Likert scales. Likert scales will be instrumental to the researcher of the dissertation. Liker scales can be used to assess relationships between quantifiable data. The appropriateness of the Likert scale depends on whether utilized data is

interval or ordinal. Responses to survey questions utilizing Likert scales can be meaningful; however, responses derived from Likert scales often rely on the subjective understanding of the survey participant. This study is important as it can aid the researcher in determining an order of importance with regard to various factors of acquisition. Thus, determining how much more important one factor of acquisition is to a buyer than another factor of acquisition could potentially be lost by merely relying on the quantification of such survey scale responses.

This data is valuable as it can be used for secondary analyses (Caporali, Morisset, & Legleye, 2015). This study is essentially a literature review of the importance of sharing survey data in the fields of various social sciences. The value of data increases as data become available for secondary analyses. The essay begins with a review of the origins and development of survey data archives for the social sciences. It then discusses provisions made in France that regulated access to social science data accumulated through those archives. The study notes that advances in data accessibility and confidentiality have increased simultaneously. The focus then shifts to a French context in regard to protectionist attitudes surrounding data. The study concludes with considerations on future developments with regard to advances in the archiving and sharing of data. The benefit of this study is twofold. Sharing survey data might help researchers evaluate the validity of conclusions drawn from surveys; and, surveys could offer insight into the causes of why a team might lose high dollar quotes.

Vendors can relate to buyers by understanding cultural differences, if they exist. While cultural differences have little effect in Indian markets (Kar & Pani, 2014), for instance, cultural differences do play roles in European markets relative to American markets (Van Winter, & Liebreuze-Himes, 2015). This study explored the potential cultural differences of international buying behavior. The study examined the reliance on price, quality, and delivery selection

criteria of U.S. buyers of software services compared to such reliance of German buyers of the same. U.S. buyers focused more on price and were more inclined to source internationally if such sourcing resulted in overall lower costs. German buyers, however, preferred quality and vendor attitude. The study also explores Social Psychologist's Geert Hofstede's five cultural dimensions. Of these five dimensions, U.S. buyers tend to exemplify individualism; whereas, German buyers are more likely to employ uncertainty avoidance. The focus of uncertainty avoidance with regard to the selection of services is understandable due to the intangibility of such. Since services cannot be empirically examined prior to consumption, German buyers rely significantly on quality and vendor reputation in determining suitability. U.S. buyers, however, were willing to accept more risk in exchange for lower outsourced pricing.

Kar and Pani (2014) identified supplier selection criteria across industries in India. After reviewing results, a generalization was made that certain criteria like cultural differences, quality management systems, and labor relations had a lesser effect on procurement in Indian markets that they possibly would have in other geographic markets. Data was collected from 188 firms utilizing a fuzzy analytic hierarchy process. Interviews were conducted in order to gain industry insight. Data was analyzed using mathematical computations in order to identify the relative importance of seven supplier selection criteria. The study found that price was ranked third place; while product quality and delivery compliance were ranked first and second, respectively. This study is important since it identifies instances where price is not the more important factor in determining to which firm to award business. If firms focused on other factors of acquisition besides price, those firms could potentially realize higher levels of profitability. While German buyers preferred product quality and vendor attitude; American buyers tolerated more risk, with an acceptance that the payoff could mean lower prices.

Also, female buyers tend to rely more on product quality and availability; while male buyers focused more on price (Swift & Gruben, 2000). When determining to whom to award business, this study examined whether gender played role in such decisions. As the female presence in traditionally male-dominated jobs increases, some researchers seek to understand the psychological phenomena of such occurrences. This study looked at gender differences when weighting vendor selection criteria within the chemicals, electronics, and transportation industries. Survey instruments were distributed to purchasing managers at various firms asking questions regarding factors related to the acquisition of goods: such as attributes, support, dependability, experience, and price. This study found that women seemed to rely more on product dependability and support than men. Women also placed more emphasis on geographic proximity and warranty availability than men. Thus, marketers should focus more on availability and quality when marketing to female purchasers; as well as focusing on providing fast and friendly service after the sale.

Profiling the purchaser could help the marketer to become more profitable in marketing its goods to that vendor. Understanding a buyer's motivation with regard to gender and culture could help the marketer to formulate strategies that could increase his or her ability to make a sale. Learning more about gender differences in the vendor selection process could prove advantageous to the industry.

Companies can also develop ways to increase customer profitability by altering customer behaviors (Persson, 2013). This study shows that some companies develop ways to increase customer profitability by altering customer behaviors. The study analyzed multiple case studies in the retail banking sector. European retail banks worked to modify customer behavior in an attempt to reduce customer-related costs. The effect was an increase in customer profitability.

The study revealed a successful strategy of not only decreasing customer related costs, but by increasing customer retention rates as well. The study is beneficial as it describes additional ways that firms can increase revenue. As firms look for ways to create value in the marketplace in the eyes of potential buyers, learning ways to retain customers can have a positive effect on the firm's ability to remain profitable. Firms that can increase customer retention rates will have greater future potential for being chosen in the vendor selection process. Increasing the firm's chance of being chosen in the vendor selection process also prepares the firm for competing in other opportunities.

These companies can also manipulate areas within competitive environments in order to achieve greater levels of profitability (Rao, Zhao, & Ma, 2012). This study reveals that since buyers often interact in competitive environments in order to maximize utility, suppliers could possibly manipulate those environments in order to achieve greater levels of profitability. Buying decisions are based on quality, quantity, lead time, and service levels. This study devises a so-called multi-attribute auction mechanism that addresses decision making problems associated with multi-source procurement options. The study discusses optimal bidding strategies along with a minimum increment bidding strategy aimed at encouraging multiple rounds of bidding by prospective vendors. The study concludes through a theoretical analysis that its auction mechanism efficiently satisfies the firm's incentive to engage in compatibility conditions. Firms that successfully manipulate environments with regard to deciding factors of acquisition can achieve greater levels of profitability by meeting the needs of its customers. The study is important to the dissertation in that factors such as quality, quantity, lead time, and service levels are elements of the vendor selection criteria that will be examined by the research.

These companies seek to increase customer profitability by influencing consumer purchase behaviors based on intelligence gathered from such competitive markets (Mahmood, 2014). This study explained how consumers implemented price discrimination strategies in competitive markets. Such businesses seek to increase customer profitability by influencing consumer purchase behaviors based on intelligence gathered from competitive markets. The study analyzed behavior-based price discrimination in order to recognize characteristics that influence price discrimination. The study uncovered why some firms offer discounts to new customers while other firms implement uniform pricing strategies. Discounts often create the illusion of a potential savings in that the price point offered by the supplier could be interpreted as a benchmark against which a potential value is derived. Uniform pricing strategies are easy to implements and can be a representation of perceived value on the part of the customer. The study is beneficial in that it offers the firm an opportunity to create value in the eyes of the customer; and provides an avenue through which profitability can be acquired by the firm. Therefore, research of the sort would be beneficial to the industry.

Risk

Risk introduces another phenomenon. While many buyers shy away from risk; those unfamiliar with a product in terms of product knowledge are willing to pay higher prices for such goods relative to prices paid by those with product knowledge since such knowledge could result in a reduction of risk (Kwok & Lee, 2015). This study utilized a theoretical framework whereby researchers mathematically identified supply chain relationships that were cost efficient and competitive. The team utilized a mixed integer nonlinear programming (MINLP) model to analyze aspects of the procurement process in order to determine an optimal level of cooperation in which to engage. The study found that as buyers become more familiar with required products, they

become more knowledgeable about those products. Vendors can exploit such knowledge by engaging in so-called cooperative relationships with other suppliers. Researchers in the study refer to so-called cooperative relationships as partnerships between suppliers and customers that are cooperative, yet competitive. These relationships can be optimal for the industry in which both entities exist. Cooperative relationships often prove to be beneficial economically. This study is important since once a firm engages in the bidding process and earns a customer's business, the firm's relationship with that customer can have residual effects in terms of future business.

Confidence levels increase with product knowledge; and buying decisions can be strategically made based on such confidence.

However, familiarity through product knowledge can work to the vendor's advantage as a result of the anchor effect. A buyer's attitude toward a price of a particular good and even the decision to use a particular good is biased because of an unwillingness to consider an alternative product (Cheng, Wu, & Lin, 2014). This study explores the framing effect, which is identified from the way information is presented to the consumer. Authors refer to the study as a debiasing study since its goal is to counter such with knowledge and the presentation of a positive frame of reference. The study found that buyers were more receptive to information framed positively than they were to information framed negatively. For instance, although meat labeled as 80% lean and 20% fat basically have the same meaning, consumers thought positively about the 80% lean label and negatively regarding the 20% fat label. Consumers that were lacking in product knowledge and familiarity were prone to being influenced by advertisements, product information, and the information presented in the original frame. The study is important since

vendors can use anchors and framing to exploit instances where buyers are lacking in product knowledge.

For instance, a buyer often assigns value to a discounted price, although the buyer has no functioning knowledge of how the benchmarked price, the anchor price, was derived. As long as the buyer believes he or she is receiving a discount off of a particular anchor price, he or she assigns value to that discount; although that anchor price could merely be an arbitrarily derived price.

How buyers process information affects the way they assess risk. In Felin, Koenderink, and Krueger (2017), the authors profiled a concept that Herbert Simon derived and referred to as bounded rationality. Bounded rationality encompasses the idea that humans are only as rational as the options they consider. The study examines the literature with regard to popular theories of rationality, and describes assumptions derived from such theories as they pertain to economic and social sciences.

A common theory of rationality holds that rational solutions are solutions that result in the best or most optimal solution given a particular dilemma. This solution is the result of a careful consideration of all input variables so that the most utility can be derived as a result of the decision-making process. This idea has manifested itself in the form of modern economic theory in which rationality exists in the marketplace and can be understood through a phenomenon known as equilibrium.

Equilibrium is an idea that ascribes order to the economy through an employment of an assumption that holds that all economic transactions ultimately result in a form of omniscience derived from an observer who could see all things. Whereas no single observer can possibly see

all things, all things could conceivably be seen by a multitude of observers who make enough unique observations.

Vendor Selection

When choosing a vendor, procurement agents locate sources that will satisfy procurement needs (Zerbini & Borghini, 2015). In this study, the vendor selection process is described as an activity through which procurement agents locate sources that will satisfy procurement needs. The study describes two constructs: visualization involves knowledge derived through analytical means; while socialization involves knowledge derived through interactions with buyer agents. Suppliers can increase their value in the vendor selection process by becoming knowledgeable in the domain where their client is not. This culminates into a tactical knowledge for the vendor, the supply-side representative in the vendor selection process. Understanding the process through the customer's perspective, and then exploiting the process so as to become more appealing to the customer could prove to be advantageous for the vendor. The process is ultimately a function of how these buyers interact with various vendors and how these buyers overcome various uncertainties. The study is beneficial in that it described ways in which the vendor could exploit this process.

Procurement needs effect decisions. Many buyers utilize weighted criteria in order to determine the proportional effect that price has on the decision to purchase (Watjatrakul, 2014). This study utilized a strategy that focused on weighted vendor selection criteria along with price. In the study, vendor selection is made based on the proportional affect that price has on desired qualifications and the importance of such qualifications. If the relative importance of such qualifications could be identified, then the innovator could develop a pricing strategy that most effectively exploits such qualifications while, at the same time, offering a competitive solution to

the buyer; thus, increasing the likelihood of being awarded a bid. This study advanced a conceptual framework whereby investments were made in information technology in order to hedge against uncertainties. Methods of avoidance were assigned relative weights based on the importance of such factors. These weighted factors affect the decision process. The study is important as researchers will examine various strategies one might use while continuing the pursuit of understanding how buyers select vendors in the acquisition of goods and services.

The decision to purchase is based on considerations of suppliers. Thus, supplier selection is often a decision-making problem with regard to effectively addressing risk management (Awasthi, Govindan, & Gold, 2017). This study explained supplier selection as a multiple decision-making problem. The concept of AHP advanced by the study could be useful as the vendor seeks to become the solution that solves the buyer's uncertainty dilemma. The study used the concept of an analytic hierarch process (AHP) to address uncertainties in the vendor selection process. The study reported that AHP could be used to address uncertainties in that such uncertainties could affect consumer buying behavior of various goods. In this regard, the study explained supplier selection as a multiple decision-making problem. The success of the process relied on the firm's ability to accumulate various statistical information regarding the intensity of importance of linguistic variables; so that the evaluation of alternatives could be made. Such attributes of rejected suppliers could serve as a warning to aspiring vendors.

