Toward an Understanding of the Effect of Relational Demographics on Buyer Trust and Distrust in Technical Market Relationships: Grounded Theory Approach

David G. Long
St. John Fisher College

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Steven K. Million

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James E. Schwartz

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By

David G. Long

Submitted in partial fulfillment of the requirements for the degree Ed.D. in Executive Leadership

Supervised by
Steven K. Million, Ph.D.

Committee Member
James E. Schwartz, Ph.D

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

August 2009
We recommend that the dissertation by

David G. Long

Entitled: Toward an Understanding of the Effect of Relational Demographics on Buyer Trust and Distrust in Technical Market Relationships: Grounded Theory Approach

Be accepted in partial fulfillment of the requirements for the Education Doctorate degree.

Steven K. Million, Ph.D., Chair

James E. Schwartz, Ph.D., Committee Member

Date

7-23-09
Dedication

This dissertation is dedicated to my wife, my children, extended family, friends and colleagues who have, as a group, cooperated and supported me through this scholarly rite of passage.

To my wife, Patricia Ann: I hold you in the highest esteem as a professional, diligent, caring, life-long educator. Not until I commiserated with 21 other career educators for the past 27 months did I come to appreciate how wonderous it is to be regarded by your peers as an excellent teacher – a reputation you have enjoyed since 1974.

To my sons David and Andy, respectively a holder of two Master’s degrees, and a practicing attorney in the Bluegrass State: it may be, in your case, unnecessary, but until you’ve climbed the doctoral pinnacle, there is will always be at least one more noble thing to aspire to. (And, how very proud I am of you.)

To my daughter, Jennie, a young Army Intelligence Officer serving her country in the middle of the baking sun of the Mojave Desert: go to graduate school – now! (And how very proud I am of you.)

To my beloved Scooter, Australian Cattle Dog extraordinaire: thanks for your companionship at my feet over many a long, dark, cold winter night as I overloaded the local DSL system with a constant feed of digital traffic as I compiled my literature review.

To the thousands of unsung heroes of the wastewater treatment and water
treatment industry, serving in far-flung, isolated facilities, guarding the public health and the public treasury in the careful stewardship of their carefully maintained, highly regulated operations: your professionalism and modesty know no bounds. Thank you for the job you do every day, and thank you for participating in this study.

To each member of Cohort II in the Ed.D. Program in Executive Leadership at St. John Fisher College. We have enjoyed the collegiality that only the best possible group of life-long learners could bring to each other over the past two years. I hope to read of your success in the coming years, bringing the power of your doctoral degrees to bear on the many, many things sorely crying for improvement in our educational system, and society as a whole.

To the unsung heroine of St. John Fisher’s Ed.D. program, Betsy Christiansen: tell them to give you a raise. You deserve it.

And finally, my heartfelt gratitude for the association to learn a whole new way to think at the age of 56: Dr. Arthur (Sam) Walton, Dr. Steven K. Million, Dr. James E. Schwartz, Dr. Mike Wischnowski, and my patient and persistent Academic Adviser, Dr. Jeannine Dingus-Eason.
Biographical Sketch

David Long is currently President and Chief Operating Officer of FBC Technologies, Inc., a manufacturer of engineered wastewater treatment systems established in 1999. Mr. Long attended Youngstown State University from 1970 to 1974, graduating with a Bachelor of Arts degree in Political Science, and with a minor in secondary education. He attended the University of Oklahoma from 1976 to 1981 and graduated with a Master of Public Administration degree. He returned to school again in 1986, where he earned his Master of Business Administration Degree in 1990. Mr. Long began his doctoral studies in the Ed.D. Program in Executive Leadership in the summer of 2007. A career Army Reserve officer, he completed the Command and General Staff College in 1985, and completed the National Defense University’s National Security Management Course in 1986. David pursued his research in the effect of relational demographics on buyer trust in the wastewater treatment market under the direction of Dr. Steven K. Million and Dr. James E. Schwartz, and will receive his degree in 2009.
Abstract

Trust is at the heart of most human relationships, and for certain, at the heart of most long-term business relationships. The subject of hundreds of studies, books and papers, there is a universal yearning for the knowledge of how trust is gained, nurtured and protected. This study focuses on how trust in buyer-seller relationships may be affected by relational demographics – that is, how people appear to each other in terms of race, age and gender.

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Given the wide range of theories claiming to explain how trust evolves between buyers and sellers, a grounded theory study was used to examine the development of trust from the inside of one relatively isolated, technically-oriented, and richly-funded marketplace.
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Chapter I: Introduction

A World of Trust

Given the increasingly diverse and global nature of modern life, trust has become a subject of scholarly interest (Hardin, 2006, p. 1; Schoorman, Mayer & Davis, 2007, p. 344). The pace of technology has driven many traditional personal exchanges to the impersonal interfaces of the internet, facsimile machine, or cell phone. Even as early as 1980, Rotter wrote about the dawning of an “age of suspicion” (p. 1). As a result of our dependence on the faceless nature of advanced technology, Kollock (1994, p. 317) observed the pervasiveness of risk and vulnerability in every part of our lives. Despite the number of transactions making their way to the digital world, a great deal of human interaction is likely to remain in the limited realm of people working to accomplish complementary goals through cooperation and trust.

But a direct relationship has been noted between the complexity of the world and the necessity of trust to accomplish nearly anything (Misztal, 1996, p. 269). In the interpersonal relationships that govern many business-to-business transactions, a minimal level of trust between buyers and sellers is especially important to initiate and consummate purchases of goods and services. When trust is finally won, often after years of benevolent service to a buyer, the gift of trust from buyer to seller is a prize to be cherished and safeguarded.
Statement of the Problem

The wastewater industry accounts for significant expenditures - spending in the wastewater treatment market has been increasing steadily over the past two decades, currently measuring over $16 billion yearly, and is estimated to increase to $25 billion yearly by 2010 (United States Environmental Protection Agency, 2002). As found in other technically-oriented markets, a small number of businesses offer a specialized range of products used by the plants, including hardware (pumps, valves) and chemicals (chlorine, sulfur dioxide). And, like other low-profile technical markets, such as utility services, employees tend to be homogeneous in terms of ethnicity (United States Equal Employment Opportunity Commission, 2008). Plant managers of wastewater treatment operations reflect the ethnic composition of American management ranks predominantly White, middle-class, middle-aged males (Kalev, 2005).

Public funds should ideally be spent in an objective manner without regard to the relational demographic similarities of buyers and sellers. Business relationships tend to be long-lasting in the wastewater market, usually more than a decade. The writer has been employed in the wastewater treatment industry for 10 years, and has conducted field studies indicating most buyer-seller relationships in the industry are long-term, usually more than 10 years, and sometimes lasting longer than 30 years. The trust that takes root during the course of long business relationships has been found in other industries to be a result of different seller behaviors, such as intimacy and accuracy. The concept that a seller must reflect similarity in relational demographics (age, gender and race) becomes problematic when it may limit business consideration to a set of vendors with certain perceivable physical characteristics.
A study of the effect of relational demographics (age, gender or race) in the initial selection of vendors may reveal biases based on how a person looks. Wastewater plants are funded largely by local governments uniformly obligated to conduct business operations with openness and fair consideration of vendors on objective business criteria. This would suggest that selection of vendors must be free of bias based solely on physical appearance or other superficial bases.

The problem surveyed in this study centers on the role that relational demography may play in how the gates of business are initially opened to new vendors, and how relational demography may influence the development of trust as buyer-seller relationships are established and grow over time. Other studies have looked at the effect of relational demographics on trust in buyer-seller relationships in other industries, but there appear to be no studies examining a technical business-to-business market. This research will focus on the effect of relational demographics in the formation of trust between buyers and sellers within the wastewater treatment market. The study will investigate possible untended biases of buyers as they deal with industry sellers. The proper operation of a wastewater treatment plant safeguards public health; excluding potential sellers on the basis of relational demographics could theoretically debilitate plant function and ultimately endanger a community with improperly treated, contaminated wastewater.

Theoretical Rationale

The presence of trust between marketers and customers "lowers transactions costs, promotes innovations and efficiency, and furthers people's willingness to share their experience and insights" (Harisalo, Huttunen & McInerney, 2005). In particular,
trust reduces business costs by limiting the number of vendors and exchanges between businesses (Bradach & Eccles, 1989). Trust universally supports the successful long-term business relationship, though research indicates that this may vary with the buyer’s perceived importance of the purchase decision (Belonax, Newell & Plank, 2007). As posited by Schoorman, Mayer & Davis, 2007 (p. 344), the perception of risk is contextual and may limit the degree of trust between actors.

The trust literature includes discussion of many facets of a wide-ranging topic, including societal-level institutional trust, organizational trust, and the interpersonal trust among two people. Though considered “simplistic” by Kern (2002, p. 203), Fukuyama (1995) published a seminal work covering institutional trust, claiming that the inherent cultural differences among nations do much to explain the relative competitiveness of their respective economies (p. 7). Lane and Bachman (2002) presented a compilation of scholarly thought on the organizational considerations of trust, including the critical effect of trust on the success of international joint ventures and mergers. Interpersonal trust has been defined as “trust that is directly engendered when two actors are involved in an exchange relationship over time (Liebeskind & Oliver, 2002, p. 121).” This study focuses on the close interpersonal trust conditionally granted by wastewater plant managers to technical salespeople.

Scholarly analyses of trust have been broad, diverse and well-developed, though most articles call for further research on the topic. Scholars have recommended additional study on the linkage of trust to commitment (Cullen, Johnson & Sakano, 2000; Wieselquist, Rusbult, Foster & Agnew, 1999), ethics (Roman & Martin, 2005), satisfaction (Gountas & Gountas, 2007), emotion (Dunn & Schweitzer, 2005; Anderson
& Kumar, 2006), loyalty (Evanschitsky, Gopalkrisnan, Plassman, Nciessing & Meffert, 2006), interdependence (Wicks, Berman & Jones, 1999), cooperation (Bendor, Kramer & Stout, 1991), and distrust (Bigley & Pearce, 1998; Kramer, 1999; Cho, 2006).

To trust assumes that an actor finds traits of trustworthiness in a prospective partner. Mayer, Davis and Schoorman (1995) presented a model of trust which portrayed the relationship between perceived ability, benevolence, integrity in a trustee, and the linkage to trust. Individuals demonstrating these characteristics show their trustworthiness in potential relationships, reducing perceived risk as trustors cautiously reveal their vulnerabilities. The extent to which a trustor offers vulnerability is tempered by the context of the risk involved; higher stakes usually change the perception of trustworthiness. Mayer, et al, has posited "the level of trust is compared to the level of perceived risk in a situation (p. 726)." Many trust scholars accept the primacy of risk in discussions of trust (Blois, 1999; Butler, 1995; Coleman, 1990, Deutsch, 1958; Hardin, 2006; Hill, 1990; Kadefors, 2004; Larson, 2004; Ring, 1996; Sztompka, 1999; Welch, 2006).

Mayer, Davis and Schoorman's (1995) model noted the effect of the trustor's innate propensity to grant trust, which has been echoed in the literature, particularly in the fields of sociology and social psychology (Kadefors, 2004; Perks & Halliday, 2003; and, Zolin & Hinds, 2004). McKnight, Cummings and Chervany (1998) claimed the "paradox of high trust in initial relationships may be explained by identifying "hidden" factors and processes that enable trust to be high when people in organizations first meet (p. 474)."

Personality-based trust researchers have posited that trust develops in early childhood (Wilson, 1998). As a baby finds kindness from a caregiver, a general tendency
to trust others may be established for life (McKnight, Cummings and Chervany, 1998). Sztompka (1999) has written that, “if typically and consistently met, the trusting impulse slowly roots itself in the personality. If commonly breached, the trusting impulse may never shape itself... (p. 98)”.

Trust has also been observed to be linked to membership in a specific group or social category (Adams, Bryant & Webb, 2001, p. 19). If buyer and seller share the same group characteristics, to include race and gender, trust is often granted on a presumptive basis. “Even though trust is conferred on people, the basis of trust is the category to which they belong. (Adams, et al., p. 19). The authors posited that racial dissimilarity between buyer and seller may signal the justification for the buyer to withhold trust from the seller, based on the cognition of out-of-group, or out-of-category asymmetry. But Cunningham (2008) observed that when differences are perceived positively in a group and seen as a source of competitive advantage, relational dissimilarity can actually produce positive relational outcomes.

Studying the issue of distrust, Hardin (2004) has suggested that some groups can distrust others on the basis of cultural dissimilarity (p. 279). The modern scourge of international terrorism has its roots in cultural intolerance and animosity. It is disturbing to observe that the same dynamics that drive “group-generalized distrust” (p. 279) may also function to bar individuals of minority racial backgrounds from working as professional salespeople. Cohrs and Boehnke (2008) posit the effect of Social Dominance Theory in discriminatory behaviors, offering that racism and other factors serve to bolster existing hierarchies and self-moralizing justifications (p. 6).

Discrimination against African-Americans in business has been recognized as a
seldom-discussed issue among Caucasians dominating most business sectors, though a subject of frequent conversation among people of color (Thomas & Wetlaufer, 1997, p. 122). Often lacking competitive resources in terms of education, income or social standing, African-Americans may suffer the effect of marginalization (Dalen, 2005, p. 109) in their efforts to establish themselves as sellers in practically any industry.

**Significance of the Study**

A study of possible discrimination against minorities, especially African-Americans, in the wastewater treatment industry on the basis of relational demographics may be of interest to scholars and entities charged with the operation and management of wastewater treatment plants, along with businesses that sell products and services in the industry. Observations made during visits with wastewater treatment plant operators and industry salespeople by the researcher over the past 10 years indicates “entrenched organizational cultures” (Kochan, Bezrukova, Ely, Jackson, Joshi, & Jehn, 2003, p. 4) that are slow to accept non-whites or females.

The researcher’s career experience indicates a possible preference among plant managers for salespeople who are demographically similar to themselves. These observations also may indicate that the participation of women in the industry is limited while participation by African-Americans is negligible.

Scholars have studied the effect of similarity on trust between buyers and sellers in various contexts and settings, but none have addressed the aspect of relational demography on buyer-seller trust in a business-to-business technical market. This paper examines the possible linkage of trust to relational demography, as dissimilarity between buyers and sellers has been claimed to trigger negative behaviors (McKnight, Cummings
and Chervany, 1998). Hardin (2006) discusses the cognitive nature of trust, based on perceptions shaped by expectations and judgments of others, putting people on a mental “autopilot” when deciding to bestow or withhold trust in another individual (p. 27).

**Purpose of the Study**

The purpose of this study is to determine how relational demography may affect trust and distrust by buyers on their sellers. The study will attempt to determine why minorities may be limited in participation as sellers based on their physical appearance.

**Research Question**

What is the effect of relational demography between buyers and sellers in the wastewater treatment industry?

**Limitations of the Study**

A grounded theory approach was used in interviews with treatment plant operators to analyze the effect of relational demographics in the trust they place in sellers of equipment and services. The research interviews were conducted among wastewater treatment plant operators in one small region of north central New York State. The United States hosts a number of subcultures that differ widely in history and tradition which may pose an external threat to the validity of the study. In addition, the sample size of interviewees in the research has been honed to a small number, following Maital, Prakhya and Sheshadri (2008). It may, however, be of interest to scholars to undertake similar research with larger or different groups of interviewees to determine any effect of sample size on the selection bias or external validity of other qualitative or quantitative studies in similar technical markets.

The effect of organization size may be an important variable in this research. The
sample population of wastewater treatment plants operating in north central New York State does not include large plants handling extremely high volumes of water.

Wastewater treatment plants are staffed and equipped in relation to the water they handle in a day's time. For example, Rochester, New York, operates a single treatment plant that may process over 400 million gallons per day of wastewater and employs six licensed plant operators, along with a support staff of 50 or more employees. In comparison, the Town of Marion, NY, operates a plant that processes 125,000 gallons of wastewater per day, employing one licensed plant operator and one helper. Wastewater treatment plants in very large metropolitan areas such as Chicago, Atlanta, New York City, or Los Angeles could reveal completely different plant operator cultures and norms, especially in terms of vendor qualification and selection as well as consideration of cultural patterns based on broad demographic differences. In this study, therefore, the population to be examined will reflect the cultural biases and preferences to be found among the inhabitants of small towns in upstate New York.