Some buyers choose vendors based on available technology and how such technology is utilized. This may result in restrictions placed on the supply chain. Vendors able to adapt to such restrictions are successful (Liu, My, & Leach, 2013); vendors unable to adapt are less successful. Some buyers choose vendors based on available technology and how such technology is utilized. In Liu et al. (2013), food suppliers are often affected by restrictions

placed on them by local and national governing entities. Such restrictions often apply to all levels of the supply-chain. The success of the food supplier, then, is based on its ability to adapt to these restrictions. Technological capabilities within the supply-chain will contribute to the ultimate competitiveness of the food supplier according to food retailers. Technology in the supply-chain can offer a competitive advantage. U.S. food retailers embrace such supply-chain technology; while, European food retailers oppose such supply-chain technology. Understanding technologies available to supply chains in the food industry and understanding how to exploit such technologies in the food industry could aid the innovator in discovering ways in which to be more competitive in other industries with regard to how buyers approach the vendor selection process.

The reputation of the vendor is important as it is often projected on to the buyer when lead times cannot be met and quality issues arise (Palanisamy & Zubar, 2013; Rid & Pfoertsch, 2013). Palanisamy and Zubar (2013) explains that the reputation of a vendor in the selection process of that vendor is important since the reputation of the supplier is often projected onto the buyer when lead times cannot be met and quality issues arise. The study utilized concepts of a multiple-criteria decision making (MCDM) analysis and the fuzzy quality function development (QFD) approach to vendor selection as models through which to analyze methodologies used in the process of selecting vendors. Vendor rankings utilizing these methodologies are then established. The selection of a vendor is important; as a faulty selection could negatively affect the firm's overall performance. In the study, researchers reason that a successful supply chain is paramount to the firm's ability to meet its needs with regard to product acquisitions. This study is important since it provides a logic that the firm can follow as it endeavors to strengthen it

supply-chain relationships. As the firm's supply-chain is strengthened; so, also, is the buyer's supply-chain strengthened.

Rid and Pfoertsch, (2013) illustrates that a reputation can be tied to branding and can, therefore, affect consumer demand. The vendor wanting to gain market share could employ branding and product differentiation strategies as suggested by the study. The study examines Autoliv, a maker of safety and equipment products; and Bosch, a maker of many automotive products. The study identifies four relationships of brand: brand as a product, brand as an organization, brand as a person, and brand as a symbol. These relationships pertain to the brand's extended identity; however, such relationships can move inward so as to reflect the brand's core identity. The study also explains how brand associations, the consumers' image of the brand, and institutional associations of the brand converge to create a base fit for the association. The method seems to be appropriate since it explains the relevancy of branding. The study is beneficial in that vendor could become more profitable if able to successfully brand itself.

Vendors that cannot meet deadlines become buyers that cannot meet their own deadlines. The inverse is also true. Relationships between manufacturers and distributors, for instance, also affect how well either performs within various markets (Kumar & Bergstrom, 2008). This study highlights how relationships between manufacturers and distributors also affect how well either performs within various markets. This study explored such relationships. The study found that in more developed markets where competition was significant and buyer knowledge was high, manufacturer and distributor relationships were relatively strong. Such economies provide an incentive for manufacturers to treat their distributors well in order to maximize economic gain. In less developed markets, however, competition was less significant and consumer knowledge

was relatively low. In such markets poor manufacturer and distributor relationships often existed as manufacturers were less reliant on distributors to remain profitable. This was in part due to dependency levels in channel relationships. In more developed markets, replacement alternatives were high; thus, manufacturers were incentivized to improve the efficiencies of channel relationships with distributors. In less developed markets, less replacement alternatives and inferior channel infrastructure disincentivized manufacturers to improve channel relationship efficiencies.

Utilizing a SWOT analysis matrix for a vendor can help identify segments of the supply chain that can offer additional means through which to be competitive (Parthiban, Zubar, & Katarar, 2013). Supply chains offer additional means through which to be competitive. This study utilized a SWOT analysis matrix in devising a strategic perspective regarding a vendor selection model. The study employed a multiple-criteria decision analysis to approach the vendor selection process mathematically. Some ten criteria were used to evaluate 20 vendors. A data envelopment analysis was then used to determine the efficiency of each decision-making unit created mathematically from the SWOT matrices. Inefficient vendors were discarded; while, efficient vendors were highlighted and rated according to the relative importance of various criteria. A vendor selection could then be made based on the single most importance selection factor. Thus, the purchaser could determine how well vendors might perform within given market. This study presents a logic used by the purchaser in order to determine the effectiveness of a given vendor; however, vendors could exploit that logic so as to become the type of vendor most appealing to the purchaser.

If the relationship between a supplier and other members of the supply chain increases in efficiency, then the result of such efficiencies could mean lower costs and more reliable lead

times to the end user (Larson, & Gammerlgaard, 2001). This study profiles a relationship in supply chain logistics known as the logistics triad. A logistics triad is a group made up of three supply chain members: buyers, sellers, and logistics service providers (LSP) which link the previous two groups. If the relationship between the supplier and the LSP increases in efficiency, then the result of such efficiencies could mean lower costs and more reliable lead times to the end user. This study by the American Society of Transportation and Logistics studied LSPs internationally. The study found that foreign LSPs were reluctant to leave their domestic markets, deriving two-thirds of their revenue from their domestic market; whereas, half of all U.S. LSPs offered services beyond North America. American LSPs offered a broad focus on international logistics management and coordination; while, Danish LSPs, for instance, specialized in servicing particular industries. While such a narrow focus is profitable for Danish LSPs within its domestic market, growth is hindered when the LSPs do not expand internationally. International expansion may also be difficult since international LSPs excel in coordination, which is also the single most significant barrier to entry.

Sources of Value

Once a firm engages in the bidding process and earns a customer's business, the firm's relationship with that customer can have residual effects. Cooperative relationships often prove to be beneficial economically (Krause & Ellram, 2014), and is especially true during economic downturns. In Krause and Ellram (2014), researchers found that since competitive priorities remain the same in a strong economy and in a downturn, relationships are just as beneficial during both instances. As a result, the supply chain becomes just as valuable to the customer as it does to the supplier.

In Aitken and Paton (2016), researchers understand value through an evaluation of the supply chain. Buyers introduce value through the acquisition process. Perceptions of buyer behavior that produce such value is the focal point of the study. This study explores such behaviors through an exploratory case study.

The study probes different perspectives on buyer value. Some buyers acquire a utility value where there is value in the use of a good. Some buyers acquire an exchange value where the value of a good is determined by the price paid. Other types of acknowledged value incorporate customer satisfaction ratings and other subjective criteria.

In the study, two prevailing logics are identified. Service-Dominant Logic (S-DL) explores the value created in the supply chain that occurs with the transfer of owner of a good. This value comes from the experience of an offering through the exchange value in the delivery of a good. Good-Dominant Logic (G-DL) explores the value created in the good itself as a function of the value the customer derives through the use of the good.

To explore this phenomenon, researchers studied the buyer-seller interphase through an exploratory case study. The cost of a buyer's investment in a product is recognized as an exchange value. This is the value paid for a good; and, it consists of the cost of the good to the supplier, the supplier's margin, and the cost to the customer of acquiring the good. This is then compared to the total value that the customer receives in exchange for the acquisition of the good. That value consists of the total utility value afforded by the acquisition and the psychic value. The psychic value consists of subjective, empathetic, emotional, and memorable perceptions experienced by the buyer as a result of the acquisition process. A net positive customer value occurs when the total customer value exceeds the exchange value.

The study concluded that buyers are generally more influenced by exchange value than by utility value. However, psychic value can play an important role in increasing firm profitability if exploited effectively. Due to the narrow focus of the study, the authors of the study recommended future research in order to explore how consistent these findings are in other case studies.

With regard to the concept of value, the perception of value as well as the perception of price can be understood through behavioral price research. In Monroe, Rikala, and Somervuori, (2015), researchers examine how buyers respond to price in business-to-business (BSB) relationships. The study opens with a review of the literature with regard to how firms focus on price and then quickly evolves into an exploration of the similarities between business-to-business practices and business-to-consumer (BSC) practices. Since humans are involved in both practices, many of the behavioral characteristics are similar.

Nonetheless, certain characteristics of the B2B segment buyer differ from the B2C segment buyer. Although motivations behind purchasing decisions are different with regard to B2B transactions versus B2C transactions, much of the psychological behavioral that guide such decisions are the same. This study attempts to explore that phenomena.

Price acts as a stimulus; and, buyers process that stimulus in various ways. Consumers evaluate price with regard to a so-called reference price. If a consumer is unaware of the factors that contribute to a price, that consumer will evaluate the essence of that price through a prism of understanding that involves the utilization of some type of reference he or she established for him or herself based on circumstances unique to that individual.

Researchers learned that multiple studies presented multiple findings with regard to price perception. One study found that salespeople often have their own references prices and that

those prices influence transactions prices. Another study found that buyers in competitive markets tend to utilize market-based reference prices. Another study found that some business buyers try to utilize predetermined reservation prices. Finally, another study found that providing salespeople with full cost information resulted in those buyers' acquiring higher reference prices.

Researchers continued in the study and differentiated between price perception and price response. Buyers interpret the difference between the actual price and the reference price as the expensiveness of the product or service being considered. Buyers will not alter prior buying intentions based on merely the existence of the difference alone; rather, they will alter prior buying intentions based on whether or not the buyer considers the difference significant. The point at which the buying intention changes is referred to as the differential price threshold and is based on that buyer's sensitivity to price.

Researchers identified a gap in the literature with regard to how business buyers judge price threshold and recommended such as a potential for future research. The research did find that price was a cue of quality. Researchers found that price was a statistical indicator to perceived quality in a relatively newer study; however, other older studies found there to be no relationship between the two with regard to B2B transactions. Other studies found that purchasing managers do operate with functional, emotional, and social regards to price and that non-price product benefits are important to those buyers.

Value-Based Pricing

With such focus on price, many suppliers of industry goods have shifted their focus away from price and onto value (Hinterhuber, 2017b). In Hinterhuber (2017b), the author explores ways to quantify various forms of value in industrial commodity markets. The author

begins with an explanation of how firms approach pricing activities in business to business relationships in industrial markets and notes that many suppliers fail to quantify value propositions for their customers. Although suppliers can explain the concept of their own value, they cannot translate that information to the customer in the form of a quantifiable benefit meaningful to that customer.

In the paper, the author explored whether or not value quantifications improve performance in industrial markets and recognized a gap in literature with regard to the same. The author conducted research on customer value, selling, and value-based pricing. Value was differentiated from price. Firms in industrial markets tend to let price define value; however, the author theorized that profitability could increase when value is not restricted by price. Value-based selling was also identified as an avenue through which value quantification could occur. Value quantification is the supplier's translation to the customer the calculated value of its competitive advantages.

Hinterhuber (2017b) reasoned that in business to business relationships, suppliers too often are unable to separate specific performance-based improvements from the selling price of that particular good when attempting to draw the customer's awareness to that value. Thus, Hinterhuber introduced the notion of value-based pricing as an alternative to performance-based pricing since the implications of both are different. Various measures were then recommended in order to effectively approach value-based pricing. For instance, active emphatic listening was recommended and involves responding to specific customer traits. This leads to customer linking capabilities whereby the successful firm identifies customer needs and then understands how to utilize its resources to satisfy those needs. The firm can employ customer-oriented selling where the firm's sales team develops more intimate customer relationships. This leads to

cross-functional collaboration whereby other departments within the firm work to support the sales department. Once the aforementioned strategies are in place, extra effort is taken to develop the sales team's ability to effectively build customer relationships. The team then undergoes self-evaluation activities with regard to confidence and risk-taking. This all ties into developing an understanding of the firm's value quantification capability.

The study concluded with the finding that developing value quantification capabilities increases a firm's performance. Successful sales managers effectively utilize such capabilities when they are able to quantify more than just the mere total cost of product ownership. Regardless of the stability of commodity markets, value quantification proved to be profitable.

Value-based pricing can help improve product differentiation in products offered in industrial markets. In Töytäri, Keränen, and Rajala (2017), researchers noted that the commoditization of products in industrial markets tend to drive prices towards cost as firms attempt to compete with each other. Thus, alternative pricing logics become necessary in order to shift focus away from the cost of goods and instead onto the value of such goods. In this regard, value-based pricing is introduced as a long-term and service-based exchange that attempts to quantify the value of products and or services as a calculus of a product's life-span or of a service's time utility. With this in mind, researchers selected a case study to examine the micro-foundations of pricing put into a real-life setting.

In Töytäri et al. (2017), researchers examined a company that employed value-based pricing as a strategy with at least some of its customers over at least a five-year period because they wanted to study attitudes and effects that the strategy had on senior management participants and potential customers. Through some twenty interviews with management participants in various positions, researchers collected data. An understanding of the literature

laid the foundation for the beginning of the study; however, analytical structures changed as researchers waded through what became more educated observations. Researchers found that barriers to the successful implementation of the value-based pricing strategy could be traced to the individual, the organization, and to factors external to both.

Individual barriers existed in the form of beliefs and attitudes. Some did not believe in the strategy or believed they lacked the aptitude to sell. Experience and skills were a factor as participants believed they were ill-equipped to implement such a strategy. Some believed that value-based pricing was simply too costly or difficult to implement. The firm attempted to counter individual barriers through training and the implementation of tools used to address actual barriers when such are identified.

Organizational barriers existed that pertained to a product-oriented sales culture. When the sales department focuses on short-term sales, cost and not value becomes the focus. Governance and tools also presented a barrier as organizational participants believed that the tools they had been given were designed to focus on costs. This extended into an inefficient customer selection process as the firm no longer focused on specific customers, but on any and all customers. The firm attempted to counter this by focusing on changing its organizational culture, installing like-minded upper managers, and investing in the acquisition of customer intelligence.

Barriers external to the organization could be identified in the prevailing buying culture. Buyers often are unaware of or unconcerned with the impact that their buying decisions have with regard to value. Moreover, customers are not accustomed to paying for value-added services since those have historically been offered by suppliers as perks that were necessary in order to earn business. Buyers of commodity goods often do not worry about brand loyalty; and,

buyers are often seemingly interested in only short-term gains. Customers often are not interested in value since their customers are not. To counter this, the case company feeds information into the marketplace that profiles the benefits of value-based strategies. This established the company as a value brand. This altered their image in the marketplace and helped the firm to establish itself as a value leader.

In Töytäri, Rajala, and Alejandro, (2015), researchers discovered more organizational and institutional barriers to value-based pricing strategies prevalent in industrial transactions. The purpose of the study was to identify such barriers and to suggest strategies for overcoming them. The study began with a review of the literature highlighting the importance of creating customer value in terms of customer-perceived value and then morphed into a description of various types of value created by the operation of the firm.

The firm generates a strategic value when it utilizes existing capabilities to generate new capabilities. Organizational learning and innovation allow the firm to adapt to changing customer needs. Strategic alliances with community social goals create social value with regard to customer perception. Internal pride and high job satisfaction rates on behalf of organizational members can increase symbolic value as it often results in those organizational members' working more efficiently. This is accompanied by the firm's exchanging value with the customer. Value-based pricing, then, is a means through which the firm can realize a financial gain through the implementation of that strategy. The difference between price and cost is the supplier perceived value. The customer-perceived value is the value beyond price that encompasses the quantification of the customer perceived net benefits.

The study required 16 months to complete and consisted of survey sampling and interviews. Interviews were both face-to-face and conducted over the telephone. The study identified three institutional barriers to the implementation of the value-based pricing model.

The study found that there was a lack understanding with regard to the meaning of influencing customer-desired value. Managers focus more on price than on value; and, industrial buyers often do not focus on suppliers that emphasize value when choosing alternative products. There are also goal conflicts in that members of the organization do what is best for their respective departments; however, that might not always be what is best for the firm.

Also, firms often get involved with projects late in the life of a project when it is too late to influence buying decisions. When firms did get involved early, they often lacked an understanding of the customer's processes and, therefore, were still unable to effectively influence buying decisions. Firms that holistically understand customer processes were more successful.

The study also found there to be an inability to influence customer-perceived value by utilizing value quantification and communication strategies. Supplier firms focus too narrowly on cost instead of value. These firms do not acquire adequate market intelligence that would enable them to exploit for value perception purposes. Buyers often display a lack of trust and do not extend to potential suppliers information that would aid those suppliers in the value quantification process. This can negatively affect the way firms capture and share the value created.

Successful firms were able to hide costs from customers so that value propositions were not contingent on such. Buyers often attempt to learn cost information, and then use that cost information as a reference price. Successful firms also developed strong relationships with

customers to that the relationship became a value matter. Successful firms were also able to establish value by becoming solutions providers instead of merely product or service providers.

Summary

Suppliers of industrial commodity goods employ many kinds of strategies in order to remain competitive and profitable. The successful firm will know its customer as well as the customer knows itself so that it sells to that customer a solution to a problem rather than merely a product for a need. Knowing how a customer does what it does and understanding how to identify value opportunities will enable the supplier to exploit such opportunities financially. Thus, there was a need to further explore mechanisms through which buyers select vendors in the acquisition of industrial goods; and, there was a need to further explore mechanisms through which sellers identify and create value for their customers.

Chapter 3: Research Method

Qualitative methodology could be useful to address the problem since such methodology humanizes the problem (Krathwohl, 2009). Krathwohl explained that humanizing the problem means to explain it in a context so as to make the idea more meaningful from the human perspective. Interviewing consumers of various goods and services, for instance, in order to learn their attitudes with respect to price fluctuations of such goods and services would help to humanize the problem. Quantitative methodology could be useful in order to measure and test variables through statistical analysis (Creswell, 2014). This is particularly helpful in measuring relationships between variables. Quantitative and qualitative research gathering methods combine to form a mixed research method. This method can often enhance research; since one method can catch what another method misses (Krathwohl, 2009). The methodology of this research was qualitative and quantitative in nature and is best described as a convergent parallel mixed methods design. This design was a simple mixed methods design in that it involved the separate collection of qualitative and quantitative data. Data were analyzed independently, and then compared to determine if and how the results related with and confirmed to each other (Creswell, 2014).

The problem addressed by this study was that firms that focus too heavily on price suffer negatively with respect to profitability. Firms can lose orders on pricing when price becomes the central focus of a sale; and, the vendor cannot compete on price against a lower cost alternative. Firms that focus too heavily on the selling price of a good can experience a negative effect on the profitability of that good (Parthiban, Zubar, & Katarar, 2013). If the only tool a firm has that it can use as leverage over its competition is price, then, as the firm lowers its price, it has a more difficult time covering minimal operational margin requirements.

If the prices of goods represent an important factor of acquisition to the buyer (Alavi, et al., 2016) then the buyer is going to weigh such costs relative to potential benefits in regard to buyer-supplier collaboration associated with the acquisition of industrial commodity goods (Botes, Niemann, & Kotzé, 2017). As a result, some competitors will lose their bids because of price (Kapferer, Kilppert, and Leproux, 2014). Many firms seemingly lose such bids because of price, and not necessarily because of other mitigating factors such as quality, product availability, or service after the sale. While price may not always be the most important factor, price is usually an important factor (Alavi, et al., 2016). For instance, total revenue is made up of unit costs plus unit profits multiplied by the quantity of units sold. Thus, the only ways to increase profitability on the sale of such products are to decrease product costs, increase per-unit selling prices, increase the number of units sold, or employ a combination of the aforementioned strategies. Firms would economically benefit by being able to identify opportunities where non-price factors of acquisition exist. Thus, research is needed to help identify relevant non-price acquisition factors of industrial commodity goods.

The purpose of this quantitative and qualitative study was to investigate such relevant non-price acquisition factors of industrial commodity goods. The study sought to uncover a hierarchy of acquisition needs that buyers of industrial commodity goods may seek to satisfy when awarding bids for such goods to suppliers. Moreover, this study sought to uncover instances where goods can be offered at prices that are potentially higher than those offered by competitors by exploiting the importance of other factors of acquisition. Buyers of industrial commodity goods in the Tennessee industrial commodity market were surveyed, along with those who influence buying decisions for such products in that market. This study also

contributed to the body of knowledge by studying factors such as product availability, product quality, price, and service after the sale.

Research Methodology and Design

The methodology of this research study consisted of the use of a convergent parallel mixed methods design. This design is a simple mixed methods design in that it involves the separate collection of qualitative and quantitative data. Data were analyzed independently, and then compared to determine if and how the results related with and confirmed to each other (Creswell, 2014).

The design associated with qualitative methodology is one that would facilitate the explanation of various phenomena. One purpose of employing qualitative methods is to study how people understand concepts (Rosaline, 2008). For instance, Rosaline (2008) pointed out that qualitative methods help in the understanding of illogical behaviors. Consumers often think illogically in that they make value judgments regarding the fairness of sellers' prices despite a lack of knowledge of sellers' costs (Rondan-Cataluña & Martin-Ruiz, 2011). Learning how consumers arrive at such understanding, or lack of understanding, would involve a qualitative design. Thus, consumer interviews would help to answer such a research question that seeks to uncover how consumers believe what they believe. Interviews would allow the researcher to humanize the problem and offer insight regarding a solution. Quantitative methodology could be useful in order to measure and test variables through statistical analysis (Creswell, 2014).

There were other qualitative designs that were considered for this study, including naturalistic observation, systematic observation, and case studies. Naturalistic observation is the act of observing phenomena in a natural setting (Cozby & Bates, 2012) in which a repetition of certain ideas could help the observer to identify a theme (Ryan & Bernard, 2002). Systematic

Observation involves the observation of specific behaviors repeatedly (Cosby & Bates, 2013), helping to identify themes of importance. Case studies were also considered. A case study is a study where a description of a human research subject is offered within a natural setting (Crosby & Bates, 2012). In a case study, the case subject is studied in detail and an in-depth analysis is offered regarding the observations made about the subject. Usually, case studies are performed in order to better understand extreme rarities or occurrences (Creswell, 2014; Crosby & Bates, 2012; Dane, 2011; Krathwohl, 2009).

After reviewing various qualitative approaches, an interview was chosen as it could help offer an intimate understanding of various topics from multiple participants (Hennink, Kaiser, & Marconi, 2017). As such, this study sought to study four variables. As an applied research study, the goal of this study was to identify a marketing strategy that can be used by a supplier that will allow that supplier to effectively offer goods to a buyer in a manner that will allow the supplier to sell at prices possibly higher than those offered by competitors. Once customer needs and a willingness of that customer to pay is established, higher prices can be charged as long as benefits can be quantified that satisfy such needs (Hinterhuber, 2017b). The success of the application of such a strategy for this study would manifest itself as a measurable level of success in the form of increased levels of buyer awards. Firms provide more business to and become more dependent on suppliers that identify and fulfill those aforementioned needs (Schiele & Vos, 2015). Thus, success would be recognized by this study as the winning of more orders.

To accomplish this, a survey was created and conducted among those who are instrumental in the purchasing process of industrial commodity goods. Surveys can be used to establish sales failures (Friend, Curasi, Boles, and Bellenger, 2014); therefore, survey questions

were chosen and worded in such a way so as to afford the researcher the ability to measure factors influencing a customer's decision regarding to what firm to award a bid for industrial commodity goods. Analyses derived from answered survey questions can help to uncover and explain buyer behaviors and expectations that form the rationale behind business-to-business relationships (Kihyun Hannah & Kumar, 2018).

For this study, customers of a locally owned wholesale distributor of industrial commodity goods were asked to participate in a survey regarding a quotation recently received in regard to a request for industrial commodity goods. Survey participants were asked if they ultimately awarded the distributor with an order for such industrial commodity goods. Survey participants were also asked a number of questions with regard to attitudes toward various concepts as those concepts relate to acquisition factors a buyer would consider when determining to whom to award a bid for industrial commodity goods.

The idea of the research was somewhat two-fold. The researcher was interested in knowing a relative importance of factors considered by a buyer when that buyer awards the firm with an order for industrial commodity goods. The firm essentially wanted to know why it was awarded the order. Secondly, the researcher was interested in knowing the relative importance of factors considered by a buyer who does not award the firm with an order for industrial commodity goods. In other words, the firm essentially wanted to know why it lost the bid. Buyers are willing to accept a tradeoff between product sustainability in various capacities and the utilitarian nature of those capacities after they have determined for themselves a relative importance of those capacities (Luchs & Kumar, 2017). Therefore, if the researcher understood the conditions under which it earned an order and understood the conditions under which it did

not earn an order, the firm could potentially employ strategies that could increase the chances of winning an order and decrease the chances of losing an order.