Definitions of Terms

Trust: Kadefors (2004) has described trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (p. 176). Mayer, Davis and Schoorman (1995) claimed that trust is formed when an individual exposes vulnerability to a trustee in the expectation of beneficial actions or behavior, and defined trust as a situational state and as a personality characteristic. In a cross-disciplinary review of the trust literature, Rosseau, Sitkin, Burt and Camerer (1998) observed "considerable overlap and synthesis in contemporary scholarship on trust" (p. 402), returning to the components of vulnerability, personality
predisposition to trust, and situational determinants of trust. For the purpose of this paper, trust will be defined as the willingness to accept vulnerability on the expectation of benevolent actions, a personality predisposition to give trust easily, and situational variables, such as risk.

**Relational Demography:** Relational demography refers to the comparative demographic characteristics of members of dyads or groups (Tsui & O'Reilly, 1989). Most of the research in relational demography has been based on similarity-attraction paradigm (Byrne, 1971). Lau, Lam and Salamon (2008) reviewed a range of relational demography research supporting the view that people tend to be “drawn to those who are similar to them in demographic attributes” (p. 189). Relational demography draws on earlier research on social categorization theory (Tajfel, 1981) a concept claiming that people depend on the use of social categories to rationalize social situations and their resultant cognitions. Tor and Singh (2007) have written about the effect of relational demography in the context of cultural stereotypes, claiming a correlation between attitudinal attraction and similarity. For the purpose of this paper, relational demography will use the definition offered by Elfenbein and O’Reilly (2007), as “the comparative demographic characteristics of members of groups” (p. 113), as above.
Chapter II: Literature Review

Overview of the Trust Literature

Fukuyama (1995) has written about trust from a broader socioeconomic perspective. Measuring economic effectiveness as a function of social capital, Fukuyama stressed the importance of disparate people being able to work together toward a common purpose (p. 10). The importance of trust to a society, in terms of its ability to vigorously compete for customers and markets along with other societies, is “conditioned by a single, pervasive cultural characteristic: the level of trust inherent in society (p. 7).”

Thirty years before Fukuyama wrote, Rotter (1967) similarly noted the importance of trust as a lynchpin of socioeconomic vitality, claiming that the survival of any group is based on the presence or absence of trust.

Discussions of the social aspects of trust naturally have evolved into business applications of trust theory, particularly in the field of sales and marketing. Ryals and Knox (2007, p. 823) claimed that the retention of customers was a high priority among marketers, and long-term customer relationships were becoming universally regarded as valuable business assets. Accountants have considered the endurance and longevity of customer relationships as an asset on the balance sheet, with the recognition of the increased revenue yielded by customers who remain loyal to a particular seller (Amir & Lev, 1996, p. 22). Weitz and Bradford (1999) categorized long-term relationship sales approaches as “Production, Sales, Marketing and Partnering” (p. 242). The object of each style was the attainment of a purchase transaction with a commitment to repurchase in the
future and the prospect of forming a long-term relationship. The authors claimed that the focus on long-term relationships constituted a paradigm-shift in thinking (p.241).

Beverland and Lindgreen (2007) described the shift from transactional to relationship-based selling as “paradigmatic (p. 207),” as marketers seek to reduce costs and maximize profits through close alignment with fewer customers.

The Relationship Marketing Paradigm and Trust

Recent work on relationship marketing (Pillai and Sharma, 2003), however, contests the notion of a “paradigm shift.” Due to various factors, many businesses have acted to reduce their involvement in long-term relationships. Sheth and Shah, 2003 (p. 647) supported this observation, claiming that “as these [long-term relationships] multiply in terms of time and commitment, customers are becoming reticent to enter into long-lasting relationships with even key suppliers (p. 627).”

Dwyer, Schurr and Oh (1987) posited that buyer-seller relationships move through four phases. During the first phase of “awareness,” buyer and seller become aware that it is possible to establish a transactional relationship. In the second phase of “exploration,” buyer and seller test the boundaries of capabilities and personalities. Given mutual satisfaction with the relationship during the first two phases, the relationship progresses to a third phase of “expansion;” the buyer and seller begin to explore new ways to cooperate. In the final stage of “commitment,” the buyer and seller share affective bonds. The solidarity of the relationship at this final stage is also based on established trust as the relationship has been expanded and found mutually beneficial over many transactions, and, possibly, over a period of many years (pp. 15-21). Wilson (2000), Burchell (1997), Rosseau, Sitkin, Burt and Camerer (1998), Lewicki and Bunker
(1995), and Wicks (1999) offer similar models, depicting growing relationship quality as a function of time. Many marketers have recently concluded, however, that long-term business relationships are not always desirable.

A focus on the development of long-term buyer-seller relationships gathered acceptance among marketers toward the end of the 20th century. Levitt (1983) stated that the relationship between buyer and seller could be described as a marriage, in that "...the sale merely consummates the courtship. Then the marriage begins. How good the marriage is depends on how well the relationship is managed by the seller." (p. 14) The metaphor is apt, although success is likely not vested in the seller alone. Trust and commitment take root at the newlywed stage, but fully mature between couples who have remained together for 20 years (Larzelere & Huston, 1980, p. 595). As in matrimony, business relationships yield greater benefits when trust is enjoyed between buyer and seller and when each plays a constructive role in managing the relationship.

Research has challenged the belief that every buyer is a candidate for relationship marketing; some may expect only to maintain a relationship on a situational, transaction-to-transaction basis, despite the length of the relationship (Gabarino & Johnson, 1999, p. 82). Ganesan (1994) has observed that trust in a business relationship is the result of credibility, a belief in the ability of relationship parties to make reliable commitments and effectively perform in the roles of buying and selling (p. 12). Whether buyers prefer a transactional or longer-term relationship, the element of trust in any buyer-seller relationship has been confirmed by scholars since the early 1980s (Swan, Trawick, Rink & Roberts, 1988, p. 1).

Antecedents to trust, such as commitment, also have been studied. Scholars have
claimed a link between a state of commitment and the formation of trust (Cullen, Johnson & Sakano, 2000; Wieselquist, Rusbult, Foster & Agnew, 1999). Gountas and Gountas (2007), along with Weitz and Bradford (1999), claimed the importance of satisfaction as a cornerstone of trust. Studies from other disciplines, including the marriage literature, have centered on the importance of relationship commitment, with exchange partners believing that maintaining a relationship is "worth [the effort] to ensure that it endures indefinitely" (Morgan & Hunt, 1994, p. 23).

Other antecedents to trust have been identified. Personal emotions, such as fear, anger, or happiness have been linked to the development of trust and distrust (Dunn & Schweitzer, 2005; Anderson & Kumar, 2006). Loyalty has been identified as a precondition as well as an outcome of trust (Evanschitsky, Gopalkrishnan, Plassman, Neiessing, & Meffert, 2006). The dependence of a customer on his seller as well as the dependence of a seller on his customer has been examined as a determinant of trust (Wicks, Berman and Jones, 1999). Cooperation also has been identified as an essential support of trust in a study conducted by Bendor, Kramer and Stout, (1991).

Since 1918 researchers have sought to establish links between seller behavior and buyer response (Churchill, Ford, Hartley and Walker, 1985, p. 104). A meta-analysis by Churchill et al., (1985) of 75 years of studies yielded 393 studies and 36 dissertations on selling, distilled to 116 works that explored the linkage between salesperson success and behavioral traits (p. 104). The authors found a strong relationship linking skill and aptitude to the type of product sold (p. 103). Products that are used in complicated roles in technical markets demand high levels of seller skill and aptitude. The use of such products also may require higher levels of buyer trust, given the greater risks associated
with product misapplication or failure.

Green (2006) has observed that the most significant factor in trust-based, buyer-seller relationships is the seller’s trustworthiness, while also Green stipulated that the buyer must offer an openness to trust. In general, trust has been considered a competitive advantage in business, permitting buyers and sellers to share confidential information without fear of exploitation by their partner (Anderson & Kumar, 2006, p. 525).

According to Hardy, Phillips and Lawrence (2002), trust is usually studied in two aspects: one that emphasizes predictability; and another that focuses on benevolence or goodwill (p. 64). Trust scholars universally accept the trustee’s expectation of benevolent actions on the part of a trustor, though predictions of trustworthiness have been explained as functions of a personality predisposed to trust (Hardin, 2006; McKnight, Cummings & Chervany, 1998), social-categorization theory (Tajfel, 1981), similarity-attraction theory (Bryne, 1971), and relational demography theory (Tsui & O’Reilly, 1989).

Ledingham (2003) recognized eleven attributes of buyer-seller relationship, including: “trust, openness, credibility, emotion, intimacy, similarity, immediacy, agreement, accuracy, common interests and relational history (p. 189).” Hardin (2006) observed that there are many views of trust and its possible antecedents that, in their unique idiosyncratic natures, “must strike everyone but their authors as odd. (p. 25).” The group of studies that link antecedents of trust, however, have provided the basis for the formulation of several coherent and possibly valuable models of trust.

Reviewing the works on trust, and the effect of their 1995 model on the trust literature from 1995 to 2007, Schoorman, Mayer & Davis, 2007 (p. 345), maintained their view that it is necessary to include the construct of propensity to trust in any trust
model. "The literature that has followed our model has not questioned this decision [to include the construct of propensity to trust] and has accepted the view that trust is based in relationships" (Schoorman, et al., 2007, p. 345). The Schoorman et al. model of trust illustrates the interrelationships among antecedents, risk, and predisposition to trust.

![Diagram of trust model](image)

**Figure 4.1.** Model of trust (Mayer, et al., 1995)

**Buyer-Seller Similarity and Trust**

Studying the issue of similarity between buyers and sellers 45 years ago, Evans (1963) claimed "the more alike the salesman and the prospect are, the greater the likelihood for a sale. This is true for physical characteristics (age, height), and other objective factors (income, religion, education)...(p. 79)." In their book that explored the issue of social trust, Earle and Cvetkovich (1995) wrote about tendency of people to trust those who are similar to them while distrusting those who are dissimilar.

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The idea that buyer-seller relationships are facilitated by shared physical similarity had been confirmed by Nicholson, Compeau and Sethi (2001), as they studied the aspect of “liking” as a factor in the building of trust in long-term relationships (p. 4). Some of the most obvious facets of physical appearance could include age, gender and race. Milliken and Martins (1996) have observed that race is a visible differentiation between people, and may be “…likely to evoke responses that are due directly to biases, prejudice, or stereotypes (p. 404).”

Scholars have generally agreed that, while gender has been vigorously studied in recent years, the topic of race has been rarely touched (Jones, Moore, Stanaland & Wyatt, 1998, pp. 72-73). Henthorne, LaTour and Williams (1992) noted that “buyers, over 90% of whom were white tended to form distinct first impressions of salesperson credibility based on race…” (p. 74). Drawing on social-categorization theory, Elasass and Graves (1998) have claimed that individuals categorize each other on the most salient features of their identities. Due to the fact that ethnicity and gender are highly accessible and salient, individuals will usually categorize on the basis of these factors.

Jones, Moore, Stanaland and Wyatt (1998) offered a model to explain the effect of a racial or gender match between seller and buyer, suggesting the heavy influence of skin color and gender on customer perceptions of trustworthiness, expertise, likability and attractiveness. The model suggests that a dissimilarity of race or gender can be viewed as a serious impediment to the seller in entering into relationships or situations that could result in the attainment of a sale credited to a seller. Racial dissimilarity, in itself, may inhibit the development of any relationship. The social literature has indicated that many buyers are generally expected to view salespeople of the same race and gender
favorably, and are likely to judge trustworthiness as a function of gender and skin color (Jones, et al., p. 76).

Figure 4.2. Effect of race and gender from Jones et al. (1998)

The effect of ethnicity has been observed in doctor-patient relationships (Cook, Kramer, Thom, Stepanikova, Mollborn & Cooper, 2004). In focus group and individual interviews among physicians and their patients in two clinics, physicians frequently mentioned the difficulty in building trust with patients of dissimilar races. Similarly, a female, non-white doctor observed that, among her elderly Caucasian patients, “I feel less trust when I go into the room for the first visit (p. 82).” Another doctor in the study described the effect of cultural dissimilarity simply as “huge (p. 82).” But trust is not the only element to consider in the development of relationships.

Welch (2006) presented a model of buyer-seller relationships based on the metaphor of a electrical coaxial cable. Featuring a bundle of wires arranged around a center conductor, Welch posits that buyer-seller relationships depend on the interplay of

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trust and distrust in the center conductor, which is surrounded by a multitude of other wires. In this arrangement, trust-related wires include many of the antecedents of trust described by other scholars, such as credibility (Cullen, Johnson & Sakano, 2000; Belonax, Newell & Plank. 2007; Young & Young, 2007). Welch, on the other hand, included an infrequently mentioned antecedent to trust in her wiring bundle, the similarity between buyer and seller (p. 139).

In the trust literature, Mayer, Davis and Schoorman (1995) observed that the issue of diversity in the workplace could be a reason for increasing modern interest in the study of trust itself (p. 710). But the view that buyer and seller must be similar in terms of race, culture or ethnicity is seldom examined (Bush, Rose, Bilbert & Ingram, 2001, p. 392). In their study of relational demographics and trust, Lau, Lam and Salamon (2008) have found that the literature contains little systematic research on the effect of demographic similarity or dissimilarity on trust. The field of professional selling in the United States has been dominated by middle class Caucasian males. Martin (2005) has observed “...although a significant number of employment fields have followed the trend of increasing the number of minority employees in their profession, the field of professional selling [remains] a profession dominated by the presence of Caucasian males (p. 285).”

Jones, Moore, Stanaland and Wyatt (1998) researched the construct of similarity as a function of homophily, a term used to define the degree to which individuals find affinity on the basis of similar identity (p. 74). Though similarity has been recognized as a key element in developing trust between buyer and seller (Jones, et al., p. 75), research also has indicated that buyers are generally distrustful of the stereotypical Caucasian male salesman (Jones, et al., p. 85). With so few people of color and females working as
professional salespeople, it is conceivable that the average buyer may consider an African-American or female salesperson a refreshing change from the norm (Jones, et al., p. 84). In their study measuring customer perceptions of likeability of black males, black females, white females, and white male salespeople, blacks (either gender) and white females consistently ranked higher than white males (Jones, et al., p. 84).

Comer, Nicholls and Vermillion (1998) have observed that although African-Americans in particular have been fighting for equality in the American workforce for more than 100 years, “little research attention has been directed toward their experiences on the sales force.(p. 4).” DelVecchio and Honeycutt (2000) found in their study of attitudes among African-American college students toward careers in sales no evidence to support claims that Blacks find sales jobs less attractive than their White contemporaries. This study sought to determine the possible effect of relational demographics as an explanation of the low participation of minorities selling jobs in the industry.

**Topic Analysis**

The topic of trust has attracted the attention of scholars from many disciplines, including sociologists, economists, psychologists, physicians, and political scientists. Given growing multidisciplinary enthusiasm for the study of trust, Kelley (1980) observed that the field of literature on trust has grown to resemble a mail-order catalogue. Kramer (1999) observed that “trust has rightly moved from bit player to center stage in contemporary organizational theory and research (p. 594).”

Working in the realm of organization science, Bigley and Pearce (1998) reviewed 123 studies of trust across a wide spectrum of social science disciplines into several
realms, including relationships between actors who are not familiar with each other. Approaching trust from a dispositional perspective, Bigley and Pearce observed that “factors exist within individuals that predispose them to trust or distrust others they do not know” (p. 410). Bigley and Pearce also examined trust in an institutional aspect, seeking to explain trust as a function of bureaucracies, laws and regulations, as individuals willingly offer up vulnerability based on a faith in the benevolent nature of their government. Looking to behavioral theory, the authors found many studies suggesting that trust results from “rational decision-making processes rather than personality characteristics” (p. 411). No study reviewed by Bigley and Pearce, however, looked at trust as a possible function of how similar one individual is perceived by another in physical appearance.

The literature emphasizes the importance of trust in the formation of enduring sales relationships. In a longitudinal study by Roman and Martin (2007), researchers mailed questionnaires to 357 industrial customers over two years, studying the effect of call frequency on the quality of business relationships. The study revealed that the importance of frequent sales visits actually declined over time, as the long-term relationship became more a function of customer satisfaction and perceived value. As the relationship matures between buyer and seller, physical contact becomes a diminishing factor of importance against the appreciation of similarity. This study seeks to further explore the effect of similarity on trust in the relations between buyers and sellers.

Green (2006) has described the pressures that often prevail against the seller seeking to develop a long-term perspective in commercial relationships including: a focus on short-term financial objectives, such as monthly sales; sales contests and
awards; reliance on promotions; fear of making price concessions; fear of setting precedents; and, a drive to push for maximum short-term profits (Green, p. 42). The pressure to obtain quick results is significant and usually undermines long-term considerations.

Weitz and Bradford (1999) reviewed personal selling and sales management literature to develop their claim that in long-term business relationships, the role of the salesperson has shifted from opportunistic instigator to sophisticated conflict manager. By managing conflict productively, the salesperson improves the understanding of business issues and contributes to building commitment in the relationship.

Other studies have correlated buyer seller relationships with factors contributing to the development of trust among buyers and sellers. Roman and Martin (2007) examined the issue of communication, in the context of frequency of sales calls on customers, preparing their research questionnaire on the basis of 22 qualitative interviews. The authors tabulated their findings using an analysis of variance. Their findings indicated that as relationships grow, the frequency of sales calls become less important. Customer perceptions of general satisfaction with the relationship were determined to be partly based on attitudinal loyalty, which has been linked directly to perceived benevolent trust. That is, the extent to which a seller is believed to act in the best interests of his customers (Colquitt, Scott, and LePine, 2007).

Ethical behaviors, such as not disclosing competitive information or simply keeping promises, are considered important by customers, and have been identified as a component of long-term customer relationships. Roman and Martin (2005) reported that the ethical behavior of salespersons' "...can play a critical role in the formation and
maintenance of long-term buyer-seller relationships," (p. 439) and has a direct bearing on the formation of buyer trust. Supporting research also has underscored the importance of credibility in the development of long-term relationships and trust, enabling buyers and sellers to progress to higher levels of relational complexity (Young & Young, 2007).

The linkage of communication, information exchange, and organizational norms also has been examined in the formation of business trust in business relationships. Young and Young (2007) conducted a large, qualitative study based on field interviews. That research included a broad cross-section of organizations to improve the applicability of their findings. The authors propose that as information is exchanged over time, trust grows through familiarity and reliability. This finding recommends further research on the relation of communication to trust while stressing that study findings were limited to a very narrow aspect of a larger field of interest.

The essence of trust as a business fundamental was studied by Harisalo, Huttunen and McInerney (2005). In a cross-sectional survey, the Finnish researchers sought opinions on trust from 221 respondents at 135 companies. The respondents were attending an elite management development program. A phase of the program was exclusively dedicated to developing a good leadership style in which trust and trust-creating management practices were taught to attendees. Data were collected in small-group discussions and the results compared. Indicating that "trust is the truly hard currency of business life and marketing," (p. 481), the authors thought further study could be repeated at similar venues to confirm the importance of trust among other business groups.

Examining how emotions affect long-term customer commitment, Gountas and
Gountas (2007) surveyed tourists to determine how likely they were to repurchase based on emotions. Positive emotions were affirmatively linked to long-term repurchase behaviors while negative emotions, such as anger, were determined to have an adverse effect on future purchases. Other research by Dunn and Schweitzer (2005), however, claimed that emotions do not influence trust or commitment when individuals are keenly aware of their emotions, or when individuals are very familiar with the trustee. Trusting is, at the very least, an affective behavior grounded in emotion – to dismiss emotion from the trust equation seems unreasonably presumptive.

Two dimensions of loyalty, attitudinal and behavioral, were studied with commitment among 2,389 customers of a mass transit system (Evanschitsky, Iyer, Plassman, Niessing, and Meffert, 2006). Identifying attitudinal loyalty as a component of long-term commitment and trust, the researchers observed that programs designed to build behavioral loyalty (e.g., coupons and discounts) had little effect on commitment. Programs aimed at developing attitudinal loyalty, such as inviting customers to become a member of a “customer club,” had a greater effect on the development of loyalty and long-term repurchase commitment.

Scholars also have investigated linkage between business trust and interdependence in long-term relationships. Wicks, Berman and Jones (1999) found that organizations seeking “optimal trust” (p. 100) in relationships found improved levels of economic performance, and that a state of interdependence was established by intentional individual and collective effort. As relationships mature over time, trust grows and the partners become dedicated to making the cooperative relationship work (Wilson, 2000). Aiming for the establishment of mutually-beneficial integrative relationships, buyers
struggle to “bind to a reliable and high quality supplier that can add significant value to the buyer’s product or process” (Wilson, p. 56). As long-term integrative relationships are developed, the salesperson’s familiar role is diminished. Successful long-term relationships have been described as [ones in which] the actors cooperatively interact on a daily basis” (p. 60).

Researchers have also have investigated correlations between the length of a relationship and perceptions of trustworthiness (Levin, Whitener, and Cross, 2006). Based on the assumption that when “two people interact and learn about each other, their relationship and trust grows,” the authors found that surprisingly little work had tested the actual linkage between trust and relationship longevity. Testing the hypothesis that trust grows as a relationship ages, 127 respondents from a variety of working environments including a pharmaceutical company, a bank, and an oil company. Rather than proving a linkage between relationship, longevity and trust, the authors discovered that in new relationships, trust was built on sharing the same gender. In medium-length relationships, trust was formed from the actors’ experience and future beliefs based on social discourse. The findings also suggested that in older, established relationships, trust was a function of coalescent attitudes and views (p. 1168). The authors concluded with the observation that “trust building is neither inevitable or irreversible, and...can turn to distrust” (p. 1169) as a result of the actions of either party. They recommend future research on other factors to include race, professional background, integrity and ability.

Distrust has been increasingly recognized as a component of long-term relationships. Trust and distrust are among a group of terms based on knowledge and belief (Hardin, 2004, p. 11). As trust has been viewed as the expectation of benevolent
intentions, distrust has been defined as an "...expectation that others will hurt, abuse, humiliate, cheat, lie, manipulate, or take advantage (Eidelson & Eidelson, 2003 p. 187)."

But rather than viewing distrust as the polar opposite of trust, there is agreement that distrust and trust are conceptual bedfellows (Lewicki & Bunker, 1995; Lewicki, McAllister & Bies, 1998; Lewicki, Tomlinson & Gillespie, 2006; Bigley & Pearce, 1998; Kramer, 1999; Ullman-Margalit, 2004; Larson, 2004).

Distrust has only recently evolved into a subject of formal academic study (Cho, 2006). Hardin (2006) has written about the dawning of "An Age of Distrust" (p.1), and the necessity of examining distrust against trust as well as its impact on the myriad facets of trustworthiness. He stresses that "this point is commonly ignored by many scholars, who see our problem as a failure of trust rather than of trustworthiness, and who argue for increasing trust – somehow (p. 1)."

Without trust, the formation of collaborative networks is arduous, if not impossible (Hannah, Dey, & Power, 2006). Cross-functional teams, strategic alliances and socially-embedded partnerships are debilitated when distrustful actors pursue independent and mutually-exclusive agendas (Lewicki, 1998).

Distrust, though, is active in every human relationship, not necessarily residing at the end of a single trust-distrust continuum (p. 440). The premise that distrust could be the function of a simple mismatch of skin color, age, or gender has become a topic of academic interest over the past decade (Jones, Moore, Stanaland & Wyatt, 1998).

The issue of distrust has emerged as a critical component of long-term relationships (Hardin, 2006, p. 1). Trust and distrust are epistemic terms, cognitive in nature, and are among the group of terms based on knowledge and belief (Hardin, 2004, p. 11). Ullmann-Margalit (2004) observed that the construct of distrust is firmly
embedded in the notion of trust itself. Hardin (2006) supported this view, holding that distrust is companion and inseparable to any discussion of trust. Rather than viewing distrust as an antithesis of trust, or the end points of a continuum, there is agreement that distrust and trust are not necessarily mutually-exclusive constructs (Lewicki & Bunker, 1995; Lewicki, McAllister & Bies, 1998; Lewicki, Tomlinson & Gillespie, 2006; Bigley & Pearce, 1998; Kramer, 1999; Ullman-Margalit, 2004; Larson, 2004).

Hardin (2006) offers an explanation in his discussion of trust as a three-part construct: “A trusts B to do, or with respect to, X” (p. 19), indicating a strong subjective dimension of trust. Situations involving factors outside of the realm of “X,” could possibly fall into the realm of distrust. Lewicki, McAllister and Bies (1998) illustrated this idea with their scenario of an imaginary academic colleague who could he trusted to perform great research, but was unreliable in attendance at research meetings. In this example, trust and distrust coexist, with distrust taking the form of negative expectations of the colleague’s attendance at meetings. Other factors, though, may influence the degree of trust and distrust in a relationship.

Other short-term oriented behaviors such as opportunism have been identified as antecedents of distrust (Lane, 2002). Artificial forms of control or governance to reduce the likelihood of opportunism usually take the form of legal agreements and contracts, though Tomkins (2001) has observed that “contract planning and contract law, at best, stand at the margin of important long-term continuing business relationships (p. 177).” Sitkin and Roth (1993) have followed Tomkins, noting that contracts often become self-feeding creatures, leading actors into a vortex of ever-formalizing relations (p. 367).

The “laws of distrust” described by Marshall (2000) include the concept that
among strangers, the natural default position in relationships is distrust. The early stages of developing relationships among buyers and sellers find actors wary and circumspect, hoping for the best, but expecting the worst from each other. Marshall contends this natural state of distrust is a result of social conditioning and of a preoccupation with the images of winners and losers (p. 34).

As relationships evolve from orientation to higher levels of stabilization and collaboration, trust may become focused on minute perceptions of actions and behaviors. Giving the example of an academic colleague who may be gifted as a theoretician, acceptable as a methodologist, but lacking in skills as a classroom teacher, Lewicki (1998) claims there are domains where trust is appropriate and where trust is not appropriate with the same person.

Making the distinction that high distrust is not the same as low trust, Lewicki defined distrust as a general expectation of negative or injurious conduct. Sztompka (1999) has described distrust as “the negative mirror-image of trust, (p. 26)” calling for defensive commitment in terms of avoidance, distancing or escape. Hardin (2006) has written extensively on distrust, and posited that the two constructs, trust and distrust are two sides of the same coin (p. 13).
Lewicki, McAllister and Bies (1998) have written about the companion nature of trust and distrust. Arguing that trust and distrust are "separate but linked" dimensions (p. 439), the trust-distrust grid (above) dispels the traditional view of trust and distrust as simple positive and negative concepts. Refocusing on trust through Lewicki et al. contextual lens, it becomes evident that trust and distrust do not lie at opposite ends of a continuum.

It is not unusual to find that in many long-term relationships a buyer may insist on highly detailed documentation on every transaction - where the seller is known for shipping a high quality product at a fair price - but maintains notoriously shoddy billing.

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Figure 4.3 Model of simultaneous trust – distrust. Lewicki, McAllister & Bies (1998)

records. Lewicki, McAllister and Bies (1998) called for a better understanding of the
dynamics of trust and distrust in future research (p. 454).

Trust and distrust in modern exchange relationships has also been studied,
specifically with regard to building long-term buyer confidence in on-line relationships
(Cho, 2006). The author observed that “while the extant literature has offered much
information on how trust can be developed and sustained, comparatively little attention
has been paid to its conceptual counterpart: distrust” (p. 25). Following Lewicki (1998)
and Kramer (1999), Cho surveyed 3000 customers to determine their perceptions of trust
and distrust with Internet businesses. Testing the theory that distrust carries more weight
than trust in the relationship commitment, respondents indicated that high trust was more
critical in determining commitment than a lack of distrust. Cho recommended future
research to explore the possible coexistence of trust and distrust.

Hannah, Dey, and Power (2006) studied the dynamics of trust and distrust in the
organizational problems experienced by a Scottish healthcare cooperative. Interviews
with ten physicians with practices in Dundee, Scotland, revealed fear and cynicism with
their government colleagues charged with program administration. The authors reported
that the physicians held low trust and a simultaneous level of high distrust, which
eventually led to the demise of the cooperative. As a result of failure to work together, the
healthcare cooperative network was abandoned in 2005.

Relational Demographics and Trust

A final consideration to the issue of trust and distrust in buyer-seller relationships
lies restlessly in the aspect of similarity. Coaxial cables are ubiquitous in
communications, and can be viewed as metaphorical in that the center, heavy conductor
serves as the essence of trust and distrust, with the smaller outer wires shaping and influencing trust through other variables. The effects of the outer wires merit careful consideration.

Welch’s (2006) portrayal of relationships in the context of coaxial cables illustrates the influence of many variables on the formation of trust in a relationship, though the size of the conductors imply that similarity is par with other factors, including the issue of credibility which has been extensively studied (Belonax, Newell & Plank, 2006; Cullen, Johnson & Sakano, 2000; Young & Young, 2007).

The preference for similarity may be explained by relational demographics (Elfenbein, Hillary & O’Reilly, 2007; Farh, Tsui, Xin, & Cheng, 1998). Dalen (2005) noted that people generally find others more trustworthy if they reflect familiarity and experience difficulty in trusting someone who may be of a different race, gender or age.

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Figure 4.4 Coaxial cable model of trust – distrust with zone of approval. Welch (2006)
When faced with those who are different, many react with uncertainty and suspicion and withholding their trust (p. 18).

Race, gender and age have been defined as key surface-level attributes in the emerging construct of relational demography (Goldberg, 2005, p. 599). Surface-level attributes have been found to trigger automatic social categorization responses in the initial stages of job interviews with negative consequences for some interviewees (Goldberg). Even the effect of a person’s name, such as Lakisha versus Emily, has been linked to negative social categorization by interviewers (Bertrand & Mullianathan, 2004).

**Summary and Conclusion**

Trust and distrust have been considered as two distinct constructs and could be considered as phases in dynamic social relationships (Rousseau, Sitkin, Burt & Camerer, 1998). Lewicki (1998), on the other hand, has posited that earlier studies of relationships lack veracity, and called the development of a new view of relationships that recognizes the interplay of trust and distrust (Lewicki, p. 440). The phenomenon of trust-distrust has been recognized as an emerging topic of interest by researchers, announcing the call for further study on trust-distrust (Adler, 2005; Burns, Mearns & McGeorge, 2006; Cho, 2006; Hannah, Dey & Power, 2006; Huang & Dastmalchian, 2006; Kramer (1999); Lewicki, 1998; Searle & Ball, 2004; Welch, 2006). Trust and distrust continue to attract the attention of many.

Research on the phenomenon of trust-distrust may be of interest to academics and business practitioners. Rousseau, Sitkin, Burt and Camerer (1998) have called for further empirical research on the topic of trust in different contexts. The study of racial diversity in any business setting has proven difficult due to the sensitive issues raised, and the fear
of organizations for the potential of litigation (Kochan, Bezrukova, Ely, Jackson, Joshi, & Jehn (2003). Due to racism or the suspicion of racism in a relationship, the development of trust can be expected to suffer (Brenkert, 2002, p. 288). Racism is an emotionally charged issue, considering the long fight of minorities for equal and fair treatment by employers, colleagues and coworkers.

Studies in diversity have given way to an emerging body of literature written across the disciplines on relational demography (Goldberg, 2005; Tsui & O’Reilly, 1989; and Tsui, Porter, & Egan, 2002). The field of relational demography encompasses a range of observable and non-observable demographic variables, including race and gender, but also a range of other factors, such as socioeconomic status. As Goldberg noted, “interest in demography has shifted away from simple effects toward more complex relational demography models (p. 597).” Relational demography may hold promise in studying the success in establishing the initial bonds that may engender the development of trust in long-term buyer-seller relationships.