Population and Sample

The population was all buyers of commodity goods in the state of Tennessee. In May of 2017, there were approximately 1,800 purchasing managers and another 7,430 buyers and purchasing agents in the state of Tennessee (United States Department of Labor, Bureau of Labor Statistics, 2017a). These buyers are organizational members who manage, plan, and coordinate purchasing activities (United States Department of Labor, Bureau of Labor Statistics, 2017c); and, they are individuals who analyze buying trends, contractual agreements, and contribute to the decision-making process relating to the purchase of such commodity goods in the state of Tennessee. For the online survey, over 750 individuals were invited to participate; and, 165 responded to the survey. These individuals consisted of participants in industries such as papermills, paper-based consumer products, chemical processing, chemical manufacturing, material sciences, power generation, and metal fabrication.

Other organizational members also contribute to the decision-making process. These are individuals within the organization who deal with the functional specialization of the organization's core competency (Gherasim, 2014). Thus, these are individuals with a vested interest in which products are purchased and how they are purchased. With regard to this study, the population also consisted of such influencers like product engineers and quality engineers.

The sample, however, consisted only of voluntary participants from among the firm's existing or potential customer base. When conducting interviews, enough interviews must be conducted in order for the researcher to believe he or she has a saturated understanding of the issues (Hennink, Kaiser, & Marconi, 2017). This could be as many as 16 to 24 (Hennink, et al.,

2017); however, 16 or fewer may be enough to identify common themes (Hagaman, & Wutich, 2017). Sample sizes of over 20 are rare; and, sample sizes of 8 to 17 are fairly common (Galvin, 2015). For the sake of this study, a sample size of 10 was chosen.

The age of the participant was unimportant to the researcher; however, survey participants were assumed to be of a pre-retirement adult age. Although, for future research, age may be of interest if the researcher seeks to learn the relative importance of product acquisition factors with regard to younger and older buyers. Ethnicity, culture, and education level were not attributes that were evaluated by the researcher in this study. While cultural and educational attributes may affect how various factors of acquisition are important to buyers, there is often a negative perception with regard to asking questions regarding ethnicity and culture.

Materials and Instrumentation

Data for this study were collected through the implementation of face-to-face interviews with qualified interview participants. Data were also collected through an online survey administered through SurveyMonkey. A copy of the interview protocol is included in Appendix B. A copy of the online survey questions is included in Appendix C. The interview transcript in Appendix B was followed in order to ensure that all interview participants were asked the standardized questions. This added to the credibility of the study (Krathwohl, 2009). Face-to-face interviews that utilize standard questions tend to offer the greatest level of reliability (Conway, Jako, & Goodman, 1995).

Prior to conducting any interviews and asking any questions, subject matter experts were consulted in order to review the interview transcript. This consultation was sought in order to ensure the reliability of the transcript and to ensure the credibility of the data derived from the

interview process. Feedback from these experts were incorporated into the final transcript prior to conducting any interviews.

Research questions were compiled so that an analysis of the responses to such questions would yield a hierarchy of importance of those factors. A hierarchy of needs can be used to evaluate supply chain capabilities within an organization (Agarwal, & Vijayvargy, 2013). Once a hierarchy is established, vendor selections could be prioritized (Perić, Babić, & Veža, 2013). Thus, questions were used to help identify buyer strategies.

For instance, one research question asked how important a relationship between price and the likelihood of winning a bid for industrial goods is. Customers are sensitive to price (Ferguson, 2014) and to price increases (Martos-Partal, & González-Benito, 2013). The second research question asked how important a relationship between the importance of lead time and the likelihood of winning a bid for industrial goods is. Lead times affect vendor reputations (Palanisamy & Zubar, 2013; Rid & Pfoertsch, 2013). The third research question asked how important a relationship between product quality / specifications and the likelihood of winning a bid for industrial goods is. Quality is an important product attribute (Kapferer, Kilppert, & Leproux, 2014; Shapiro, Dwyer, & Drayer, 2016; Van Winter & Liebrez-Himes, 2015). The final research question asked how important a relationship between the level of knowledge and helpfulness of the salespeople and the likelihood of winning a bid for industrial goods is. For the buyer, knowledge affects attitudes toward price (Cheng, Wu, & Lin, 2014), helps to reduce perceived risk (Kwok & Lee, 2015), and can affect overall confidence levels in the buying experience.

Fieldwork and Observation

Fieldwork and observations could be used to answer the aforementioned research questions by offering an avenue through which to obtain primary data (Krathwohl, 2009). For instance, suppose members of a purchasing department were contemplating the purchase of a list of items needed for an upcoming project. As the members interacted with each other, an observer could uncover what issues were important during the interaction. A repetition of certain ideas could help the observer to identify a theme (Ryan & Bernard, 2002). Identifying such characteristics might make it easier for the observer to identify similar patterns while making other observations.

The observer records such observations in the form of field notes. Through the implementation of the constant comparison method, field notes make it easier for the observer to zero in on what is important and allow him or her to ignore what might not be important (Krathwohl, 2009). A systematic method of recording field notes, such as coding, could help to make future field notes easier to compile (Dane, 2011). Compiling field notes could also be disadvantageous; compiling field notes is time consuming (Krathwohl, 2009). Field notes are compiled from observations that happen in real time; thus, if a significant amount of time is spent compiling field notes during a single observation; similar amounts of time might be required of other observations in order to maintain a consistent focus (Dane, 2011). Also, if the researcher is not conducting the actual observation, the field notes from that observation might contain a bias in the form of some type of inconsistency that might not be present in the researchers own notes had the researcher made the initial observation (Krathwohl, 2009).

Access and permission from any group must be obtained. Once permission to proceed with the study was granted by NCU's Internal Review Board (IRB), permission from my

employer was obtained in order to access my customer base. Once permission was granted, I accessed this customer base through my email contact list. I sent out a bulk email to everyone in my list requesting that they participate in my research (see Appendix A). When accessing an online networking contact list, such as LinkedIn, I utilized the online posting feature that allowed members to publish posts. This allowed my post to be seen by any of my contacts through their online feed. I asked for volunteers to take the online survey. I also asked participants directly to participate in the interview process.

Interviewing

Interviewing was used in answering the aforementioned research questions. Interviewing allowed me the opportunity to better understand the buying process from the buyer's point of view because I was then placed in a position to more intimately learn what was important to the buyer (Krathwohl, 2009). If a buyer knows his or her customer, that buyer will be in tune with what is acceptable and unacceptable to that customer. Face-to-face interviews would allow the observer to understand and identify the passion of the interviewee as he or she relays what is important to the customer. Observing such passion would not be possible through an electronic interviewing process (Krathwohl, 2009).

While face-to face interviews offered a more intimate observation than would an electronic interview have; such an interview process was more time consuming and may have resulted in a decrease in interview efficiency (Krathwohl, 2009). The electronic interviewing process could have sped things up in terms of generating greater amounts of data within a given time frame (Dane, 2011). Online questionnaires were used that contained survey questions pertaining to the aforementioned research questions (Dane, 2011). Having participants rate the

importance of the factors listed in the research questions allowed me to uncover a relative importance hierarchy of those factors.

Operational Definitions of Variables

Constructs were examined, and data collected. A Likert scale was used to record levels of agreement that survey participants ascribe onto various statements (Dane, 2011). Survey participants in this study were asked to record their level of agreement as that agreement relates to the participant's affirmation of definitive statements that relate to each of the constructs. Likert scales measure extreme positions and are used to sum responses to individual survey items (Dane, 2011). Therefore, Likert scales helped to establish a hierarchy with regard to the level of importance of various factors that were significant to the buyer. The operational definition for each construct is as follows.

The awarding of an order.

An interview question asked whether the participant awarded an order to the firm based on the quotation that was submitted by the firm. For the purpose of this study, an awarding of an order occurs when a consumer of industrial goods chooses to place an order with a supplier of industrial goods. The researcher sought to understand the conditions under which this event takes place. This was a nominal variable as the only two answers were yes and no. A yes answer was assigned a value of 0; while a no answer was assigned a value of 1. This data value appeared on the row with all of the other data values for each of the other questions.

Gender.

An observation involved a notation of the participant's gender. The researcher sought to learn if there were differences with regard to factors that female buyers deem important relative to factors that male buyers deem important. This knowledge was used refute information

documented in the literature review. This was a nominal variable as the only two selections were male and female. A selection of male was assigned a value of 0; while, a selection of female was assigned a value of 1. This data value appeared on the row with all of the other data values for each of the other questions.

Product availability.

A survey question asked the participant about his or her opinion of the importance of product availability when determining to what firm to award an order for industrial commodity goods. For the purpose of this study, product availability refers to the lead time of industrial commodity goods. It is the average amount of time that it takes for the buyer's organization or its assignee to possess the industrial goods once an order for those goods is placed with the supplier. This was an ordinal value. This data appeared on the row with all of the other data values for each of the other questions.

Product quality and specifications.

A survey question asked the participant about his or her opinion with regard to a definitive statement relating to the importance of product quality and specifications when determining to what firm to award an order for industrial commodity goods. Product quality and specifications refers to material composition, manufacturing fabrication techniques, and third-party guidelines that govern the manufacturing, fabrication, and material composition of such products. This answer was an ordinal value. This data appeared on the row with all of the other data values for each of the other questions.

Knowledge of inside sales associate.

A survey question asked the participant about his or her opinion with regard to a definitive statement relating to the importance of the level of knowledge and helpfulness of the

inside sales associate when determining to what firm to award an order for industrial commodity goods. Knowledge of the inside sales associate refers to the technical expertise of the sales associates with regard to the industrial goods that they offer for sale in the marketplace. This answer was an ordinal value. This data appeared on the row with all of the other data values for each of the other questions.

Price.

A survey question asked the participant about his or her opinion with regard to a definitive statement relating to the importance of product price when determining to what firm to award an order for industrial commodity goods. Price refers to the cost that an industrial goods consumer will pay in order to acquire an industrial good. This answer was an ordinal value. This data appeared on the row with all of the other data values for each of the other questions.

Study Procedures

Krathwohl (2009) lists 14 steps in order to code collected data. Coding translates observational data into electronic data that can be manipulated for statistical purposes and analysis. Coding also involves the interpretation of such data so that what is analyzed statistically is also meaningful systematically. As such, each step in the process aided in the analysis of the collected data.

Noting what was significant was of value. For instance, if several interview participants stressed the importance of lead time, the researcher might deliberately look for similar occurrences with all participants in order to identify a theme. Looking for these occurrences would result in a restudy of the raw data. This would allow the researcher to form an intimate knowledge of that data. This repetition would enable the researcher to eventually process the

data unconsciously. He or she might think about what the data might mean while performing other tasks. This scenario helped me to process the data collected.

I began with the initial codes and a list of corresponding categories into which these codes resided. For instance, if a researcher observed that most interview participants began with a focus on customer expectations, the researcher could code this note fragment *cus exp* for customer expectation. The researcher would also need to maintain this consistency so that all of the raw data is coded in the same manner. The researcher might find that as he or she progresses through the data, the initial categories and coding may need to be adjusted so that they more effectively represent the data collected.

Once the initial coding took place, the researcher could have recoded the same material in a more explanatory way. For instance, if the researcher determined that many interview participants begin by focusing on customer expectations, he or she could record such observations differently in order to determine why the focus begins there. Maybe different participants have different motivations in terms of why the focus begins there. An interpretive coding of such motivations would have allowed for a later analysis of those motivations.

This interpretive coding could have lead to the development of a hypothesis regarding those patterns. Generalizations could then be made regarding the data; and a testing mechanism could be designed that would permit a conceptual analysis. For instance, if the interpretive coding process revealed that some buyers began with a customer focus because they suffered some type of customer loss previously due to neglectful behavior, a generalization could be made as to the relative importance of various product factors to that buyer. The researcher could also develop a testing procedure for this generalization.

Graphics could be used to illustrate relationships; and the definitions of codes used to illustrate these relationships would identify the boundaries of the data. For instance, once the relative importance of product factors was determined, a Pareto chart could have been used to illustrate the circumstances in descending order of importance. A Pareto chart would have shown the relative importance of each variable to other variables; and, it would show which variables contribute most significantly to the likelihood of a firm's awarding of a bid.

Data Collection and Analysis

Survey results were collected and coded to be used in a statistical analysis. An ANOVA with fixed effects, special, main effects and interactions was used. The analysis was of a $2 \times 2 \times 5$ factorial design. Gender and whether or not a buyer has placed an order were the two independent variables. There are two levels associated with each variable: male or female for gender; and yes or no with regard to whether or not a buyer has placed an order. The dependent variable was the Likert scale response for each of the factors of acquisition. Thus, there were five levels of this dependent variable: 1, 2, 3, 4, and 5. Thus, there were 20 groups: $2 \times 2 \times 5 = 20$. According to Faul, Erdfelder, Lang, and Buchner (2007), a G*Power 3 power analysis can be conducted in order to derive a sample size. A sample was chosen with a medium effect size of 0.25 since the researcher is only interested in whether or not statistical significance exists between variables. As such, I was not looking for small effects. Also, $\alpha = .05$ and $\beta = .2$: two commonly accepted values. The program calculated a required total sample size given the aforementioned parameters. Upon opening the program, I selected *F*-tests from the selection of test families. The statistical test chosen was the ANOVA test where the effects were fixed; and the ANOVA was special, with main effects and interactions. The type of power analysis that allows the user to calculate the total sample size is the priori power analysis. The sample size is

a function of the effect size, d , the error probability, α , and the power, $1-\beta$. Given that the effect size is medium, $d = 0.25$ for the ANOVA test (Piasta & Justice, 2010). The results of this analysis can be seen in Table 2 below.

Table 2

F tests - ANOVA: Fixed effects, special, main effects and interactions

Analysis:	A priori: Compute required sample size	
Input:	Effect size f	= 0.25
	α err prob	= 0.05
	Power ($1-\beta$ err prob)	= 0.8
	Numerator df	= 10
	Number of groups	= 20
Output:	Noncentrality parameter λ	= 16.875
	Critical F	= 1.8687007
	Denominator df	= 250
	Total sample size	= 270
	Actual power	= 0.8010132

Table 2 contains the results displayed in the tab containing the protocol of the power analysis. This was obtained after clicking the calculate button. According to the results, the total theoretical sample size was 270. Based on a sample size of 270 participants, and given the values of α and β are 0.05 and 0.20, respectively, there is a 20% probability of a Type II error and a 5% probability of a Type I error occurring.

The ANOVA evaluations allowed me to identify significant links between various factors of acquisition; and allowed me to determine a hierarchy of those factors. Once a hierarchy was identified, I was then able to develop a strategy with regard to identifying a relative importance of acquisition factors. Firms could then utilize that strategy to become more profitable.

Assumptions

A qualitative and quantitative study ultimately helped to answer why certain phenomena occur. This study helped to answer how buyers regard price and other factors associated with the

acquisition of industrial commodity goods. This research formulated a solution to the problem through an implementation of a finite strategy.

Kar and Pani (2014) identified supplier selection criteria across industries in India. After reviewing results, a generalization was made that certain criteria like cultural differences, quality management systems, and labor relations had a lesser effect on procurement in Indian markets that they possibly would have in other geographic markets. Data was collected from 188 firms utilizing a fuzzy analytic hierarchy process. Interviews were conducted in order to gain industry insight. Data was analyzed using mathematical computations in order to identify the relative importance of seven supplier selection criteria. The study found that price was ranked third place; while product quality and delivery compliance were ranked first and second, respectively.

This research sought to perform a similar analysis in order to develop a list of factors of relative importance. The research sought to determine if there are factors of importance ranked higher than price when buyers consider the procurement of industrial commodity goods. Focusing on factors of greater importance to price might result in the realization of higher profits when selling such goods.

Kapferer, Klippert, & Leproux, (2014) conducted a qualitative analysis of luxury prices. The psychology of the concept of luxury was explored in order to determine what constitutes luxury. A series of literature reviews were analyzed in order to study how people perceive prices relative to luxury items. Research showed that consumers associate quality with luxury; and that price was assumed to be higher relative to prices for non-luxury items. Moreover, over half of survey respondents believed that if the retailer of a luxury brand item were to reduce prices by 50% in order to reduce inventory so that they could make room for newer inventory, the

reduced-price item would no longer be luxurious. The study offered no generalization beyond the idea that luxury was a cultural notion.

While industrial commodity goods are not luxury items, similar studies would offer insight into how price is perceived relative to other factors of acquisition. With regard to the aforementioned study, consumers valued quality with regard to product specifications, product durability, and services related to that product. If suppliers of industrial commodity goods effectively increased awareness of those same attributes in the products they offered to the market, they might increase the perceived value of those products in those markets.

Limitations

One weakness of the study was the potential unwillingness of participants to participate. Buyers might claim to be too busy to fill out a survey. Buyers might be reluctant to fill out a survey if they believe doing so to be a violation of their respective company policy with regard to divulging proprietary information. Some buyers could interpret answering survey questions as disclosing pricing strategies. Another weakness could be a criticism that the study is not broad enough; meaning, it only surveys the customer base of one company. These weaknesses could negatively affect validity if causal links could not be established or if generalizations could not be made on to the population of the study.

A diligent effort was made to avoid bias, or the appearance of bias. Bias can occur at any stage of the research process, particularly during the design and data collection stage of the study (Pannucci & Wilkins, 2010). As such, bias could filter the understanding of evaluation criteria.

Moreover, the study could be limited by the number of respondents participating in the research if the number of participants was low. More research participants would have improved the representation of the situation. More participants would have allowed for the confirmation of

different correlations and possibly the establishment of statistical significance of such correlations. Also, it is recommended that research be performed on a continual basis regarding the reasons why bids might be lost for industrial commodity goods. Research conducted on a continual basis would allow the researcher to stay current with regard to factors that affect the awarding of bids for industrial commodity goods.

Delimitations

Surveys validate reliability and attest to the consistency of the study. Correlations between certain variables emerged that aided in the understanding of how firms award bids for industrial commodity goods. Since the relative importance of factors considered when awarding bids for industrial commodity goods were determined, instances were identified where some factors may be more important than price. Exploiting these instances could yield higher profits if material could be sold at higher prices. If respondents were not truthful, phony data could have resulted that might have led to incorrect conclusions.

The wording of questions could also have introduced bias. Biased questions that predispose the participant to answer in a particular way are considered unethical. A biased analysis of suspect data would be the epitome of unethical reporting.

Ethical Assurances

The Institutional Review Board (IRB) seeks to raise awareness of ethical standards with regard to research that uses human subjects. The application through the Collaborative Institutional Training Initiative (CITI) provides courses to the researcher that pertains to expectations put out by the IRB. These courses define research with human subjects and offer a historical perspective with regard to the evolution of ethical principles. Federal regulations are covered with regard to how they relate to assessing risk, obtaining informed consent, and

maintaining the privacy and confidentiality of test subjects. Courses are presented as modules with quizzes administered at the end of each module. A report of the progress one has made in the completion of this course is available as a document to be submitted to the learning institution to serve as proof of an adequate completion of the course.

The inherent strength of this study was such that it proposed a method through which a solution to a problem could be uncovered. However, ethical considerations were made regarding the interview process. An inherent challenge of this study was that the personal interview process could lend itself to the possibility of creating confidentiality violations if confidential information was gained through the interview process. The use of an online survey eliminated this concern. The survey neither recorded nor asked for any identifiable information. Survey participants remained completely anonymous so that the privacy of all participants was assured. This strengthened the integrity of the study and relevancy to its findings.

Ethical issues could have arisen during the use of qualitative collection methods. For instance, many firms consider pricing strategies used to obtain customer business to be confidential. Although the successful interviewer builds a rapport with the interview participant, that relationship could be exploited negatively if that participant is convinced to violate confidentiality. To ask the participant to violate that trust would be unethical.

Lying to get the interview would have also been unethical. Since the actions of department personnel are sometimes confidential and kept from spectators outside the firm, misrepresenting one's credentials in order to gain access into that firm would be unethical. For instance, if the researcher works for a company that competes with the firm into which the researcher has gained access, the knowledge gained from interviews with members of that firm could be perceived as an act of corporate espionage.

Electronic interviewing methods could also contain ethical issues. Survey questions could be worded in a way that leads the participant to answer in a particular way. Formulating a data collection method that yields a predetermined response and then reporting that response as genuine would be unethical. Survey questions for this research established a relative importance of various factors with regard to the acquisition of industrial commodity goods. Participants were given an affirmative statement; and then asked whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with that statement.

Summary

Qualitative and quantitative data collection methods enabled me to formulate generalizations with respect to that data; and allowed for the testing of the consistency of such generalizations with other observational data. Data collected during fieldwork exercises using a properly designed coding mechanism were manipulated and analyzed so that the findings of such data could be passed on to the reader. The theories derived from such generalizations could presumably be used to formulate strategies that lead to increases in profitability.

Chapter 4: Findings

The purpose of this quantitative and qualitative study was to study the impact of non-price acquisition factors of industrial commodity goods relative to the impact of other such factors. By learning how important various factors are relative to other factors, a hierarchy of importance can be established for those factors. By focusing on factors of greater importance than price, sellers could generate sales without focusing too heavily on price. This chapter presents the findings of both an open-ended questionnaire and an online convenience survey. The questionnaire was used to interview a purposive sample of buyers, and those who influence the buying process. The purpose of the questionnaire was to learn from participants in various industries what their attitudes were regarding the reasons why they purchase and influence the purchase of the goods that they use, and to learn the relative importance of those reasons. The purpose of the survey was to see if a hierarchy of acquisition factors could be established with statistical significance in regard to the perceived importance of those factors. These findings are then assessed individually in regard to corresponding research questions asked in the questionnaire and in the online survey of those questions. Furthermore, these assessments are then reconciled with the literature that was accumulated during the literature review in chapter two.

The research questions were as follows:

Interview Q1. How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods?

Interview Q2. How important is a product's specifications and general level of quality when deciding to whom to award a contract for industrial commodity goods?

Interview Q3. How important is the level of knowledge and helpfulness of the inside sales staff when deciding to whom to award a contract for industrial commodity goods?

Interview Q4. How important is price when deciding to whom to award a contract for industrial commodity goods?

Survey questions were also asked, and those responses were gathered into a spreadsheet. Each recipient was asked a yes or no question as to whether or not they are a purchasing manager, purchasing agent, buyer, product engineer, or if they have some degree of decision influence over industrial goods purchased by their organization. If the answer was no, their response was deleted from the spreadsheet. The recipients were then asked another yes or no question regarding whether or not they awarded a contract to TEK. For each question, a yes response was coded with a 1 and a no response was coded as a 2. This was one of the binary data points for which an ANOVA was run in the data collection and analysis section of Chapter 3 above.

For the remaining survey questions, recipients were asked to please note whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with a series of statements. The statements appeared as the following research questions:

Survey Q3. Lead time is an important factor in determining to what company to award a bid for industrial goods.

Survey Q4. Product quality and product specifications are important factors in determining to what company to award a bid for industrial goods.

Survey Q5. The level of knowledge and helpfulness of a firm's salespeople is an important factor in determining to what company to award a bid for industrial goods.

Survey Q6. Price is an important factor in determining to what company to award a bid for industrial goods.

These research questions helped guide the identification of buyers perceptions about factors that are important in the process of acquiring industrial commodity goods. The study interviewed people who have an influence in the buying process of industrial commodity goods. The sample population for the study consisted of the customer base of TEK Cumberland Valve & Fitting Company in Knoxville, TN.

The conceptual perspective for this research is one that is derived from an understanding of the psychology of the buyer of industrial goods and how these buyers perceive price. If the marketer of industrial goods better understood how industrial goods buyers perceive price relative to other important factors of acquisition, that marketer could exploit such knowledge in an attempt to increase his or her firm's profitability. Thus, the marketer could develop a solution to the initial problem of losing an order due to price.

To answer the research questions, interviews and an online survey were utilized. Ten participants, seven male, and three female, were recruited and participated in the questionnaire interview. For the online survey, over 750 individuals were invited to participate; and, 165 responded to the survey. Interviews took place with participants in industries such as papermills, paper-based consumer products, chemical processing, chemical manufacturing, material sciences, power generation, and metal fabrication. A purposive sampling method was used to recruit participants for the interviews; while, an online convenience survey administered through SurveyMonkey was used to collect data for the quantitative analysis.

Participants for the online survey were recruited two ways. A daily email was sent for three weeks to each customer who requested a quote for industrial commodities from TEK

CV&F Division. The e-mail contained a copy of a specific quote done that day; and instructions requesting each recipient to participate in a survey regarding that specific quote. The second way in which participants were recruited involved a mass email on two occasions to 750 individuals with whom TEK CV&F Division either has or currently does business. These contacts either have a direct or an influencing control over the purchasing decisions made by their respective companies. In total, the number of respondents to the survey invites numbered 165.