Cox and Smolinski (1994) called for industry-based research in the field of diversity (p. 45). Studying the issue of racial diversity in long-term buyer-seller relationships in the wastewater treatment industry may be of interest to scholars with an interest in stereotyping and tokenism (Comer, Nicholls & Vermillion, 1998, pp. 5-6).

Pitts (2006) has observed that “the most prominent form of diversity studied – race and ethnicity – has actually been declining in recent years, (p. 249)” and that the majority of these studies were conducted in the 1950s and 1960s, and have become irrelevant due to evolving social norms and values. But the scholarly examination of trust has continued to evolve.
One theory of trust has been offered to explain the endurance of long-term economic relationships where actors are continually asking, "Whom do we trust?" and "What do we trust them with?" (Ring, 1996, p. 156). Ring's questions offer a general framework for the research problem investigated in this paper. Conducting research among wastewater plant operators on how they bestow trust on industry sellers follows Ring's observation that "scholars are more likely to learn more about trust and its role in economic exchange from managers than are managers from scholars (p. 167)."
Chapter III: Methodology

Overall Research Design

The research question investigated in this dissertation focuses on the effect of similarity in the formation of trust between buyers and sellers in the wastewater treatment market. Relational demography centers on the study of similarity and differences between people, particularly in the realm of "surface level" characteristics, e.g., race, gender and age (Goldberg, 2005, p. 599). Berry (1996, p. 42) has claimed that trust may be the "most important relationship tool available to a business." Among the many antecedents of trust identified in the literature (Palmatier, Dant, Grewal & Evans, 2006, p. 138), similarity between buyer and seller have determined to have a gate-keeping effect at early relationship stages (Jones, Moore, Stanaland & Wyatt, 1998). Other scholars, including Doney and Cannon (1997), Welch (2006), and Levin, Whitener and Cross (2006) recognized the primacy of similarity in buyer-seller dyads, as relationships grow into long-term interpersonal affairs.

The paper presents qualitative research into the effect of similarity on the formation of trust between buyers and sellers in the wastewater treatment market. The wastewater industry is a close-knit community of technical professionals, enjoying its own jargon and working culture. Lewicki, Tomlinson and Gillespie (2006) have discouraged further quantitative research on trust and distrust, claiming that due to the richness and complexity of the topic, the study of trust can be better served through the use of qualitative methods, including in-depth interviews (p. 1015). Business scholars
(Cooper & McAlister, 1998; Kaplan, 1998; Maital, Prakhya and Seshadri, 2008) have called for the increased use of qualitative tools in business research.

The field of literature on trust is broad, diverse and well-developed. Scholars have recommended further study on the linkage of trust to commitment (Cullen, Johnson & Sakano, 2000; Wieselquist, Rusbult, Foster & Agnew, 1999), ethics (Roman & Martin, 2005), satisfaction (Gountas & Gountas, 2007), emotion (Dunn & Schweitzer, 2005; Anderson & Kumar, 2006), loyalty (Evanschitsky, Gopalkrisnan, Plassman, Neiessing & Meffert, 2006), interdependence (Wicks, Berman & Jones, 1999), cooperation (Bendor, Kramer & Stout, 1991), and distrust (Bigley & Pearce, 1998; Kramer, 1999; Cho, 2006). Research into trust also has generated interest into the issue of the effect of similarity between associated individuals.

The construct of similarity between buyer and seller has been debated in the literature for over 35 years, with empirical studies in sales, marketing and social psychology (Lichtenthal & Tellefsen, 2001, p. 1). Churchill, Collins and Strang (1975) studied the effects of age, height, nationality, race and gender among buyers and sellers, finding that similarity did not determine whether a buyer made a purchase in a retail setting. This paper does not repeat earlier research, but explores the effect of similarity in a technical, business-to-business market. Later work by Crosby, Evans and Cowles (1990), however, found that there was a correlation between observable similarity characteristics (age, gender and race) and short-term relationship performance. At any stage of a relationship, Lichtenthal and Tellefsen (2001) posit it is more important that buyers and sellers think in a similar manner than reflect one another's observable characteristics.
Pitts (2006) wrote about the state of research on the management of diversity in public organizations, finding that “there had not been much focus on other management practices that worked to ameliorate working conditions for underrepresented groups (p. 247).” The present study was designed to explore the possible effects of the lack of diversity awareness among the public sector employees who operate wastewater treatment facilities, and the possible effect on the success of minority salespeople to establish sales relationships with these facilities. Pitts found that although underrepresented groups are slowly finding assimilation into public sector organizations, there have been few studies to examine the significance of variables such as relational demographics (p. 248).

Given the plethora of research on trust, grounded theory research was used to investigate how trust evolves between buyers and sellers in a segment of the water treatment industry, with particular attention on how relational demographics (race, age and gender) affect the growth of trust (Elfenbein & O’Reilly, 2007). Grounded theory provides a framework for exploring the effect of relational demographics on the formation of trust, through the “views, feelings, intentions, and actions as well as the contexts and structures of [the study participants] lives (Charmaz, 2006, p. 14).”

Trust is highly interpersonal in nature and thus lends itself well to study through the grounded theory method. A chorus of scholars has risen to proclaim the use of grounded theory for the study of interpersonal phenomena (Singh and Krishnan, 2005; Parry, 1998; Conger, 1998; Egan, 2002). Framing an investigation of the possible effect of relational demographics on a decision to grant or withhold trust from buyer to seller
compelled the selection of grounded theory methodology, depending on industry participants to describe this phenomenon in their own voices.

The Research Context

The research venue consisted of municipal treatment plants managed by state-licensed operators in the region surrounding Rochester, New York. Demographic information was collected from each of the participants, including age, education background, race, gender, professional education as well as level of license certification. Plant operators' licenses in New York State range from Class I (permitting the operation of very small operations) to Class IV (permitting the operation of a plant treating any volume of water).

The Research Participants

The study population included ten licensed wastewater treatment plant operators. The author's previous field research with other wastewater plant managers indicated that the majority are middle-aged Caucasian males with an average of two years of college in a field of study unrelated to their occupation. General discussions conducted by the researcher with industry salespeople have indicated a high degree of homogeneity in race, gender and age, (white – male – middle age) among salespeople and plant operators.

The New York Water Environment Association (NYWEA) provided a copy of their membership database including the contact information for every licensed wastewater treatment plant operator in the state. The membership database was sorted by zip code to narrow the survey population to operators employed at plants located within 100 miles of Rochester, NY.

Five operators were selected for their proximity to the researcher, called on the
telephone and asked to participate in the research project. Five more operators were recommended for inclusion in the study by the first group of plant operators, using the “snowballing” technique of participant referrals suggested by Charmaz (2006) and cited widely by qualitative researchers. When called, the purpose of the study was explained and permission sought to visit the plant and obtain the interview. Geiger and Turley (2003) and Kvale (1996) observed that no maximum or minimum number of participants was necessary to engage in grounded theory research (p. 582), given that the strength of grounded theory lies in the integrity of the processing and coding of interview data. This view of research requirements, then, appears to support the use of small samples and may suggest that meaningful data could be obtained through the use of even fewer than ten participants. The same research logic suggests that a larger participant sample would not yield dissimilar findings.

Procedures for Data Collection

Each study participant was asked to set aside one hour for an interview conducted by the researcher. Following the compilation of interview transcripts at the end of every two interviews, similarities and “saturation points” were sought, and the results integrated into the interviews with the next two plant operators. Gathering and analyzing interviews with the five groups afforded the essential “zigzag” (Creswell, 2007) dimension to the study, bringing the candidate back and forth from the field to achieve the constant comparative feature of grounded theory process analysis as emphasized by Creswell (p. 64). Interviews were obtained from participants and captured on two digital voice recorders. Interviews were played while transcripts were encoded with Atlas ti 5.0 software (Muhr, 2004). A typed transcript of each interview was prepared and data
coded, then theoretically sampled in the grounded theory process described by Charmaz (2006), and Strauss and Corbin (1990). As code sets began to emerge in the data, the researcher examined notes and memos to develop a recognition of meaningful patterns of thought and action by interview participants, zigging and zagging (Creswell) from interview tapes to coded analyses and reflection with several advisors well-versed in grounded theory research.

Data Analysis

Miller and Fredericks (1999) have framed grounded theory as “logic of discovery,” and a path of “inference to the best explanation. (p. 539).” The interview questions were developed to explore the linkage between buyer trust and the effect of non-verbal factors (e.g., relational demographics), and behavioral and verbal factors such as benevolence and technical knowledge. The examination of the interviews attempted to identify threads of inference, while searching for the relative effects of similarity among other antecedents of trust (Welch, 2006; Mayer, Davis & Schoorman, 1995; Jones, Moore, Stanaland & Wyatt, 1998; Doney & Cannon, 1987) in the context of the buyer and seller relationship. Dwyer, Shurr and Oh (1987) described four phases of relationship development in buyer-seller dyads, including “awareness, exploration, expansion and commitment.” Looking across buyer-seller relationships in early, middle and mature stages, scholars (Levin, Whitener & Cross (2006); Rosseau, Sitken, Burt & Camerer (1998); Lewicki and Bunker (1995) noted varied effects of similarity on trust. The findings of these scholars framed many of the researcher’s interpretations and analyses of the interviews.

After the first two interviews, written transcripts were prepared from the interview
recordings. As recommended by Charmaz (2006), each interview transcript was coded and analyzed in the context of the trust-similarity literature. Each round of interviews was reviewed to identify the singular effect of similarity on the development of trust, with particular attention to the possible importance of relational demography (race, age, and gender).

The coding procedure closely followed the study conducted by Singh and Krishnan (2005, p. 10), seeking to establish a set of "universal" determinants of similarity-based trust reflected in the literature, as well as factors that may be unique to the wastewater treatment industry due to the relatively isolated, technical nature of the professionals who predominate the management of the plants.

Given the broad nature of the trust construct, grounded theory provided a way to examine the effect of buyer-seller similarity against the background of a highly developed body of knowledge on the subject (Fendt & Sachs, 2008, p. 452). Geiger and Turley (2003) encouraged the use of grounded theory in buyer-seller relationships, noting that the use of "the method has remained astonishingly low" in the field of business research (p. 580).

**Plan of Action Timeline**

Interview questions initially were compiled to yield an hour-long interview. Interview questions were approved by the dissertation committee for topic relevancy. The questions regarding similarity and other antecedents of trust were influenced by the trust-similarity research performed by Doney and Cannon (1997) and Welch (2006). Doney and Cannon identified likability, similarity, frequent business contact, and length of relationship as characteristics of a buyer's relationship to a salesperson (p. 39). Welch
described the effect of similarity, credibility, emotion, intimacy, immediacy, agreement, accuracy, common interests, and relational history in determining the nature of the “zone of approval” that defines trust and distrust in a business relationship (p. 152).

The first two operators were interviewed over a two-week period; two tape recorders (one for back-up) were used to capture the interviews. The interview recordings were transcribed by a hired service during the following week, then coded and categorized (Glaser, 1998, p. 42). Glaser (1978) and Strauss and Corbin (1990, 1998) recommended that interview transcripts and notes be reviewed several times, allowing the emergence of a “core category” (Geiger & Turley, 2003) to establish central themes in the research data.

A period of four weeks was required to complete the first two interviews and perform the necessary coding and categorization. The remaining eight plant operators were interviewed and the tapes of those transactions were coded and categorized over the following 12 weeks. Interview questions focused on the emerging core category of interview responses. A total of 16 weeks was spent in collecting the field interviews, preparing transcriptions, coding and analyzing data.

Table 3.1 Timeline for Grounded Theory Study

Project Timeline

<table>
<thead>
<tr>
<th>20 Weeks</th>
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<tbody>
<tr>
<td>Interviewing, Transcribing, Coding &amp; Categorizing (16 weeks)</td>
</tr>
<tr>
<td>Assessment (2 weeks) — Analysis (2 weeks)</td>
</tr>
</tbody>
</table>

After the findings of the study were developed, a summary of the study and the
model it yielded were mailed to each of the participants for review and comment, which provided for member-checking (Geiger & Turley, 2003). Lincoln and Guba (1985) developed the member-checking technique to insure that research participants have the opportunity to confirm that their views have been accurately represented. Five days were allotted for receiving responses from the plant operators. The participants' responses to the summary are reported in Chapter V.
Chapter IV: Results

Introduction

The 10 plant operators readily agreed to participate in the research. Upon arrival at the each plant operator’s office, a release document was provided which stated the purpose of the project and the participant’s right to anonymity, confidentiality and withdrawal from the study at any time. Each plant operator was given the opportunity to ask questions about the research before they signed the release document. Each participant also completed a demographic information questionnaire.

Interviews lasted an average of one hour, and were conducted in a conversational tone. All interviews were conducted face-to-face in each treatment plant operator’s office. Field notes were taken after the interviews, recording impressions, reactions, and interview conditions. After the interview, a short summary was also dictated into a separate digital recorder maintained for this specific purpose. The notes were typed and entered into the qualitative software program Atlas ti 5.0 (Muhr, 2004) for analysis.

Demographics of Study Group

The study group demographics (Appendix A) revealed the similarity among participants. The study group was relatively homogeneous; the average age of the participants was 50 years, and ages ranged from 38 to 59 years. All participants in the study reported that they were white, and no participant indicated Hispanic or Latino heritage. The education of the group ranged from two participants with a high school education; five people with some college education but no degree; two participants held a
two-year degree; and one person held a Bachelor’s degree. The operators reported long
tenure at their plants, ranging from 10 to 35 years, with an average of 23 years of plant
operator experience. During the interviews, the operators revealed that none of them had
originally trained for the career of a wastewater plant operator. The majority of plant
operators had been employed soon after their wastewater treatment facility had opened in
the mid to late 1970's, as the nation’s wastewater infrastructure was created as a

Table 3.2 Study Group Demographics

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<th>Resp 4</th>
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Conduct of the Interviews and Questions

The interviews began by asking an operator to describe how his industry has
changed over his career. Interview questions became more focused as a comfort level was
established with the participant. In each case, the interviewer posed questions designed
to determine the effect of relational demographics on the development of trust between
plant operators and salespeople, and other factors that could influence the operator’s
bestowal of trust or distrust in a relationship. Questions commonly followed a theme
which invited the operator to offer views and perspectives from an impartial standpoint.

Other questions were designed to provide the participant with opportunities to reflect on the non-verbal cues and behaviors exhibited by salespeople that often determine the success or failure of any sales relationship from the first meeting (Interview Questionnaire, Appendix B).

Respondents were asked to answer 16 open-ended questions in the interviews:

1. In your opinion, how has your industry changed since you started?

2. How many salespeople visit your plant, on the average, every month?

3. When you meet a salesperson for the first time, what signals a positive visit to you?

4. When you meet a salesperson for the first time, what signals a negative visit to you?

5. What can a salesperson do, without saying anything, that can influence your attitude toward that salesperson?

6. Trust has been defined by some people as a willingness to take a risk, or become vulnerable to someone else, in the expectation that that person will act in your best interest. Do you have this kind of relationship with a salesperson who visits you? What kind of things has that person done to make you willing to take a risk on him or her?

7. Can you remember a time when you were first visited by a salesperson, and how you just KNEW that you could trust that salesperson? Why?

8. Can you remember a time when you were first visited by a salesperson, and you knew that you could NOT trust that salesperson? Why?
9. Do you feel that the way a salesperson looks can affect your decision to trust that salesperson or not? Why? Can you give an example?

10. Have you been approached by salespeople of a gender different than your own? Do you do business with salespeople who are of a different gender than your own? Why – or why not?

11. Have you been approached by salespeople of a different race than your own? Do you do business with salespeople who are of a different race than your own? Why – or why not?

12. Have you been approached by salespeople of a different age than your own? Do you do business with salespeople who are of an age different than your own? Why – or why not?

13. Distrust has been described by some people as a feeling that you can NOT take a risk, or become vulnerable to someone else. Do you have relationships with salespeople that you distrust? Can you tell me about one of these relationships? What sort of things led you to distrust the salesperson?

14. Some people think that it is possible to trust people in some ways, but distrust them in others. Can you think of a salesperson who you trust in some ways, but distrust in other ways?

15. Do you think that trust is something that must be earned over time? If so, how long does it take for a salesperson to earn your trust?

16. Have you ever had a situation with a salesperson who you trusted, but something happened, and then you distrusted that salesperson? Can you tell me what happened to cause this? Can you tell me how that relationship worked out?
The interview questions were presented in the same order with each interview. The researcher did not ask different questions in the interviews in order to improve the uniformity of the structure of the interviews, and the dependability of the research data to yield reliable codes in grounded theory analysis.

Data Analysis

The analysis of the data was conducted on the techniques recommended by Strauss and Corbin (1998), Marshall and Rossman (1995), Miles and Huberman (1994), Maykut and Morehouse (1994), and Glesne (1999). Interview recordings were again played after the preparation of the transcripts. Each interview recording was listened to twice, often resulting in the compilation of additional notes and memos. Each interview transcript was read twice to bring a closer distance to the interview event. Using the qualitative software program Atlas ti.5.0 (Muhr, 2004), the interviews were slowly processed, line-by-line, using the open coding process. Rennie, Phillips and Quartaro (1988) have described the steps of open coding as the identification of basic units of meaning that signal ideas and concepts; and the subsequent assignment of categories to the units that evolve into codes. In open coding, categories are developed as the interviews are reviewed. Searching for similarities and differences in the meaning units and categories met the constant comparative method of analysis described by Glaser and Strauss (1967), and Strauss and Corbin (1998).

Open coding was followed by the development of code hierarchies. There were 89 codes developed during the open coding phase of analysis. Using the power and speed of the Atlas ti. software, the 89 codes were sorted by frequency. Frequency counts can contribute to the identification of patterns in the data (Glesne, 1999). Grouping the codes
from the highest occurring frequency to the lowest occurring frequency allowed for the establishment of a basic hierarchy of analyses among the codes. Using a manual technique described by Maykut and Morehouse (1994), the frequency codes were transferred to 89 index cards. The cards were then sorted into general categories which shared a common theme or hinted at a subtle linkage. The cards were pasted on large sheets of paper, sometimes under new themes and categories which better described the relationship between codes.

The use of powerful, modern qualitative software enabled the rapid coding of the interview transcripts, and minimized time spent cutting and pasting from paper documents. Using the manual card process (Maykut & Morehouse, 1994) contributed to a firmer understanding of the evolving relationships and observations in the coding process: the analysis approach was a hybrid technique, using proven methodology and technology. During the analysis process, memos and notes were reviewed against the emerging categories, blending observations and thought. Accounting for the interview conditions, body language, and other dynamics (such as the presence of animal pets) described in memos and notes helped the categorization proceed in a free manner.

Glaser's (1978) admonition against the natural tendency of researchers to forge data relationships to fit preconceived notions was observed by the researcher throughout the analysis. The researcher reflected on how an outsider would view the interviews and emerging data, and found it challenging to shed assumptions and cognitions ingrained by a decade of personal industry experience. Objectivity in the analyses of the data was reinforced with an impartial review by two professors with recognized competency in grounded theory research.
The last phase of analysis was selective coding, which resulted in the formation of ten super codes, bringing to bear a general focus on the interrelationships in the study. This phase has been called a "thematic level" (Harry, Sturges & Klingner, 2005, p. 5), where a theory begins to take shape in the interrelationships between themes.

Charmaz (2006) has described the concept of theoretical saturation, which holds that data collection and analysis may cease when categories begin to be repeated in the study. Due in part to the strong homogeneity of study participants, the point of saturation was recognized after the fourth interview. The similarity of the participants lent additional strength to the study as aspects of the phenomenon began to clearly emerge, facilitating the development of categories and agreement on their properties (Rennie, Phillips & Qaurtaro, 1988, p. 142). Strauss and Corbin (1998) have stated that theoretical saturation proceeds in an incremental manner. An academic advisor with significant grounded theory research experience recommended the use of ten participants to ensure a valid saturation of the interview data. The final analysis of the transcripts, memos and notes reinforced the significance of data relationships and contributed to the development of several unique observations that will be described later in the paper.

Credibility of the Study

A grounded theorist develops an appreciation for the nuances, patterns and relationships in a study by immersion in the data. It is recognized that two researchers looking at the same collection of data will not produce the same resulting theory (Glaser & Strauss, 1967). The credibility of grounded theory research depends on the accurate interpretation of data, and becomes trustworthy when: the data is complete and accurate; the interpretation of the data reflects the participants' intentions; the emerging data codes
relate to the research topic; and, the emerging grounded theory becomes transferable to other settings than those specifically included in this study (Miles & Huberman, 1994; Van Vliet, 2008, p. 236). Dey (1993) stipulated that the validity of grounded theory study requires the firm application of grounded theory methods, and that the process used to arrive at findings is fully documented. Throughout the grounded theory process followed in this study, suggestions and recommendations were sought from faculty members with long experience in qualitative research and grounded theory, in addition to the regular and timely oversight of the dissertation committee.

In this study, the data were captured in interviews with wastewater plant operators who are in frequent contact with salespeople. The interviews were captured on digital recorders (an extra recorder was always used for back-up). During the conduct of the interviews, the researcher had the benefit of being able to use industry-specific jargon and technical terminology to clarify questions and probes. An effort was made to frame questions in an open-ended manner, and follow-up questions were presented to confirm the intended meanings of the plant operators' statements.

An initial effort was made to construct a coding scheme as each interview was reviewed in the Atlas ti 5.0 (Muhr, 2004) program. The trust literature guided the preparation of a set of codes that could capture the essence of operators' opinions. Drawing on the earlier work of trust scholars cited in the literature review, particularly Welch (2006); Doney and Cannon (1997); Lewicki, McAllister and Bies (1998); Mayer, Davis and Schoorman (1995); and Dwyer, Schurr and Oh (1987). As the grounded theory coding process continued it became apparent that the richness of the interviews required an expansion of the code set. At the completion of analyses a code scheme
emerged with a total of 89 factors. Sorting the codes through the linking facilities of Atlas t.i. 5.0 (Muhr, 2004), and conducting an additional manual sort on large chart paper and an index card dedicated to each of the codes allowed for the creation of code families and overarching themes.

Table 3.3 Final Coding Structure

1. Operator personality and preconceived views – propensity to trust or distrust
2. Operator’s bandwidth of acceptance – judgment of seller’s non-verbal attributes
   a. vehicle
   b. general considerations for attire
   c. specific considerations for female attire
   d. self-confidence (non-verbal behaviors)
3. Operator’s consideration of relational demographics
   a. age
   b. gender
   c. race
   d. race and gender
4. Operator’s assessment of seller’s personality
   a. likeability
   b. respect for plant operator’s profession
5. Operator’s perception of negative seller behaviors
   a. intrusive visits
   b. disregard for plant operator’s time
   c. bribes
6. Operator’s sense of perceived risk
7. Operator’s judgment of seller’s technical ability
8. Operator’s assessment of seller’s professionalism
   a. benevolence
   b. integrity
      (1) honesty
      (2) fairness
      (3) consistency and dependability
9. Operator’s consideration of share-values with seller
10. Operator’s consideration for the effect of time on seller relationships
The revised coding structure was presented to several academic advisors with experience in conducting grounded theory studies. Their suggestions and recommendations clarified the organization and content of the coding structure and the creation of the coding categories. Continuing this interactive review process, and returning to the written transcripts, memos, notes, and interview recordings provided a deeper understanding of the relational process that seemed to be used by all operators in selecting the salespeople who earned their trust. Early review of the data led the researcher to believe that relational demographics appeared to have little effect on the formation of trust and distrust among study participants. Discussion of the same data with advisors provided for opportunities to reframe and discuss the meaning of the data, and provided a deeper comprehension of the coding relationships, especially with regard to participants views of salespeople of different race and gender.

This chapter presents categorized responses of the study participants as they reflected on the interview questions. The themes and categories emerging from the grounded theory analysis are presented in a chronological manner, starting with the participants’ reflections from the first meeting with a new sales person, to descriptions of the stable, mature sales relationships that dominate most of the purchasing transactions in this market.

The codes and excerpts from the interviews are arranged in the sequence of events that occur when a buyer meets a salesperson, starting with the preconceived views held by operators before a salesperson makes an initial visit. The data concludes with interview excerpts describing the affect of shared values and the passage of time in longer, well-established sales relationships. The order in which data is presented does not
suggest an emphasis to the items, but represents the experiential flow described by plant operators when dealing with salespeople.

**Propensity to Trust or Distrust**

Conditioned by life experiences from early childhood through their careers, study participants often mentioned that they were generally wary of giving trust too quickly, too freely, or at all to visiting salespeople. Generalized attitudes toward salespeople are the result of years of positive and negative experiences, and study participants often described a propensity to stereotype salespeople as inherently distrustful, especially at the early stages of relationship development.

Shorty said:

There’s some level of distrust in us all. The level of distrust in us all depends on what our other senses tell us about the person that you’re sitting here talking to. The formal theory in the waste water field in general is that you never trust a chemical salesman. You must have heard that a thousand times.

Wesley said:

You know, and then a lot of times I’ll, you know, the office manager is pretty good about weeding out salesmen on the phone and stuff and you know he’s not in right now, who are you with, can I take a message...she knows how to weed them out and if they do show up I usually pawn them off on the maintenance guy that ends up ordering the chemicals and then let him deal with them.

**Operator’s Bandwidth of Acceptance: Judgment of Seller’s Non-verbal Attributes**

The plant operators uniformly stated that a series of observations are made on the first sales visit that encompass a set of non-verbal cues, including relational
demographics (age, gender, and race). The type of vehicle that a sales person drives, along with how a sales person is dressed weigh heavily on first impressions, moving the operator to formulate a "gut feeling" regarding the sales person, and what to expect during the imminent visit. There is a "bandwidth of acceptance" that salespeople should expect to pass through, as plant operators decide whether a type of car or mode of attire falls within the acceptable mental picture of the attributes of a trustworthy sales person.

When a salesperson makes the first visit to a wastewater treatment plant, he drives into the plant parking lot. In each of the ten plants visited, the operator has an office situated toward the front of an administrative office building, with a clear view of the parking lot. It is at this point, when the operator sees an unfamiliar vehicle coming into the lot that the evaluation process begins.

*Seller's vehicle.* Paul said, "When I see a guy pull in with a Volvo or Mercedes I'm thinking this guy probably makes a ton of money on these things [but] I don't expect to see an old wreck either."

Wesley commented, "You know, that can work against some salesmen too if they're driving a beat up jalopy in here that's got 300,000 miles on it..."

Wilbur said, "Yeah, the Ford Taurus is a great sales person's car, you know, there's little things that tell you that, you know, if you're driving a rather expensive car I'm probably thinking, well depending on what your sales job is..."

The cost of a vehicle, along with its age and appearance triggers operator judgments before the salesperson reaches the plant office. Vehicles that are expensive signal that the salesperson may be overcharging for his products. Vehicles that are old and worn signal that the salesperson may represent products which are of low value to the
operator. Based on the interviews, the acceptable bandwidth for a salesperson's vehicle would indicate a preference for a clean, moderately-priced, and well-maintained vehicle. Study participants also expressed negative feelings for salespeople who pulled into their parking lot, and for one reason or another, sat in their car for any length of time before coming into the plant. Sitting in the car signals that a salesperson is poorly organized and unprepared for the sales visit, and will likely waste the operator's time.

*Attire.* Wastewater plant operators spend most of their days drawing samples from water for laboratory testing, maintaining mechanical equipment, and repairing broken machinery. Running a plant requires a willingness to “get dirty,” and the standard uniform for an operator is a clean pair of jeans and a clean shirt – during the winter, the operators will usually wear a clean sweatshirt.

The way a salesperson dresses, particularly in the wastewater treatment plant market, weighs heavily on the operator’s perception of a salesperson before a word is exchanged. The population of wastewater plant operators interviewed in the study was remarkably homogeneous and their thoughts on this issue were often reflected with emotion. Counting the number of times that the words “attire” and “dress” appeared in the interviews, this single non-verbal attribute was mentioned by participants more than any other factor in determining the fitness of a salesperson for business with the plant. Upscale dress, with a coat and tie, shined shoes, or plainly expensive clothing was viewed as a departure from the reality of working in a wastewater plant. Brian describes the attire worn by a visiting technician who frequently visits his wastewater treatment plant:

Brian said:
about shined penny loafers. or whatever you’re talking about, its all that same attitude. You’ve been working in this industry for a number of years and you can tell just by a person’s dress and attitude of whether you want to deal with them or not and once in a great while they may surprise you, but not usually. Usually you are what you look and act like. Most of us look at it that way.

Gary said:

I guess maybe I feel easier talking to somebody as far as a salesman with somebody that comes dressed as yourself, not a suit and tie, and you know the pants and the spiffy shoes, and a Cadillac out front. You know, he was driving a Ford Taurus. It looked like the tires were going to fall off of it and he had a t-shirt on and a pair of jeans. I guess I feel more comfortable talking to somebody that looks like they might actually know what they’re talking about. Some people come through all dressed to kill with the gold chains, the rings, and the whole nine yards. That just doesn’t do anything for me.

Clifford said:

I think if a guy comes in here in a suit and tie, you don’t belong in a sewer plant, you know...go to a big corporation or something like that, but don’t come down here in a suit and tie. I mean, if you come in and, it doesn’t have to be jeans, you know, a pair of sport pants or something like that. But if he comes out here with a suit and tie, he is out-of-place down here.

The bandwidth of acceptance in attire for female salespeople was viewed differently by operators. Females were expected to dress conservatively when making sales visits to wastewater treatment plants. Low-cut blouses, short skirts, or other attire
was viewed as the allure of sex to gain favor with an operator, and was very negatively perceived. Shorty described the visit of a female salesperson who visited the plant in a low-cut dress; his perception was so negative as to even trigger an association with the despised “three piece suit.”

Shorty commented:

She’s been coming here for I don’t know maybe three times, and each time she’s come here she’s come in what I would consider inappropriate dress, you know that three piece suit type attitude. Well, in a female it’s the low cut, very low cut dress with high heels. So what ends up happening is she’s trying to sell something other than the chemical that she is [trying to sell] ... you know, it’s the attitude that I see, and so therefore, I am supposed to buy because of [the provocative attire] ... and I won’t do that...

Wesley shared his view on another female sales representative visiting the plant in what he considered inappropriate attire:

I think the one thing that bothers me is that they’ll send a girl here in a short skirt or something. You know, it’s a sewage treatment plant. This bubbly personality, you know, I didn’t ask you to come here and sell me this, and I’m not looking to buy this, and I think they sometimes find a girl to do their work as far as her looks, and that’s ... that turns me off basically because they’re just trying to use her looks to sell a product, you know, instead of a product selling itself: I don’t see a lot of female sales people in here, and then usually they’ll come with another male [who] knows a little bit more, and she’s just there to be the bubbly personality in a skirt, you know.
As in other venues where technical products are sold, employees spend careers dressed to meet the challenges of their workplace and are quick to negatively categorize a salesperson if they stray too far from the attire customary to the plant environment. The interviews indicated that a seller who dresses to reflect the mode of attire that is similar to the plant operator’s earns unspoken credibility and trustworthiness. The preference for functional, neat attire was also described by participants as a function of the reality of running a wastewater plant and the workplace safety rules and regulations that govern standards of attire, footwear and jewelry.

*Self-confidence (non-verbal).* Various cues are given to plant operators that a salesperson lacks the requisite self-confidence to effectively deal with the plant operator’s needs. After the salesperson parks his vehicle and makes his way into the plant, the operator is looking for a demonstration of purpose in non-verbal actions. The participants stated that the actions of a seller that would indicate timidity or unnatural politeness, such as knocking on open door jams, are perceived as a seller’s expression of low self-confidence, self-esteem, and low credibility.