Trustworthiness of the Data

The inherent strength of this study is such that it proposed a method through which a solution to a problem could be uncovered. However, ethical considerations were made regarding the interview process. An inherent challenge of this study is that the personal interview process could lend itself to the possibility of creating confidentiality violations if confidential information is gained through the interview process. Confidentiality was guarded.

The use of surveys eliminated this concern. The survey neither recorded nor asked for any identifiable information. Survey participants remained completely anonymous so that the privacy of all participants was assured. This strengthened the integrity of the study and relevancy to its findings.

Surveys can validate reliability and attest to the consistency of the study. If multiple studies were performed with multiple surveys administered in those studies, getting similar results would confirm reliability. Influences of independent variables on dependent variables emerged that can aid in the understanding of how firms award bids for industrial commodity goods. Since the relative importance of factors considered when awarding bids for industrial commodity goods can be determined, instances can also be identified where some factors may be

more important than price. Exploiting these instances could yield higher profits if material could be sold at higher prices. If respondents are not truthful, phony data could result that might lead to incorrect conclusions. Similar finding in future research could confirm that the right variables are being tested, thus affirming the study's validity.

The wording of questions could also introduce bias. Biased questions that predispose the participant to answer in a particular way would be considered unethical. A biased analysis of suspect data would be the epitome of unethical reporting.

Results

The purpose of this quantitative and qualitative study was to investigate non-price acquisition factors of industrial commodity goods. The research questions were as follows:

Interview Q1. How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods?

Interview Q2. How important is a product's specifications and general level of quality when deciding to whom to award a contract for industrial commodity goods?

Interview Q3. How important is the level of knowledge and helpfulness of the inside sales staff when deciding to whom to award a contract for industrial commodity goods?

Interview Q4. How important is price when deciding to whom to award a contract for industrial commodity goods?

Survey responses were also asked and gathered into a spreadsheet. Each recipient was asked a yes or no question as to whether or not they are a purchasing manager, purchasing agent, buyer, product engineer, or if they have some degree of influence over industrial goods purchased by their organization. The recipients were then asked another yes or no question

regarding whether or not they awarded a contract to TEK. For each question, a yes response was coded with a 1 and a no response was coded as a 2.

For the remaining survey questions, recipients were asked to please note whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with a series of statements. The statements appeared as the following research questions:

Survey Q3. Lead time is an important factor in determining to what company to award a bid for industrial goods.

Survey Q4. Product quality and product specifications is an important factor in determining to what company to award a bid for industrial goods.

Survey Q5. The level of knowledge and helpfulness of a firm's sales people is an important factor in determining to what company to award a bid for industrial goods.

Survey Q6. Price is an important factor in determining to what company to award a bid for industrial goods.

To answer the research questions associated with the questionnaire, ten participants, seven male, and three female, were recruited and participated in the interviews. The lengths of the interviews ranged from 15 to 20 minutes. An interview protocol was used to make sure each interview participant was given the opportunity to answer the same interview questions and in the same order. Each interview answer was recorded manually into a journal and then later transcribed into an Excel spreadsheet. Interview participants were also asked to answer the same survey questions that survey participants answered. Interview questions focused on four major factors of acquisition: lead-time, product quality, knowledge and helpfulness of salespeople, and price. The interview results appear below.

Interview Question 1. How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods?

The first research question was concerned with how the interviewee regarded the lead time of an industrial commodity good. Before this question was asked, he or she was asked the corresponding survey question: please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree that lead time is an important factor in determining to what company to award a bid for industrial goods. The results for each research participant's answer regarding his or her agreement with a statement made about lead time are listed in Table 3 below:

Table 3

Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Lead time is an important factor in determining to what company to award a bid for industrial goods.

Participant Number	Participant Interview Answer (directly quoted)
1	Agree
2	Agree
3	Strongly Agree
4	Agree
5	Agree
6	Strongly Agree
7	Agree
8	Strongly Agree
9	Agree
10	Agree

The results for each research participant's answer regarding the importance of lead time are listed in Table 4 below:

Table 4

How important is lead time with regard to awarding a bid for industrial goods?

Participant Number	Participant Interview Answer (directly quoted)
1	Lead time follows price.
2	The customer needs the product delivered on blanket orders to be on time.
3	Lead time is really important when a plant is in an outage. The plant needs material delivered during the outage.
4	We need material supplied before it runs out so that the guys on the floor don't get delayed.
5	Product needs to be delivered and available before it is needed.
6	Projects depend on lead time. Lead time is critical.
7	I need to have parts in the bin for when the guys need them.
8	I need the product shipped to me as soon as I can get it.
9	I need to get the material when I'm promised.
10	All parts in bin locations must be stocked. I don't want to run out of anything.

Interview Question 2. How important is product quality and product specifications with regard to awarding a bid for industrial goods?

The second research question was concerned with how the interviewee regarded the product quality of an industrial commodity good. Before this question was asked, he or she was asked the corresponding survey question: please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree that product quality and product specifications are important factors in determining to what company to award a bid for industrial goods. The results for each research participant's answer regarding his or her agreement with a statement made about product quality are listed in Table 5 below:

Table 5

Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Product quality and product specifications is an important factor in determining to what company to award a bid for industrial goods.

Participant Number	Participant Interview Answer (directly quoted)
1	Strongly Agree
2	Strongly Agree
3	Strongly Agree
4	Strongly Agree
5	Strongly Agree
6	Strongly Agree
7	Strongly Agree
8	Strongly Agree
9	Strongly Agree
10	Strongly Agree

The results for each research participant's answer regarding the importance of product quality are listed in Table 6 below:

Table 6

How important is product quality and product specifications with regard to awarding a bid for industrial goods?

Participant Number	Participant Interview Answer (directly quoted)
1	Customer orders must meet specifications and drawings.
2	I need the product to be exactly what the customer requests.
3	The plant needs what it needs and cannot accept a substitute most of the time.
4	The quality has to be there so that we know we're producing a good product for our customer.
5	Our specifications require that quality not be substituted under any circumstances.
6	We have contracts to supply goods all over the world. Quality is the most important aspect of what we do.
7	I need to know that the parts in the bins are exactly the ones called for in design specs.
8	I need to get exactly what the specs say.
9	I need to get material that lines up precisely with the specifications issued at the initial time of requisition.
10	Product specifications must be met.

Interview Question 3. How important is the level of knowledge and helpfulness of a firm's salespeople with regard to awarding a bid for industrial goods?

The third research question was concerned with how the interviewee regarded the knowledge and helpfulness of a firm's salespeople with regard of purchasing an industrial commodity good. Before this question was asked, he or she was asked the corresponding survey question: please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree that the knowledge and helpfulness of a firm's sales people are important factors in determining to what company to award a bid for industrial goods. The results for each research participant's answer regarding his or her agreement with a statement made about knowledge and helpfulness of a firm's salespeople are listed in Table 7 below:

Table 7

Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: The level of knowledge and helpfulness of a firm's salespeople is an important factor in determining to what company to award a bid for industrial goods.

Participant Number	Participant Interview Answer (directly quoted)
1	Strongly Agree
2	Agree
3	Agree
4	Agree
5	Agree
6	Agree
7	Agree
8	Strongly Agree
9	Agree
10	Agree

The results for each research participant's answer regarding the importance of the knowledge and helpfulness of a firm's salespeople are listed in Table 8 below:

Table 8

How important is the level of knowledge and helpfulness of a firm's salespeople with regard to awarding a bid for industrial goods?

Participant Number	Participant Interview Answer (directly quoted)
1	It is really important customers get the goods according to the specifications that they have listed on their order. They must get what they want.
2	The inside salespeople need to know what they're talking about. Otherwise, I'm not sure they understand what I need.
3	I need the inside folks to be able to understand what the sites need.
4	If I check on an order or ask about a product, I expect the inside people to be able to understand what I want, and be able to help.
5	I need to know that the salespeople selling me product knows about that product and can answer questions.
6	I need to know that the inside sales personell understand their product better than I do.
7	Salespeople need to be able to help me with looking up orders. And they have to know about their products.
8	I need the people on the inside to help me fast and accurately.
9	I need the inside and outside salespeople to be able to answer questions related to the product.
10	The sales associates need to be able to help me with what we use.

Interview Question 4. How important is price with regard to awarding a bid for industrial goods?

The fourth research question was concerned with how the interviewee regarded price when purchasing an industrial commodity good. Before this question was asked, he or she was asked the corresponding survey question: please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree that price is an important factor in determining to what company to award a bid for industrial goods. The results for each research

participant's answer regarding his or her agreement with a statement made about price are listed in Table 9 below:

Table 9

Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Price is an important factor in determining to what company to award a bid for industrial goods.

Participant Number	Participant Interview Answer (directly quoted)
1	Strongly Agree
2	Strongly Agree
3	Agree
4	Agree
5	Strongly Agree
6	Agree
7	Agree.
8	Agree
9	Agree
10	Agree

The results for each research participant's answer regarding price are listed in Table 10 below:

Table 10

How important is price with regard to awarding a bid for industrial goods?

Participant Number	Participant Interview Answer (directly quoted)
1	Customers award their orders to the firm with the most competitive prices.
2	I compete with several other suppliers to supply product for my customer.
3	The price needs to align with what is on the contract.
4	It's important that the price charged is the same as the price agreed to.
5	Pricing must be competitive with other bids.
6	Pricing is always important; however, quality and lead time are the most important things.

Table 10 (Continued)

How important is price with regard to awarding a bid for industrial goods?

Participant Number	Participant Interview Answer (directly quoted)
7	I need to know that I'm being charged a fair price.
8	The price needs to be what they say it's going to be.
9	Given my relationship with my supplier, I expect to be charged a fair price.
10	I need a good product at a good price.

Online survey responses were gathered into a spreadsheet. There was a total of 165 responses. Each recipient was asked a yes or no question regarding whether or not they awarded a contract to TEK. A yes response was coded with a 1 and a no response was coded as a 2. The remaining survey questions were numbered three through six and are listed as follows:

Survey Q 3. Lead time is important when determining to what company to award a bid.

Survey Q 4. Product quality is an important factor in determining to what company to award a bid.

Survey Q 5 The knowledge and helpfulness of the sales people is an important factor in determining to what company to award a bid.

Survey Q 6. Price is an important factor in determining to what company to award a bid.

Survey participants numbered 165 and were asked to note whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the aforementioned statements. A strongly disagree response was coded with a 1. A disagree response was coded with a 2. A neither agree nor disagree response was coded with a 3. An agree response was coded with a 4. A strongly agree response was coded with a 5. A regression analysis was performed in order to examine the relationship between four independent variables and one dependent variables. The four independent variables were lead time, product quality, technical expertise of salespeople,

and price. The dependent variable was whether or not a bid for industrial commodity goods was awarded. A separate regression analysis was conducted for each hypothesis. The regression statistics tables were generated utilizing the Data Analysis tool add-in in Excel. The results of these analyses appear below.

Hypothesis 1. There is a positive relationship between lead time and the likelihood of winning a bid for industrial goods. The regression analysis of lead time versus the likelihood of winning a bid for industrial goods is presented in Table 11 below:

Table 11

Lead time and the likelihood of winning a bid for industrial goods

<i>Regression Statistics</i>					
Multiple R		0.163194676			
R Square		0.026632502			
Adjusted R Square		0.020660922			
Standard Error		0.811593088			
Observations		165			
<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	2.937645688	2.937645688	4.459875488	0.036224463
Residual	163	107.3653846	0.658683341		
Total	164	110.3030303			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	3.803846154	0.217074164	17.523256	2.50447E-39	3.375206164
Order awarded?	0.273076923	0.129307476	2.111841729	0.036224463	0.017743198

With regard question 1, H1 was confirmed; there was a positive relationship between lead time and the likelihood of being awarded a bid ($r = 0.16$). And, this relationship was statistically significant ($t = 2.11$, $p < .05$).