Paul said:

I guess if a person comes in positive and sure of themselves, I mean some people come to that door shy as can be, knock on the door, and come in and then, you know, they’re looking through their notes that they got from the last salesman that had this route...I mean some people won’t walk through this door into the office. They’ll stand out there and kind of peak around and knock on the windows, oh look, if you came in, you know, walk into the office or knock on the door and say hi I’m so and so, are you John, you know. When they have some
confidence...when they’re going through their notes trying to figure out, “who am I looking for here,” and everything else tells me you’re not very organized at all.

Relational Demographics

The study participants were asked a series of questions regarding their contact and relationships with salespeople of different ages, gender and race. The population of wastewater treatment plant operators was highly similar in these same characteristics. The majority of the American wastewater treatment infrastructure was built in the several years following the passage of the Clean Water Act of 1972, and the study participants began their careers soon after the completion of plant construction.

Age. The average research participant in the study was 50 years of age. The ages ranged from 35 to 58 years. Discussions on the issue of age were generally met with neutral views, with most operators defaulting to a position that age was inconsequential in comparison to other attributes, such as the product being sold and the technical competence of a sales person, regardless of age.

Though some operators expressed that they would expect an older salesperson to have more experience and more useful knowledge to help in the resolution of plant problems, they stated that they were prepared to welcome salespeople of any age to their plants. The comments of Paul reflected the views expressed in most of the interviews: “I don’t want a salesperson that just fell off a turnip truck…I want them to know their product, which tells me they better have been there a couple of years. But I can say [that with] the purchasing and stuff that I’ve done, age hasn’t mattered.”

Gender. The research participants were all males. The writer’s decade of career experience in this industry has indicated the presence of very few females in the ranks of
the wastewater treatment profession. Plant operators expressed a generally respectful view of the few female salespeople who visited their plants. Several operators framed their descriptions of visiting female salespeople in terms of sisters or wives. When asked why there was a relatively low participation of female salespeople in the industry, operators frequently invoked the "yuck" factor of the wastewater treatment plant environment.

Clifford said:

I've got a girl that comes in here that sells plumbing fixtures, probably everything. She's been in the business 30 years. And she'll get right down, if you're having problems, if she has, comes in here and you're having a problem, she'll call back to Rochester and have them bring the parts down now and she'll get right in there and help you.

Shorty commented:

I have a salesperson come in, that shows up here three or four times a year and walks in whether I'm here or not, she'll spend 20 minutes with the dog and she's dressed appropriately. When she comes in she says 'hi, how are you, can I do anything for you,' and then she'll sit right down, and even if you say no, and you're not real busy, she'll sit down and she'll talk to you, and it could be about anything. She gets any business that I have to give her. Her prices are reasonable, they match everybody else's in the world so therefore it's not an issue of price, there's no shape or form in time where she has used her gender to accent the sale. She's just a good person.
(In the preceding interview, Shorty mentioned the interaction of the female salesperson with the plant’s dog. It is customary at wastewater treatment plants for the operator to keep a pet on the property. Running a wastewater treatment plant is a lonely occupation, and it is not unusual to find a dog or cat sleeping in the operator’s office.)

Paul added:

I still remember her, her name was Marie, she was from Iowa and she shared her personal story. Like I remember her, she grew up on a pig farm. I don’t know how we got into pigs one day, but we did, and she grew up on one and she just had some interesting stories and shared some stuff, but she had a personality. She didn’t try to sell it on well, she was a mid 20’s woman or something like that, but was definitely your girl next door...and just when she came in here she knew the product and was also very personable, she wasn’t just a flame-bomb [bombshell] or whatever. but there are few [females], I have to admit, I don’t think you see very many [females].

Perry said:

This is a male-dominated field, but you now, my upbringing was one of respect [for females]. I might tend to give a male guy the bum’s rush out of here if I am busy, but I might give her [a female salesperson] a little bit of extra time and consideration.

Race. The wastewater plant operators in the research population all reported on the demographic questionnaire that they were white. The researcher has visited several hundred plants in his career, and has found several African-Americans employed as plant operators in Mississippi and Louisiana. General industry information has been sought
regarding the total number of African-Americans, or other racial minorities who serve as wastewater plant operators, but such information is unavailable from industry associations, state government, or the federal government.

The appearance of a salesperson of a race different than the plant operator was reported as a rare career event throughout the interviews. Most operators reported no contact with a salesperson of another race during their careers.

The few operators who did report contact with salespeople of other races reflected at length and commented thoughtfully on the issue of racial diversity among salespeople and how racial difference affected their estimation of trustworthiness. A sample of those reflections follows.

Shorty said:

Race has no effect around here on me. I’ve never had a race issue. If I need something and they’re what I consider good people, would I consider all your other categories here, then yeah its no problem. Some are very successful, some are not successful, and there’s everything in between. I don’t think this industry pays a tremendous amount of attention to race. This industry gets a big chuckle out of female gender coming into a waste water treatment plant, but race does it have an effect, no. I don’t think it’s a big issue. In fact I don’t think its any issue. So no, I don’t think it has any [effect on trust].

The effect of different races was reflected in the comments of several plant operators who commented that though the race of the salesperson presented no barrier, though differences in English language proficiency levels were negatively viewed against salespeople of different races.
Perry said:

I’ve had African Americans, I’ve had Pakistanis, I’ve had Indian
[salespeople]...the only thing that irritates me about it is, and one that comes to
mind is there was an Indian, from India, that can’t communicate well. I had a
hard time understanding him and that irritated me. If you’re trying to sell me
something I should be able to understand you. You know, that irritates me
because I feel awkward having to ask him to repeat himself all the time, because
I’m not catching what his saying. I feel that he’s making me feel awkward
because I got to keep asking him to repeat himself.

Gary commented:

Not to sound like a bigot or something, but one of the problems I have is
understanding them [salespeople of different races]. I was just going to say, if
you can speak English, I don’t care what you look like. I went through startup
with a brand new plant and they sent an ethnic person out and I actually called the
company and said you need to send somebody I can understand, because this guy
is trying to tell me how to start the plant and run it and other than saying good
morning, I have no idea what he’s saying to me for the other 8 hours. [The
salesperson was Chinese.]

Though physical appearance in terms of skin color seemed to be of no
concern to operators, the English-speaking ability of salespeople of different races
was mentioned in several interviews. The possibility that speech, as a facet of
relational demographics, could affect buyer trust will be discussed in Chapter 5.
**Race and Gender**

Though plant operators in the wastewater industry are predominantly male, female salespeople (suitably attired for visiting a wastewater plant) were expected to meet the attire bandwidth expectations for male salespeople. Given the fact that the research population consisted of males, the appearance of a scantily-dressed female salesperson is perceived as a cheap and transparent ploy to develop business. The research participants recounted few instances of dealing with female sales representatives, and when they did recount such a relationship, the female salesperson was White. When asked to offer a possible explanation for the absence of people of color among salespeople operating in the wastewater industry, participants were at a loss for a possible explanation.

**Personality**

The effect of verbal behaviors on the judgment of salesperson trustworthiness was mentioned frequently in all interviews. Displaying a sense of humor with a self-deprecating manner was mentioned as a positive attribute by many plant operators. Salespeople who expressed interest in the plant and the operator’s problems were viewed positively, but the desire to avoid pushy, aggressive salespeople rang through most of the interview sessions with emotion. Having a pushy demeanor was described by plant operators as a salesperson with an offensive “winner takes all” mentality, where the salesperson is bent on securing a sale, no matter what, on the very first sales visit. The buyers in the study framed the pushy salesperson as an adversary, almost as a mortal enemy.

Shorty said:
If the salesperson comes in with a laid back attitude that they just want to show me what they have and be willing to walk away and not make a sale the first day, that’s a positive attitude. And the opposite, of course, is if they come in really, really pushy and [use] high pressure sales tactics. That’s usually their last time in here. If they are high-pressure salespeople, I say, okay, this is a high-pressure salesperson and unless I drastically need what they are selling, I really don’t have time for it. I don’t do well with a high pressure salesperson – the first thing I do is turn them off.

Gary recounted the visit of one particularly annoying manufacturer’s representative in which the plant staff ran to hiding places rather than endure another round of aggressive sales tactics.

He [the salesperson] is just obnoxious and wouldn’t go away, you know what I mean. I would tell him I didn’t need anything, he’d say, ‘well, you’ve got stuff on the shelves, you must be buying it from some place.’ He would come and [we would] hide and he would walk around the whole place until he found us. And that’s how he caught me – I was hiding out in the garage, and he actually saw me. He opened up the door and starts yelling, ‘you’re hiding from me!’ So now what do I do - I’m caught, busted. I’ve got to come out of the corner and go back to what I was doing.

Shorty mentioned a single incident with a pushy, aggressive sales person occurring just after he began working at his plant.

I have several [salespeople] in my mind over the years. The first one I ran into which was 25 years ago and obviously he must have made a big impression
because I can still remember. He came in and demanded that I buy everything from him because the local village was buying it and if I didn’t buy it he would go before the board members. That was the opening visit. Immediately after 5 minutes of this, he was shown the door and told never to enter the door again, ever, and to feel free to contact the board. It was very clear that was probably the worst case that I’ve ever seen.

*Likeability*

During most of the interviews, operators described a stereotype of most salespeople as manipulative and untrustworthy. A new salesperson arriving at the plant is viewed through a biased lens – salespeople bent on making a sale on that first visit, by any means necessary, create a self-fulfilling prophecy in the eyes of the buyer as shortsighted, offensive, untrustworthy people. This was confirmed by previous work by scholars in the literature review relative to the formation of distrust. The participants in this study liked salespeople who would start the initial sales visit with a courteous introduction and demonstrate an awareness of the plant property and equipment. Asking questions and avoiding high-pressure sales tactics was viewed as a promising start to a longer relationship.

*Respect for Plant Operator’s Profession*

Running a wastewater treatment plant includes familiarity with a wide variety of mechanical equipment, including pumps, valves and filters. Every plant operator in the study was licensed by the State of New York. Each had passed a formal written examination designed to assess knowledge in microbiology, chemistry, and pathology. Knowledge of common equipment and treatment processes, along with applicable
environmental laws and regulations, was also required to pass the license exams. All states have continuing education requirements which stipulate that operators must attend minimum hours of additional training during certification interval periods in order to maintain a valid operator’s license. And, in smaller communities, many operators will have dual licenses which allow them to operate not only the wastewater plant, but also the municipality’s drinking water plant.

Wastewater plants operate in relative obscurity, with an unfortunate stigma associated with odor, excrement, and general unpleasantness. Plant operators are quick to sense salespeople who are disrespectful or ignorant of the knowledge required to hold a plant operator’s license, or the endless work involved in running a clean, efficient, odor-free treatment plant. Shorty described how he felt he was viewed, as a plant operator, by some visiting salespeople: “...it is very important for us to be recognized for what we do and what we have to do, and some representatives, some sales people see that and some don’t. Those that don’t see that and treat us like any other customer down the line - their companies tend to not last as long, and that's a big issue with wastewater operators.”

William said:

...first of all, no one knows this plant even exists back here. As long as the toilet flushes, that’s all they [the public] thinks about, then they actually see what we do down there and see the size of it, and how we change the water, they are pretty amazed by it.

Shorty said:

[The plant operator] has to take much more responsibility than he ever did before.

He has to have five times the training than he used to have, and everything now
that [used to be considered a] mistake, as far as waste water treatment operators are concerned, is now considered a felony as far as the government is concerned, where it never used to be. So they've now made us more responsible than, let's say, a doctor. A doctor does not need to get recertified. We have to, in the case of water [drinking water] operators, it is every three years, in the case of wastewater operators it is every five years. We have to take recertification training, so we must stay on top of things - a doctor doesn't. If a doctor makes a mistake in an operation, the maximum that will happen is that he will get sued and he'll settle it with his insurance. If we make a mistake, we go to jail and, oh, by the way, we lose our profession totally.

*Negative Seller Behaviors*

*Intrusive visits.* The observance of negative salesperson non-verbal behaviors perceived as negative by the operators included entering the plant without permission and conducting an inspection or inventory of plant supplies. Several operators stated that they had seen an unfamiliar vehicle parked outside their office, and when entering the plant found a strange salesperson, often with his boss, conducting an inventory of supplies with the goal of identifying an opportunity to secure an order, and an immediate sale.

Mike said, "They will come in and go through your cupboards and say, you are out of this, this, and this...and we had one that used to do that. But that doesn't fly, not with me anyway."

Henry said, "...obviously, I'm not always in the building. I come in and see a car parked out here and they [the salespeople] are going through our inventory. I don't like that. They should come up and find somebody first."
Disregard for plant operator's time. Plant operators are often busy dealing with the breakdown or repair of equipment; if the operator is obviously busy, a perceptive salesperson will respect the operator’s situation and plan to visit the plant again. Brian described his positive view of salespeople who recognized the value of a plant operator’s time: “[if] they keep it kind of short, the initial visit, that’s good. If they try to stay too long, then it begins to interfere.”

Bribes. An extremely negative verbal behavior committed by salespeople was the offer of an enticement or bribe for business. Wastewater treatment plant operators are public employees and fall under municipal regulations and state laws forbidding the acceptance of gifts. Attempts by salespeople to win orders through bribery were viewed as unethical, dishonest, and illegal. More than any other negative behavior, offering a bribe for business is the fastest way to permanently end any hope of establishing a sales relationship with a plant operator.

William said:

Just that instinct when you meet somebody and your hairs back up. It’s like a dog, the hair on the back of your neck stands up and you just say there’s something about this person and you know. The first thing in distrust is the bribe. You [the salesperson] walk in the door carrying gifts before I even know where you’re from, you are bribing me, and again, what trust do I have in you then. You’re trying to start this relationship off with this, basically with distrust. I mean you are inferring that my morality is low. 

Perceived risk. In the initial evaluation of a sales person, surface-level attributes are used to assess the basic character and potential for an actual business relationship. As
the buyer-salesperson relationship begins to slowly grow from awareness to serious consideration for business, the buyer continues to judge and assess the risk involved in placing any level of trust or confidence in a salesperson. Having passed all of the initial cursory hurdles, buyers continue to look for deeper signs that a salesperson can be trusted with their plant's business.

Wesley said:

Well basically before I buy anything I usually have them test it or have brought the sample. You know we use some older neutralizers here, not an older masking, you know, they taught us this in operator's school, a masking does nothing more than, it's not fixing the problem, its changing the smell of it. You know, so if someone says well I can mask it, I don't want to mask it, I want to eliminate it, you know, and then, you know ... some salesman come in and they're educated in neutralizing odors and explain to me how and then they'll give me a sample to actually try to make sure it works. and you know, if it works then I'll go through the channels of getting it approved.

**Technical Ability**

In the wastewater treatment market, there is no room for technically inept salespeople. The buyers in this study had an average of 20 years career experience, and were highly trained in their jobs. Operating a wastewater treatment plant, treating thousands of gallons of water per minute, requires a high degree of technical competency. Hundreds of mechanical products, including pumps, valves and filters must be continuously maintained by the operator to insure that the plant is running as it was designed.
Buyers quickly determine the technical competency of salespeople, sometimes by informal testing. Salespeople must pass through these assessments of technical ability and knowledge to gain the buyer’s confidence as an able business partner.

Shorty commented:

If a young salesperson is coming in to sell me a pump, for instance, or an aeration system...we’ll pick an aeration system...I need to verify that he knows what he is talking about. So I will ask him a series of questions on a system. I will keep asking questions until he can get me the answer.

An assessment of technical ability also may occur as a salesperson demonstrates his ability to quickly determine the cause of an operating problem, analyze various alternatives, and arrive at a meaningful conclusion.