Hypothesis 2. There is a positive relationship between the importance of product quality / specifications and the likelihood of winning a bid for industrial goods. The regression analysis

of product quality/ specifications versus the likelihood of winning a bid for industrial goods is presented in Table 12 below:

Table 12

Product quality /specifications and the likelihood of winning a bid for industrial goods

<i>Regression Statistics</i>					
Multiple R		0.34105005			
R Square		0.116315136			
Adjusted R Square		0.110893757			
Standard Error		0.781752729			
Observations		165			

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	13.11188811	13.11188811	21.45489645	7.37032E-06
Residual	163	99.61538462	0.611137329		
Total	164	112.7272727			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	3.346153846	0.20909286	16.00319513	2.98321E-35	2.933273936
Order awarded?	0.576923077	0.124553145	4.631943054	7.37032E-06	0.330977369

With regard to question 2, H2 was confirmed; there was a positive relationship between product quality and product specifications and the likelihood of winning a bid for industrial goods ($r = 0.34$). This relationship was also statistically significant ($t = 4.63.05, p < .05$).

Hypothesis 3. There is a positive relationship between the knowledge and helpfulness of salespeople and the likelihood of winning a bid for industrial goods. The regression analysis of the knowledge and helpfulness of salespeople versus the likelihood of winning a bid for industrial goods is presented in Table 13 below:

Table 13

Knowledge and helpfulness of salespeople and the likelihood of winning a bid for industrial goods

<i>Regression Statistics</i>					
Multiple R		0.215993302			
R Square		0.046653107			
Adjusted R Square		0.040804353			
Standard Error		0.743621611			
Observations		165			

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	4.410839161	4.410839161	7.976589018	0.00533036
Residual	163	90.13461538	0.552973101		
Total	164	94.54545455			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	3.280769231	0.198894054	16.49505934	1.39601E-36	2.888028134
Order awarded?	0.334615385	0.118477886	2.824285577	0.00533036	0.100666034

With regard to question 3, H3 was confirmed; there was a positive relationship between the knowledge and helpfulness of sales people and the likelihood of winning a bid for industrial goods ($r = 0.22$). This relationship was also statistically significant ($t = 2.82, p < .05$).

Hypothesis 4. There is a negative relationship between price and the likelihood of winning a bid for industrial goods. The regression analysis of price versus the likelihood of winning a bid for industrial goods is presented in Table 14 below:

Table 14

Price and the likelihood of winning a bid for industrial goods

<i>Regression Statistics</i>	
Multiple R	0.455653835
R Square	0.207620417
Adjusted R Square	0.202759193
Standard Error	0.561465083

Table 14 (Continued)

Price and the likelihood of winning a bid for industrial goods

<i>Regression Statistics</i>					
Observations	165				
ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	13.46386946	13.46386946	42.70949011	7.76389E-10
Residual	163	51.38461538	0.315243039		
Total	164	64.84848485			
	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>
Intercept	3.030769231	0.15017324	20.18181954	3.44929E-46	2.734233454
Order awarded?	0.584615385	0.089455706	6.535249812	7.76389E-10	0.407973945

With regard to question 4, H4 was confirmed; there was a negative relationship between price and the likelihood of winning a bid for industrial goods ($r = 0.46$). This relationship was also statistically significant ($t = 6.53, p < .05$).

Evaluation of the Findings

Customers do not like uncertainties; rather they prefer known probabilities to unknown probabilities with regard to decision making strategies. They utilize such decision-making strategies in order to increase efficiencies. Increased efficiencies through innovation help to decrease uncertainty (Revilla, Rodriguez-Prado, & Cui, 2016). This is true of customers with regard to lead time. Customers need product “delivered and available before it is needed.” They need assurance of quality because, “Quality is the most important aspect of what we do.” They need to be certain of the salespeople’s knowledge of their products because “The sales associates need to be able to help me with what we use.” Finally, price is important because, “Given my relationship with my supplier, I expect to be charged a fair price.” These are all ways in which customers want to alleviate uncertainties.

The literature review uncovered that procurement needs affect decisions. Many buyers utilize weighted criteria in order to determine the proportional effect that price has on the decision to purchase (Watjatrakul, 2014). If the relative importance of such qualifications could be identified, then the innovator could develop a pricing strategy that most effectively exploits such qualifications while, at the same time, offering a competitive solution to the buyer, increasing the likelihood of being awarded a bid. In this study, a relative importance of such factors was established. From Table 15 below, lead time was the most important factor to customers that awarded bids to TEK; and, product quality was the most important factor to customers that did not award bids to TEK.

Table 15

Average Score for Survey Questions

	Awarded a bid	Not awarded a bid
Lead Time	4.08	4.35
Product Quality	3.92	4.50
Knowledge of Salespeople	3.62	3.95
Price	3.62	4.20

In regard to those who awarded a bid for industrial commodity goods to TEK, the knowledge and helpfulness of the salespeople and price tied for third (3.62) as the most important factor of acquisition, behind lead time (4.08) and product quality (3.92). In regard to those who did not award a bid for industrial commodity goods to TEK, price was chosen third (4.20) as the most important factor of acquisition, behind product quality (4.50) and lead time (4.35).

Summary

This quantitative and qualitative study explored non-price acquisition factors of industrial commodity goods. This chapter presented the findings of both an open-ended questionnaire and an online convenience survey. These findings were then assessed individually in regard to corresponding research questions and in regard to survey results of those questions.

Furthermore, these assessments were then reconciled with the literature that was accumulated during the theoretical phase of the study.

To answer the research questions, ten participants, seven male, and three female, were recruited and participated interviews. A purposive sampling method was used to recruit participants for the study in order to achieve a sampling from diverse industries. Participants came from industries such as tooling and materials fabrication, power generation, chemical manufacturing, pulp and paper, and material sciences. An online survey of 165 respondents was also utilized to answer research questions. Results and implications of those results will be presented in chapter 5, along with recommendations for practice and future research.

Chapter 5: Implications, Recommendations, and Conclusions

The specific problem addressed in this study was that firms that focus too heavily on the selling price of a good can experience a negative effect on the profitability of that good (Parthiban, Zubar, & Katarak, 2013). If the only tool a firm has that it can use as leverage over its competition is price, then, as the firm lowers its price, it has a more difficult time covering minimal operational margin requirements. The purpose of this qualitative and quantitative study was to investigate these other, non-price acquisition factors of industrial commodity goods by uncovering a hierarchy of acquisition needs that buyers of industrial commodity goods may seek to satisfy when awarding bids for such goods to suppliers.

To accomplish this goal, the researcher conducted interviews guided by an interview protocol used to make sure each interview participant was given the opportunity to answer the same interview questions and in the same order. The researcher also administered an online questionnaire in order to learn from participants in various industries what their attitudes were regarding the reasons why they purchase and influence the purchase of the goods that they use, and to learn the relative importance of those reasons. This study contributes to the body of knowledge by studying factors of acquisition such as product availability, product quality, price, and the technical expertise and helpfulness of salespeople.

The research questions for the qualitative portion of the study were as follows:

Interview Q1. How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods?

Interview Q2. How important is a product's specifications and general level of quality when deciding to whom to award a contract for industrial commodity goods?

Interview Q3. How important is the level of knowledge and helpfulness of the inside sales staff when deciding to whom to award a contract for industrial commodity goods?

Interview Q4. How important is price when deciding to whom to award a contract for industrial commodity goods?

Survey questions were also asked, and those responses were gathered into a spreadsheet. Each recipient was asked a yes or no question as to whether or not they are a purchasing manager, purchasing agent, buyer, product engineer, or if they have some degree of decision influence over industrial goods purchased by their organization. If the answer was no, their response was deleted from the spreadsheet. The recipients were then asked another yes or no question regarding whether or not they awarded a contract to TEK. For the remaining survey questions, recipients were asked to please note whether they strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with a series of statements. The statements appeared as the following research questions:

Survey Q3. Lead time is an important factor in determining to what company to award a bid for industrial goods.

Survey Q4. Product quality and product specifications are important factors in determining to what company to award a bid for industrial goods.

Survey Q5. The level of knowledge and helpfulness of a firm's salespeople is an important factor in determining to what company to award a bid for industrial goods.

Survey Q6. Price is an important factor in determining to what company to award a bid for industrial goods.

The methodology of the research was qualitative and quantitative in nature and relied on interviews conducted with buyers of industrial commodity goods and an online survey of similar

types of participants. Information derived through interviews, exploratory research methods, facilitated the understanding of how buyers regard price. Information derived through online surveys also helped to identify attitudes of buyers and those who influence the buying process. Since observational methods of research allow the researcher to use qualitative research methods in order to describe behavior, methods that utilize naturalistic observations in order to develop a methodological approach to analyzing data were employed. Survey results allowed the researcher to quantify a hierarchal relationship between various criteria of product acquisition.

This chapter will explore the implications with regard to each research question. A brief discussion will then ensue to illustrate how the study can be applied to practice. Finally, recommendations for future research will be made, suggesting what could be built upon this study.

Implications

This study contributes to the body of knowledge of managerial accounting. More specifically, this study expands what is known in managerial accounting in regard to customer profitability. Supply chain capabilities can be evaluated so as to determine a hierarchy of needs of those capabilities (Agarwal, & Vijayvargy, 2013). By implementing strategies that focus on exploiting various factors of acquisition, firms within the supply chain that sell industrial commodity goods could employ such strategies in order to increase customer profitability.

Interview Question 1. The first research question for the study was: How important is a product's lead time when deciding to whom to award a contract for industrial commodity goods? Buying decisions are often based on lead time (Rao, Zhao, & Ma, 2012).

This first research question investigated the respondent's attitude regarding product lead time. Interview participants were asked whether they strongly disagreed, disagreed, neither

agreed nor disagreed, agreed, or strongly agreed with the notion that lead time was an important factor in determining to what company to award a bid for industrial goods. Three out of ten interview participants strongly agreed that lead time was an important factor; whereas, the other seven simply agreed with that same notion. With regard to the sample of interviewees, lead time tied for second place as the most important acquisition factor of industrial commodity goods. These participants used words like really important, critical, and as soon as I can get it to describe the importance of lead time.

Survey Question 3. With regard to the online survey results of firms that awarded bids for industrial commodity goods to TEK, lead time was the most important factor of acquisition, with an average score of 4.08. With regard to the online survey results of firms that did not award bids for industrial commodity goods to TEK, lead time was the second most important factor of acquisition. The implication is that TEK primarily wins bids for industrial commodity goods because it can meet lead time requirements. Since lead time is also of significant importance to those who did not award TEK with bids of industrial commodity goods, the implication is that meeting such lead time requirements in the future could result in winning more bids for such goods.

Interview Question 2. The second research question for the study was: How important is a product's product quality and product specifications when deciding to whom to award a contract for industrial commodity goods?

This second research question investigated the respondent's attitude regarding product quality and product specifications. Interview participants were asked whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the notion that product quality and product specifications was an important factor in determining to what

company to award a bid for industrial goods. All ten interviewees strongly agreed that product quality and product specifications was important. These participants used words like exactly, must, precisely, and most when explaining the importance of product quality.

Survey Question 4. With regard to the online survey results of firms that awarded bids for industrial commodity goods to TEK, product quality was the second most important factor of acquisition, with an average score of 3.92. With regard to the online survey results of firms that did not award bids for industrial commodity goods to TEK, product quality was the most important factor of acquisition.

The implication is that product quality is overall the most important aspect of awarding a bid for industrial commodity goods. Buyers are often unwilling to gamble on uncertainties (Chew, Yi, Zhang, & Zhong, 2016). Products that do not adhere to required quality attributes create such uncertainties, as confirmed by this study. Users of such goods need those goods specifically. Customer specifications call for certain goods; purchase requisitions specify certain goods; and, and project requirements establish a need for certain goods. These quality attributes cannot be substituted; they must be adhered to. In order for a substitute good to be acceptable, form, fit, and function must be the same. This means that the substitute good must look the same as the original good; the substitute good must integrate within the system the same as the original good; and, the substitute good must perform in exactly the same manner as the original good. In this regard, neither of the other three factors of acquisition, lead time, knowledge and helpfulness of salespeople, or even price, matter at all if the quality is not there.

Interview Question 3. The third research question for the study was: How important is the level of knowledge and helpfulness of a firm's salespeople with regard to awarding a bid for industrial goods?

This third research question investigated the respondent's attitude regarding the level of knowledge and helpfulness of a firm's salespeople. Interview participants were asked whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the notion that the level of knowledge and helpfulness of a firm's sales people is an important factor in determining to what company to award a bid for industrial goods. Only two of the ten interviewees strongly agreed that the level of knowledge and helpfulness of a firm's sales people is an important factor in determining to what company to award a bid for industrial goods.

Survey Question 5. With regard to the online survey results of firms that awarded bids for industrial commodity goods to TEK, the helpfulness and technical expertise of sales people tied for last place in determining the hierarchy of acquisition factors, with an average score of 3.62. With regard to the online survey results of firms that did not award bids for industrial commodity goods to TEK, the helpfulness and technical expertise was the least important factor in determining to what company to award a bid.