Gary said:

And we were out in the field, pulled back in the driveway and as we drive by, you know, I made the comment oh there’s a salesman here, and I don’t know who he is or what he’s selling. So we came in and he was talking with the lab technician... introduced himself, seemed like a heck of a nice guy. Told us that Sam had given him a rundown on where we were with our polymer [a complicated chemical that requires constant attention] situation. The salesman goes out to his car. He had all of his test kits with him. He came in and found one that worked for us and basically saved us half of what we were purebasing that same product for. The guy opens up a test kit with, you know, not exaggerating, with probably 100 vials of different polymer samples in there. We think, where does he even know where to start, you know, what happens if he
grabs the 99th one, is he going to try every single one? He said he knows by looking at our sludge, the color of our sludge, the texture, for where to start, and the fourth product he tried actually worked.

Salespeople hoping to establish a successful, enduring business relationship must demonstrate their knowledge of products and the wastewater industry. Product knowledge must be complemented with a similar degree of industry knowledge. As in the example where the salesman had to quickly determine where to start among a selection of 100 different polymers, industry experience and knowledge, the buyer becomes aware of the salesperson’s ability to bring a certain expertise to bear on the plant’s issues and problems.

Buyers also mentioned the necessity of timely follow-up after the sales visit as a component of technical competence. Salespeople establish technical competency and a sense of trustworthy benevolence when they pay attention to the customer after a product has been put into service, return to a plant to ensure proper product operation, or help an operator adjust new, unfamiliar equipment.

Sales Professionalism

Wastewater plant operators take pride in their profession. Though many plants are located far from the public eye, property and equipment is usually maintained in an extremely clean and orderly manner. Lawns are manicured and weeds are meticulously controlled due to the abundance of nutrients that find their way into the soil, floating through the air and settling into soils as a result of treatment processes that create mists and aerosols from wastewater. Plant offices and laboratories are scrubbed and polished, and a part of each operator’s budget is spent keeping equipment surfaces painted.
polished and free of rust. The operators interviewed in this study considered themselves professionals and expected similar high standards of professionalism in the salespeople who hoped to earn plant business. The lens through which professionalism was judged contained the elements of benevolence, ability and integrity.

_Benevolence_. The study participants frequently described how the benevolent actions of a seller could establish a feeling of trustworthiness, and engender an overall atmosphere of goodwill. Brian and Henry described relationships where a salesperson displayed the ability to perform the “can-do” and “will-do” benevolent dimensions of trustworthiness.

Brian said:

I don’t remember how we initially met but he [the salesperson] represents a small control company, they do calibrations and things like that. I actually approached him about doing that [calibrating equipment] and he came out and did it. He has always done a good job, always makes sure things are right. He’s always been above board. Because of the good work that he’s done, when I have something that I need or warrants questioning, I’ll ask him and he’ll tell me whether it is something that he does or he knows someone that handles that kind of thing. He’s real good about that kind of thing.

Henry added:

If we need replacement parts they’ve got to be made and the prices can be enormous. We have a couple of...sales people who will go the extra mile and look for things, or they’ll get in touch with somebody who maybe they normally wouldn’t deal with to give us some advice. That is big for us. We are a small
operation. I don't have hours to just sit here and make those calls and try to track down things.

When Gary, Wesley and Perry recounted instances where a salesperson had encapsulated their interests, acted benevolently, internalizing buyer needs as their very own.

Gary said:

[The salesperson] was willing to give us a 5 gallon sample to try for free. He came back a week later, to actually run the product through our machine and make sure it worked, and we ended up basically switching purchases to him, for price and follow-up. He got somebody to come right out here, made the call and came back to see if the product was going to work. He sent us out a trial product sized to make sure that it would work.

Wesley added:

When you have a salesperson that goes out of his way to service the client, not just to sell a product, service the client, that's usually the person you can trust. I've got sales people that will drive all the way... in our business its infrastructure, its repair and if you don't have something in stock sometimes you got to wait until the next day, or wait days to get something. We have salespeople who will drive to another facility and go get that item for you ... those types of things, or make sure that you have an item that you needed right away or go out of their way for something that was necessary...

Perry said:
I'm thinking of one [salesperson] right now that really went out of his way for me on a few cases. We were in an emergency situation; we had a chain bust here, and he [the salesperson] was on vacation. He came in from vacation to get me the parts I needed.

As all interview participants were able to recount stories regarding the benevolence of a few trusted salespeople, they also were eager to share stories regarding salespeople whom they distrusted on the basis of a single incident where the operator felt trust had been abused. The following story describes a situation where trust had been broken by the deceitful actions of an experienced salesperson with a newly-assigned plant operator.

Gary said:

When I started here as superintendent he [the salesperson] showed up. I had only been superintendent for a couple of weeks, John [a long-term plant employee] was on vacation. I did not exactly know some of the chemicals. I trusted that the salesperson knew what we were using. He sold me, or took me for $1,000 basically on something that we didn't use and didn't need. He told me we had to have it right away because we were out of that chemical. I ordered on the basis of trusting him. He got me for $1,000 and I called him on the carpet for it. He apologized up and down and said he didn't know, and wanted to give me $1,000 credit for that purchase and I told him to pack it and get out. I didn't care if he gave me credit or not.

Integrity

Honesty: Integrity was viewed by operators as a crucial ingredient in the
formation of trust. Foregoing the many opportunities to take advantage of a plant operator through dishonest behavior, which would include misrepresenting the capabilities of a product in the hope of a quick sale, is elemental to the reduction of the buyer’s sense of risk in the relationship. Salespeople who succeed in making a sale by overstating the capabilities of a product enjoy a very brief period of prosperity until the plant operator realizes that the product falls short of promised expectations. Many plant operators recalled incidents when a salesperson promised much more than he was proven able to deliver. One operator described a situation involving the purchase of a product that when delivered, would not even fit the space into which it was to be installed, much less operate properly.

Shorty said:

The nature of this event was over a pump station hatch and it was where [the salesperson] went out and took the measurements [to which the hatch must be manufactured in order to fit into place] with me and they sent the wrong hatch. Ane he would not take it back, and obviously that did not work well, and we got into quite the argument. I said I am not paying for it, it does not fit – you’re the one who measured it with me, you were right there. It is not my fault; I am not paying. And they [the salesperson’s company] kept sending bills and I kept saying no, and finally they had one of their other representatives come and pick it up. I said, guess what, it’s yours – don’t ever come back and try to sell me another one.

Gary commented, “I can think of a number of different companies that misrepresented their product, saying it will do this, and it ended up doing nothing.”
Wesley said:

...selling us the best product in the world that has been nothing but a headache, and then you talk with other plant operators and they have gone through the same thing. We drove 3 hours to visit another plant to see a new product in service. This little mini thing has only been there for three months....and the old operator that was there who purchased this thing has had nothing but trouble from day one.

*Fairness.* Interview participants defined fairness through a lens that critically analyzed the fairness of salesperson billing. Presenting invoices for work that was not done, or at a price that was far beyond what the operator considered remotely reasonable was viewed as dishonest and unfair. These events were usually described as fairly acrimonious, resulting in permanent distrust of the salesperson involved in each of the following instances.

Perry said:

One of the things I am big on is that if I tell you I am going to do something for you, I will do it. If you tell me you’re going to do something, I am going to hold you to it. If you don’t [do as promised], then I don’t want to have anything to do with you. I dealt with a person at one of our satellite stations who had done some work for us. When his bill came in for the work that was done it was beyond exorbitant. The scope of the work that we had originally discussed was not what was involved in the work. It was a padded bill. I make sure that all the bills come through me. I called him on the carpet for it. I said that this is not what we agreed to and I just won’t deal with you anymore.

Henry added:
Yeah, getting that price and they tell me, “I’m going to take care of this for you,” and then, all of a sudden, getting a bill for the work. They took care of this “extra,” and then a month later we receive a bill for something [that was expected to be without charge].

Gary recounted a story describing a situation where a salesperson demonstrated complete transparency and honesty in pricing a product used by the plant.

He knew what we were paying before he even quoted us a price. Another plant employee had told him [the salesperson] what we were paying for that product and the salesperson could have made up a totally different amount. He could have came in at three-quarters of the price and I would have still bought it from him. But, you know, he opened up and gave us a price off of his price sheet. So you have to say the guy [the salesperson] was honest right there. He could have gouged us another $200 a drum, and we would have been none the wiser, and there still would have been a cost savings. I am sure he was getting a commission, so it cost him a few bucks to be honest. I would say that I trust him right off the bat just knowing what he had done right there.

*Consistency and dependability.* Interview participants expressed their positive regard for salespeople who visited their facilities on a regular, consistent basis. Plant operators frequently mentioned that the regularity of salesperson visits, regardless of their immediate need for a product or service, engendered the relational history between buyer and salesperson. Shorty described the benefit of regular visits from salespeople to his wastewater treatment plant:
...some salespeople, depending on what they are selling, if they are good and on
the way somewhere, they will stop in and say, "hey, I’m here, do you need
anything? If you don’t, that’s fine and I’ll see you later. I’ll see you in another
three months, six months, or whenever," and they continue. Sooner or later, when
I need something, I will buy it from him.

Value-Sharing

Plant operators discussed their positive feelings for the few salespeople who
shared details of their personal lives. Finding a common bond as a result of discussing
familial relations or other non-work related issues was viewed as important. Similarity in
values enabled buyers and sellers to see the same issue from compatible viewpoints,
develop complementary solutions to a problem, and approach the same problem in much
the same manner. Similarity between buyer and seller was a transcendant issue that ran
through the interviews and resulting themes.

Brian described the primacy of shared values in the formation of trust with a
particular salesperson:

I probably know more about this guy than some of the people I work with, but
that is because he was not afraid to share. He is working on stuff and we’re
talking and he is telling me what is going on with his kids and, I mean a couple of
times, he would come in all bummed out about something that was going on with
his daughter and, you know, I would listen to him and we would commiserate. I
mean, he’s sharing with you a part of his life...I think this builds trust.

Paul spoke of a relationship with a salesperson he dealt with at arms-length for
over 20 years. Though Paul knew the salesperson well from over two decades of contact.
he regarded him as a nuisance. On the salesperson’s last visit with Paul, he announced his retirement, and by sharing some details of his personal life, finally found the bond with Paul that he had been seeking for his entire career:

….the day he [the salesperson] told me he was retiring he suddenly became a person human to me because he acted differently. He was not here to sell, and in all actuality, it was funny what happened that day. He came up and said that he wasn’t here to sell anything, but he wanted to thank me for the business we gave him. I said, “well, you’re welcome.” He said that it looked like I was in a hurry, and I said that I was leaving the next day on vacation to Hawaii. He said that he had gone to Hawaii a year or two ago with his wife, and he said he thought about a few places and he said there are some places you really want to go in Hawaii. He became human rather than just a guy pushing a product on the very last day I ever met him. But it’s funny, here’s the last time I will ever see this guy and now I think a whole lot more of him than I ever did the years before that. If he had shared a story like that before, I think it would have been….he should have just put the product aside. I guess that is probably where I get with a lot of people. I feel if we can share a personal story back and forth, I think that the trust level goes so much higher.

Gary shared a similar story of another salesperson who had visited his plant for many years. The salesperson takes time to talk about his family life, forging a relational dimension beyond mere sales. Relationship-building is based on the sharing and recognition of similar values.
He [the salesperson] will stop and show you pictures of his grandkids and we talk with him and it's more of a friend relationship than a sales relationship. He is a little pricey, but he has got a lot of the stuff that you can't get, fasteners and different things like that. I would not ever say that he would take advantage of us down here. There are other salesmen that I would not trust to shut the door.

_Time Aspect of Trust_

During the interviews the plant operators often stated that the few salespeople they trusted had enjoyed a long relationship – often as long as the plant operator's career. When asked specifically about the amount of time required to build a firm bond of trust with a salesperson, operators were reluctant to identify a specific time period that was necessary to establish trust. But all operators were quick to state that trust was only granted to a precious few salespeople on the basis of long, favorable repeated contact. Perry described the affect of time in his relationships with salespeople:

I want to be treated ... I want to treat people the way I want to be treated and I think I'm a pretty trustworthy person. I will give you that opportunity, but the more I work with people the more I trust them and I get to the point where I'll trust you with my life because you earned over a period of time I guess that level of trust, there's different levels of trust, I guess that is what I'm saying.

Summary of Findings

The relational demographics of the study participants were similar in terms of age, race and gender. The study was designed to measure the effect of relational demographics on the development of trust [among buyers] in the wastewater treatment industry. The buyers interviewed were White, middle-aged and male. Though they
maintained a willingness to receive any salespeople without bias to race, age or gender, comments indicated a preference for females who minimized their femininity, and discomfort with races demonstrating poor English-speaking skills. When pressed to give their candid views of how relational demographics could possibly affect trust in a salesperson, thoughts were occasionally expressed describing the affect of racial and gender bias in the time frame when the operators found their initial employment in the industry. Much more important to these buyers, in terms of their views of salespeople, was the issue of similarity in attire. The principles of dressing for success as a salesperson in the wastewater industry, however, would indicate that any such signals of elitism should he camouflaged with care. The appearance of a salesperson in business-formal attire, particularly a three-piece suit, should be avoided in favor of neat, functional attire that reflects the appearance of a plant operator.

This chapter presented the findings of how wastewater treatment plant operators perceived salespeople on the basis of relational demographics and other factors which influenced the development of an affinity or dislike for a salesperson. Plant operators were interviewed and their thoughts analyzed in the context of grounded theory practice, allowing for the development of codes, super-codes, themes and categories. A chronology of categorical buyer judgments emerged from the analyses of the interviews. Avoidance of negatively-perceived behaviors, including disrespect for the operator’s profession, offering bribes, or unauthorized intrusive plant visits could quickly end any hope of doing sales business at a wastewater treatment plant.

The importance of a salesperson’s technical ability, integrity and benevolence was evident in every interview. The effect of the passage of time was also noted as an
important factor in the development of deep trust as were shared values. The next chapter will provide a discussion of the findings to include implications of findings, limitations of the study, recommendations for further research and a final summary of the study.
Chapter V: Discussion

Introduction

The purpose of this study was to describe the effect of relational demographics on buyer trust based on intensive interviews with ten wastewater treatment plant managers. This chapter begins with an implication of the findings, subsequently followed by the limitations of the study. To conclude this chapter, recommendations for future research and a summary of the entire dissertation is presented.

Implications of Findings

Findings associated with this study suggest a theory of how relational demographics affect trust between buyers and sellers in ten wastewater plants in north central New York State.

Theoretical implications. The study addressed a void in existing research by examining the development of trust among buyers in a technical market. Other studies on trust between buyers and sellers have been conducted in other markets, including the banking industry (Benamati, Serva & Fuller, 2006), and insurance sales (Evans, 1963). The study may also have bridged a gap in existing research in the conduct of grounded theory research in a technical, business-to-business market, and the influence of relational demographics on buyer trust. Interviews with research participants explored the processes used by wastewater treatment plant operators to assess the trustworthiness of industry salespeople.
The study reflected the work of Liao, Joshi and Chaung (2004), with a "measurement of the effect of surface-level traits (i.e., gender, ethnicity, and age) and "deep-level traits (i.e., personality)" (p. 971) on trust. The study participants claimed to waive the biases of surface-level relational demographics, but maintained an unequivocal intolerance of salespeople who visited the plant in attire viewed as unsuitable for working in a wastewater treatment plant. Throughout a sales visit, from the time the salesperson’s vehicle is parked, until the salesperson leaves, deep-level personality and professional attributes were judged for the probability of trustworthiness and a long-term business fit.

Pitts, Jarry, Wilkins and Pandey (2006) observed that many of the theoretical considerations of diversity are grounded in social identification and categorization, and similarity-attraction theories, which dovetails with the strong similarity preferences stated by study participants for salespeople who reflected what they defined as norms in dress and behaviors. Chatman and Spataro (2005) confirmed the link between surface-level relational demography and cooperation among coworkers in the financial service industry.

Pitts (2006) observed that "very few scholars have attempted to establish theoretical frameworks through which to understand the impact of diversity in public sector organizations (p. 246)." The study measured the effect of relational demographics among public employees who operate wastewater treatment plants, and may provide a theoretical basis to launch further research in other operations managed by governments.