The implication here is that customers already know enough about the products that they use so as to not need to rely as heavily on the vendor for help. This is consistent with the literature. As buyers become more familiar with required products, they become more knowledgeable about those products (Kwok & Lee, 2015). If they are more knowledgeable about their own products, the knowledge and expertise of salespeople has less value.

Suppliers can increase their value in the vendor selection process by becoming knowledgeable in the domain where their client is not. This culminates into a tactical knowledge for the vendor, the supply-side representative in the vendor selection process. Understanding the process through the customer's perspective, and then exploiting the process so as to become more appealing to the customer could prove to be advantageous for the vendor (Zerbini &

Borghini, 2015). This study confirms the literature in that knowledge exhibited by salespeople resulted in a greater likelihood of being awarded business.

Interview Question 4. The fourth research question for the study was: How important is price with regard to awarding a bid for industrial goods? Consistent with the literature is the notion that price is not the most important factor (Wilson, 1994). In this study, price was chosen behind product quality and product lead time.

This fourth research question investigated the respondent's attitude regarding price. Interview participants were asked whether they strongly disagreed, disagreed, neither agreed nor disagreed, agreed, or strongly agreed with the notion that price is an important factor in determining to what company to award a bid for industrial goods. Three out of ten interview participants strongly agreed that price was an important factor; whereas, the other seven simply agreed with that same notion. With regard to the sample of interviewees, price tied for second place as the most important acquisition factor of industrial commodity goods. These participants repeatedly used the word competitive to describe the importance of price.

Survey Question 6. With regard to the online survey results of firms that awarded bids for industrial commodity goods to TEK, price tied for last place in the hierarchy of important factors of acquisition, with an average score of 3.62. With regard to the online survey results of firms that did not award bids for industrial commodity goods to TEK, price was the third most important factor of acquisition. One implication is that price was a little more important to firms that did not award TEK a bid for industrial commodity goods than it was to firms that did award TEK a bid for industrial commodity goods.

Another implication is that price is not that important at all relative to other factors of acquisition considered by buyers and those who influence the buying process. This, too, is

consistent with the literature and with the findings in Research Question 3. Customers that have a relatively high degree of product knowledge assign a relatively low importance on price than customers with a relatively low degree of product knowledge (Alavi, Wieseke, & Guba, 2016). If customers do not require a lot of product intelligence from salespeople, then they must already have that high degree of product knowledge. If they have that high degree of product knowledge, then this study is consistent with the findings of Alavi et al. (2016) wherein a low importance on price was assigned by such buyers.

Recommendations for Practice

Interview Question 1, Survey Question 3. An implication for practice from the findings of the first research question suggests that firms should focus on meeting lead time requirements in order to increase their chances the most of winning bids for industrial commodity goods. If one removed the notion of quality requirements from the list of factors important in the acquisition of industrial commodity goods studied above, since no customer can use a product whose quality does not conform to existing requirements, lead time becomes the most important factor of acquisition from interviewees, from the online survey of those who did award a bid for industrial commodity goods to TEK, and from the online survey of those who did not award a bid for industrial commodity goods to TEK.

One way lead time can be improved for consumers of industrial commodity goods is through VMI (Lavastre, Ageron, Chaze-Magnan, & SPalanzani, 2014). Vendor managed inventory allows suppliers to maintain an inventory presence at the customer's facility. Suppliers keep inventory bins filled to predetermined levels. This creates value for the customer in the form of always-on-time inventory; and, it creates value for the supplier in the form of guaranteed sales.

Interview Question 2, Survey Question 4. An implication for practice from the findings of the second research question suggests that product quality must be adhered to in order to have any chance at all of earning that customer's business. In the study, interviewees and online survey respondents placed the most importance on product quality. Thus, in order for the merchant of industrial commodity goods to successfully sell any such goods to consumers, he or she should make sure that the quality requested is the quality supplied.

Just like buyers are often unwilling to gamble on uncertainties, resolving uncertainties creates value (Narayanaswamy, Grover, & Henry, 2013). Thus, the merchant of industrial commodity goods should communicate to the consumers of such goods requested quality attributes so as to resolve possible uncertainties with regard to the product being presented.

Interview Question 3, Survey Question 5. An implication for practice from the findings of the third research question suggests that the level of knowledge and helpfulness of a firm's salespeople is not significantly important relative to the other factors assessed by buyers and those who influence the buying decision process. Thus, marketers have two options: if the level of knowledge and helpfulness of a firm's salespeople are important, focus on it; if it is not important, do not focus on it. Either way, it benefits the supplier. If a customer already has a high level of knowledge regarding his or her product, price will not be assigned a high importance (Alavi et al. 2016), and the marketer will not need to focus on providing that knowledge. If a customer does not already have a high level of knowledge, price will be assigned a high importance (Alavi et al. 2016). Thus, in practice, the marketer should provide a higher level of knowledge to the customer about the customer's product.

Moreover, salespeople who provide such knowledge to their customer base can help their customers become store-loyal customers to their particular brand. Consumers who are store-

loyal are less sensitive to price than consumers who are not store-loyal (Martos-Partal & González-Benito, 2013). And, consumers who are loyal to a particular store will be more tolerant of price increases than consumers who are not necessarily loyal to that store.

Interview Question 4, Survey Question 6. An implication for practice from the findings of the fourth research question suggests that price is not the most important factor of acquisition. Therefore, suppliers should not focus on price as if it were the most important factor. Instead, suppliers should focus on other, non-price factors of acquisition when trying to sell their products. Suppliers should tout the importance of other factors, and tout how those other factors can be satisfied through their offerings and service. Suppliers should help their customers to not focus on price.

Moreover, with regard to price, since buyers of commodity goods do not normally concern themselves with brand loyalty, feeding information into the marketplace that touts the benefits of value-based strategies should be employed in order to establish the company as a value brand (Töytäri et al, 2017). This will help to draw focus away from price. Value-based pricing should also be used in this regard (Hinterhuber, 2017b).

Recommendations for Future Research

This qualitative and quantitative study was conducted using a single industrial commodity goods supplier's customer base as a sample population. While this study expands what is known about buyer perceptions and the perceptions of those who influence the buying process with regard to acquisitional factors of industrial commodity goods, the body of knowledge would also benefit from studies that consider multiple suppliers' customer bases in order to offer a wider breadth of research results. Because this study is rather narrow in scope,

the results of this study may not necessarily be applicable to a wider population of industrial commodity goods users.

Future research might focus on the gender of buyers and those who influence buying decisions to see if gender plays a role in the differences in the perceptions of those individuals. Swift & Gruben (2000) looked at gender differences when weighting vendor selection criteria within the chemicals, electronics, and transportation industries and found that women seemed to rely more on product dependability and support than men; and they relied less on price than men. However, in this study's interview process, two of the three females interviewed strongly agreed that price was important; whereas, only one of the seven males interviewed strongly agreed that price was important. Thus, the finding of this study is inconsistent with what Swift & Gruben (2000) found. Future research might help uncover if gender is still relevant.

The next logical step in this line of research is to determine to what extent factors of acquisition are important. For instance, this study found that lead time is statistically significant when considered by consumers of industrial commodity goods. However, that simply means that users need material when they need it. Future research might explore how far away from the present is acceptable. If a user claims that he or she needs something quickly. What does quickly mean? Do they mean the next day, the next week, or some other seemingly random day into the future? A future study might be able to uncover a commonly desired lead time that is not necessarily the most expensive one for the supplier to provide. If so, the supplier could earn even more business while keeping his or her cost increases to a minimum.

Conclusions

This study explored the attitudes of industrial commodity good buyers, and the attitudes of those who influence buying decisions. This study examined product lead time, product

quality and specifications, the helpfulness of salespeople and their level of technical expertise, and price as factors of acquisition in the buying process of industrial commodity goods. This study relied on an interview of ten individuals heavily involved in the process, as well as on an online survey of individuals also heavily involved in the process. The interview offered personal accounts of such factors of acquisition at the individual level; while, the online survey generated a broader group of data that could be interpreted mathematically in order to establish a hierarchal order of those factors. Both data collection methods resulted in significant findings that can benefit the supplier of industrial commodity goods in practice.

While price is a determinant regarding the awarding of bids for industrial commodity goods, it is not the sole deciding factor. Many factors contribute to the awarding of bids for such goods. It is the responsibility of the merchant to know his or her customers regarding goods used on a routine basis, and to understand the applications in which such goods are used. Merchants should be able to effectively communicate to their customers the quality and specification offerings of their goods and how such are consistent with the customers' requirements. The technical expertise of the merchant will help the customer to appreciate the state of compliance with regard to the goods sought. Realizing that the merchant will be supportive in the process of acquiring industrial commodity goods, along with receiving a competitive price for such goods, the customer will be more inclined to award its bids for such goods accordingly.

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Appendices

Appendix A: Introductory E-mail

Lester Phinney
 Manager
 Tek Cumberland Valve & Fitting
 8701 Unicorn Drive, Suite 306
 Knoxville, TN 37923

[Date]

Attn: [Potential Participant's Name]

My name is Lester Phinney and I am conducting a research study on understanding the psychology of the industrial goods buyer. You are invited to be a part of this research study. Your participation in this study will be important and could provide a unique perspective with regard to understanding the psychology of the industrial goods buyer by uncovering factors of importance to that buyer. I want to find out what factors are considered in determining the awarding of bids for industrial goods; and, I want to learn how important those factors are.

The research will involve a personal interview that will take anywhere from 30 minutes to 45 minutes. The interview would be conducted at a time, date, and location that is convenient to you. Your participation in this study is completely voluntary. You can decide not to be in the study; and, you can decide to change your mind about being in the study at any time after the interview begins. Any information that could possibly identify you or your company will be kept strictly confidential; and, no one will be able to identify you or your company in any written reports or publications that might result from this study.

You do not have to pay to be in this study; and, there is no compensation for participating in this study. I am not receiving compensation for conducting this study; and, I am conducting this study on my own time. Being in this study will not help you; however, information from this study might help researchers to help others in the future.

In order to be considered for participation in this study, you must meet the following qualifications:

1. You are at least 18 years of age.
2. You are a purchasing manager, purchasing agent, buyer, product engineer, or have some degree of influence over industrial goods purchased by your organization.

If these qualifications are not in line with yours, please disregard this request and accept my apologies for the inconvenience. If, however, you do meet the qualifications, and you are interested in participating in my research, please e-mail me with your contact information, and a time that is convenient for you to meet.

Sincerely,

Lester Phinney
lester@tekcvandf.com

Appendix B: Interview Instrument

Interview Questions for Participants in Study

1. Are you a purchasing manager, purchasing agent, buyer, product engineer, or do you have some degree of influence over industrial goods purchased by your organization?
 - a. If the answer is yes, continue with the interview. If the answer is no, the research participant does not qualify; and, the interview cannot continue.
2. Have you awarded a bid for industrial goods to TEK?
3. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Lead time is an important factor in determining to what company to award a bid for industrial goods.
4. How important is lead time with regard to awarding a bid for industrial goods?
5. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Product quality and product specifications is an important factor in determining to what company to award a bid for industrial goods.
6. How important is product quality and product specifications with regard to awarding a bid for industrial goods?
7. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: The level of knowledge and helpfulness of a firm's sales people is an important factor in determining to what company to award a bid for industrial goods.
8. How important is the level of knowledge and helpfulness of a firm's sales people with regard to awarding a bid for industrial goods?

9. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Price is an important factor in determining to what company to award a bid for industrial goods.
10. How important is price with regard to awarding a bid for industrial goods?

Appendix C: Survey Instrument

Survey Questions for Participants in Study

1. Are you a purchasing manager, purchasing agent, buyer, product engineer, or do you have some degree of influence over industrial goods purchased by your organization?
 - a. If the answer is yes, continue with the interview. If the answer is no, the research participant does not qualify; and, the interview cannot continue.
2. Have you awarded a bid for industrial goods to TEK?
3. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Lead time is an important factor in determining to what company to award a bid for industrial goods.
4. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Product quality and product specifications is an important factor in determining to what company to award a bid for industrial goods.
5. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: The level of knowledge and helpfulness of a firm's salespeople is an important factor in determining to what company to award a bid for industrial goods.
6. Please note whether you strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree with the following statement: Price is an important factor in determining to what company to award a bid for industrial goods.