Palmatier (2008) asked, "What other relationship attributes or mechanisms, in addition to relationship quality (trust and/or commitment), can account for relationship
marketing's effect on performance? (p. 76).” The study revealed that a multitude of factors are scrutinized in the formation of a sales relationship with a buyer, including the perceived strength and enthusiasm of a handshake, the salesperson’s selection of an appropriate vehicle, and the avoidance of a multitude of negatively-perceived behaviors, such as bribery.

The study presented some new dimensions that might bear consideration in the context of Welch’s (2006) “Coaxial cable model of trust-distrust with zone of approval” (Figure 4). Welch described 10 factors that influenced the development of trust and distrust in a relationship. The intimacy suggested by Welch was reflected in the importance of shared values between buyers and sellers. The study revealed, however, that among the research participants not all factors are equal in sales relationships, suggesting that the factors surrounding the core of trust and distrust may be of varying degrees of importance. The buyer’s consideration of similarity in the study, particularly in the realm of seller’s attire, far outweighed concerns for emotion and intimacy with a salesperson.

In the light of the study, Welch’s (2006) cable model might expand to include additional factors on the development of trust and distrust, such as acceptable perceived risk, benevolence, consistency, and the avoidance of negative, pushy sales behaviors. Depending on the particular industry under study, Welch’s model could be adaptable to expand or contract in relation to the proclivities of buyers in other technical markets.

The effect of similarity on buyer trust was evident in the study and may also be reflected in the notion of conformity theory (Bernheim, 1994). With buyers demanding similarity in attire as a condition of trustworthiness, sellers will conform to “a single,
homogenous standard of behavior, despite underlying preferences. They are willing to conform because they recognize that even small departures from the social norm will seriously impair their status (Bernheim, p.841).” Conformity theory offers a possible explanation and an avenue for further research that may account for the development of distinct norms in the multiple subcultures characterizing small, specialized industries such as wastewater treatment. White, middle-aged, males would presumably find it easier to match the similarity expectations of buyers than it would be for a salesperson of a different race and gender. This similarity effect was also reflected in the work of Adams, Bryant and Webb (2001), as they studied the linkage of trust to membership in certain social categories.

Similarity-attraction theory (Bryne, 1971) posits that people are drawn to others who mirror various attributes. Amodio and Showers (2005) observed that “liking has been associated with similarity along a variety of dimensions, including attitudes, personality traits. [and] physical characteristics (p. 818). Interviewees stated a preference for salespeople who exhibited similarity in values, appearance, and exuded a likeable personality.

Though the American workforce is one of the most racially and gender diverse in the world, the lack of diversity in middle and senior management jobs “may be related to group identity factors such as gender and race (Cox & Smolinsky, 1994.) It became apparent early in the interviews with participants that salespeople serving the wastewater treatment industry closely mirrored the demographics of the buyers. Prevailing stereotypes of older workers, women, and racial minorities are often viewed inconsistently with the perceived requirements of managerial positions than the
stereotypes of White, male, middle-class workers (Goldman, Gutek, Stein & Lewis, 2006). Based on similarity-attraction (Bryne, 1971), and the all-male population of interview participants, it was expected there would be a clear preference for male salespeople in the wastewater industry. This inference could be made from the study in the buyers' preferences for females who minimized their femininity, dressing in work clothes and confining conversation to technical matters or issues (e.g., pig-farming) normally considered in the male domain.

Interview participants struggled to account for the poor representation of other races in the ranks of wastewater plant operators or the sellers operating in the wastewater treatment industry. Comer, Nichols and Vermillion (1998) wrote about the employment of racial minorities in the sales profession. Their findings indicated that while several minorities had experienced employment growth as salespeople, the number of African-Americans starting sales careers was relatively small. The authors offered an explanation suggesting that social determinations may work against the employment of non-traditional salespeople, including (1) stereotyping by buyers (2) devaluation (3) tokenism by employers (4) communication style compatibility with buyers (5) and negative perceptions of selling careers. The authors also described the typical barriers confronted by non-traditional salespeople, including (1) gaining employment, (2) lack of corporate networking, (3) customer resistance, (4) poor upward mobility, and (5) comparatively poor supervisory support. The interviews yielded some thoughts echoing Comer, et al., in particular regard to devaluation based on race and English-speaking skill, and female attire. Participants were quick to deny the overt effect of racism in any of their industry dealings, though this could have been due to cognitions in response to the negative
connotation of racism. Participants were quite open in describing their expectation that some races would present significant problems in their ability to communicate clearly in the English language. Lucas (1996) offered that the absence of African-Americans in the selling professions is the result of racism that remains operative in business-to-business and other industrial companies, combined with the general low perception of sales jobs by the African-American community.

Goldman, Gutek, Stein and Lewis (2006) stated: “The fact that high-status managerial and professional jobs are predominantly held by Whites, men and middle-aged – broadly defined- workers contributes to the problem because the type of people who are common in any particular job are viewed as the most appropriate people to hold that job (p.796).” Mueller, Finley, Iverson and Price (1999) follow in their observation that the homogeneity of a group has been found to produce positive feelings by group members sharing homogeneous characteristics. All interviewees voiced a clear preference for salespeople with similarity in values, appearance and general behavior. The interviewees were middle-aged, White males. With the few exceptions of middle-aged, White females, they enjoyed long-standing, trusting relationships with salespeople who were middle-aged White males.

Kochan, Bezrukova, Ely, Jackson, Joshi, Jehn (2003) explored the effect of diversity on business performance. Though gender diversity was considered a generally positive social trend among their research participants, the authors found that gender diversity usually meant the employment of White females, not minority females. The authors also described the inherent difficulty in conducting research that touches on racial diversity due to a fear of litigation. Study participants stated that they had seen few
females in the industry as plant managers or sellers. No participant reported dealing with a female salesperson of color during their careers. Gender discrimination may be an unrecognized issue in the wastewater treatment industry. The absence of significant number of females from the ranks of buyers and sellers in the industry reflects the research of findings of Cox and Smolinsky (1994), as they observed that although females comprise over half of the American workforce, they struggle to gain a significant presence in many career fields.

Molloy (1975) observed that "we try to ignore the fact that people who possess wealth and education, our great social yardsticks, do carry themselves different and do set themselves apart from their poorer, less-educated neighbors by distinctive patterns of speech and dress" (p.17). As a group, the interviewees were considerate and thoughtful. When asked if they would judge salespeople on the basis of age, race or gender, they quickly dismissed any notion of prejudicial thinking on these grounds. But the data did indicate that the operators negatively viewed salespeople visiting the plant in dirty clothing, or exhibited difficulty in speaking English in a manner preferred by interview participants.

Elsbach (2004) wrote about the various behaviors and signals that may communicate "in-group" membership or favorable stereotyping and side-step stereotyping that leads to distrust. The author specifically examined "self-representation behaviors," "Choice of language" (formal, informal, technical, difficult or easy to understand), and "Physical Appearance," to include attire, posture, facial expression, and the appearance of maturity (p. 279)." Plant operators frequently speak with technically-laced jargon that only an
industry-insider would understand. The prima facie assessment of suitability of a new salesperson, based on attire, falls within the framework suggested by Elsbach.

Jolson (1997) observed that for the last 50 years, the term “salesmanship” connotes the use of pushy, “insincere tactics engineered by a ‘get the order anyway you can’ philosophy (p. 75).” Study participants uniformly stated their aversion to pushy salespeople. Guenzi and Troilo (2007) wrote about the difference between the aggressiveness of direct sale representatives, employed by a specific manufacturer, compared to manufacturer’s representatives who sell in many technical markets, including the wastewater treatment industry. These authors suggested that direct salespeople should be used when the selling business wants to provide value-bearing relationships. When manufacturer’s representatives are used, however, they may prefer to maximize commissions and immediate sales, using hard-selling techniques, usually at the expense of developing a strong, long-term sales relationship with a buyer (p. 102). The majority of salespeople operating in the wastewater market are manufacturer’s representatives. It is not surprising that the interviewees viewed many of these salespeople as “pushy.”

Nicholson, Compeau and Sethi (2001) studied the phenomenon of liking: “Liking is the global affective attachment that the buyer has for the rep. Specifically, it is an emotional connection that one feels for another that can be viewed as fondness or affection - a feeling that goes beyond the mere acceptance of a competent business partner.” finding that, “in general, greater liking leads to greater trust (p. 5).” Interview participants indicated a sense of liking for honest and credible salespeople. Credible salespeople were viewed by buyers in study as experts, and these salespeople become a
valuable source of information and gradually evolve into long-term, intimate business partners (Liu & Leach, 2001).

Dwyer, Schurr and Oh (1987) modeled the relationship development process by measuring the relative mutual dependence upon buyers and sellers. The four phases typifying the growth of relationship are indicated as sequential. The Dwyer, et al., study indicated the ease with an early relationship may be terminated and this was borne out by the interview participants who would give little consideration to salespeople viewed as unsuited for future business. As in Welch's (2006) study, Dwyer, et al.'s model (Figure 4) graphically portrays five factors, or sub-processes of equal weight in the relationship development process. In the study of wastewater plant operators, the importance of initial attraction through similarity in attire outweighed considerations for power and justice in the initial phases of a relationship. As a relationship grows from one phase to another, the relative importance of the sub-processes change according to study participants. The importance of the frequency of seller visits in the formation of a trustful relationship was mentioned by study participants and could be included as a factor that may hasten the maturation of a relationship to the commitment phase.

Roman and Martin (2007) examined sales call frequency and buyer behavior, finding that increased sales visits were linked to sales volume, buyer perception of value, and buyer satisfaction. They also posited that the expectations for frequent sales visits will vary according to the position of the buyer in the hierarchy of his organization (e.g., the higher the buyer is placed, the more he will expect frequent sales calls). The study participants occupied the apex of their plant management structures, and frequently
mentioned the importance of regular sales visits to their facilities. Frequent sales visits are essential to firmly establish an early relationship (Schulz, J. & Evans, R., 2002).

Sales training literature from the early 1990s described a paradigm shift from the norm of pushy hard-sale tactics to a new approach that “emphasizes serving first and selling second (Gitomer, 2003).” In the study, sellers used this benevolent philosophy to offer products or services on a free trial basis in order to eliminate the financial risk of working with a new or unknown product in order to demonstrate a benefit to the plant operator. Bernheim (1994) described the function of generosity in economic relationships, positing that generous individuals may earn special favor based on the expectations for future selfless behaviors that internalize, or encapsulate the interest of a buyer (Hardin, 2006).

Lewicki, McAllister, and Bies (1998) observed that most relationships are typified

Figure 4.5 The Relationship Development Process (Dwyer, et al., 1987)

by varying simultaneous degrees of trust and distrust. The plant operators in the study indicated that trust within their profession was an absolute proposition—either a salesperson was fully trusted or not dealt with at all. When pressed to imagine a situation where the buyer could simultaneously trust and distrust a salesperson in various contexts, plant operators were unable to describe such a relationship with any salesperson they dealt with. This was borne out by the revelation that the lion’s share of sales at most wastewater plants are enjoyed by a very small, long-term group of suppliers at the mature-end of the relationship continuum described by Lewicki and Bunker (1995). The sales relationships were described at their highest when buyers identified with sellers over a long time period. Trust and distrust as a simultaneous phenomenon is a topic of debate among scholars, but was unrecognized as a valid notion by the study participants. Though Lewicki, McAllister and Bies (1998) made a compelling study to support the notion of trust and distrust of simultaneous relationship constructs, the interviewees denied that such a thing could be possible. In the world of the research participants, trust and distrust are an either-or proposition. They could not imagine a situation where a distrusted salesperson would be considered trustworthy in any aspect.

Colquitt, Scottt and LePine (2007) have described two components of trusting relationships: “A can-do component of trustworthiness (ability) and a will-do component (whether trustee will choose to use those abilities to act in the best interest of the trustor (p. 911).” Study participants frequently stated their preference for sellers who had, over time, encapsulated the buyer’s interests and were trusted to consistently perform in the “will-do” dimension of relationship trust.
Organizational Culture and Relational Demographics

The construct of organizational culture (Hatch, 1993) may offer a partial explanation for the preference for particular norms of attire and behavior in that segment of the wastewater treatment industry examined. Culture, according to Schein (1991), involves the integration of assumptions (beliefs about reality and human nature), values (standards and principles), and artifacts (visible symbols based on assumptions and values).

Turner (1971) studied the phenomenon of “micro-cultures (p. 2)” constituted by specific norms, values and perceptions associated with industrial subcultures. The ritualistic symbolism of attire supports the notion of a wastewater treatment industrial sub-culture, along with a peculiar form of social interaction involving joking and mock hostile behavior (Turner, p. 42). Trice (1993) wrote of the ideologies that characterize industrial subcultures that come to be taken as common sense among insiders. Following Trice, the beliefs and assumptions of plant operators regarding seller appearance and behavior could indicate belief clusters that may be unique to the wastewater treatment industry. The effect of relational demographics is evident in the operators’ norms, delineating preferences for attire among males and females, and proficiency in English-speaking skills by salespeople of other races.

Wastewater treatment plants may have a unique organizational culture where, according to study participants, sellers are judged on their conformance to expected norms of appearance and behavior. In particular, the symbolism of attire allows plant managers to “do more than stand for or represent something else... they also allow those who employ them to supply their meaning. (Cohen, 1985, p. 14).” Thornton (1995) has
observed that the notion of difference plays a key role in the process of cultural
distinctions.

Stereotyping sellers on the basis of their vehicles, attire and other non-verbal traits
may result in the possible exclusion of otherwise trustworthy people. The norms and
symbols that prevail among the wastewater operator industry culture determine the basic
acceptability of a new outsider, as found by Böse (2005) in her study of difference and
exclusion in the culture that has emerged among entertainment clubs in Manchester,
England. Based on these findings, an African-American female who desires to be a
successful salesperson in the wastewater treatment industry will confront significant
challenges to overcome the outsider-status signaled by her gender and skin color.

The segment of the wastewater industry studied was demographically
homogeneous in nature. Operating under a special set of operational regulations and
standards, performing specialized work relatively unknown by their public clientele, plant
operators are acculturated over their careers to share a sharply defined reality. The
cultural dynamics of the wastewater treatment industry work positively on behalf of
sellers willing to conform to the cultural expectations of operators demanding
conformance to perceived acceptability.

Self-categorization theory underscores the importance of the effect of relational
demographics in buyer-seller relationships, in that a “self-concept is based on the social
categories to which we view ourselves as belonging (e.g., age, gender, race, personality)
and that we desire to have a positive self-identity. The need for a positive self-identity
explains the study participants’ preference for sellers similar in terms of the social
category on which plant operators based their identity (Strauss, Connerly & Ammermann, 2003, p.35).

Johnson and Grayson (2005) discuss the formation of cognitive and affective trust in a relationship. Cognitive trust is based on the buyer's belief in the seller's competence and reliability to fulfill the basic aspects of a commercial transaction, arising from the buyer's "accumulated knowledge that allows one to make predictions, with some level of confidence, regarding the likelihood that a focal partner will live up to... obligations (p. 501)." Every time a buyer signs a purchase order, he expresses cognitive trust that the purchased product will be delivered at the agreed price and perform as promised. Deeper trust begins to take root with the experience of successive satisfactory purchases.

Affective trust occurs when "the confidence one places in a partner on the basis of feelings generated by the level of care and concern the partner demonstrates. It is characterized by feelings of security and perceived strength of the relationship (Johnson & Grayson, 2005, p. 501)," in the buyer's faith that the seller's behavior may hopefully be guided by internal benevolence.

Hardin (2004) advanced the idea of trust as the encapsulation of interests. A seller will encapsulate, or internalize the interests of the buyer because the buyer will want, at a minimum, the relationship to continue with the seller. "At a minimum, you may want our relationship to continue because it is economically beneficial to you, as in the case of your relationship to your merchant. In richer cases, you may want our relationship to continue, and not be damaged by your failure to fulfill my trust, because you value the relationship for many reasons, including nonmaterial reasons (p. 6)." Plant operators often stated a preference for salespeople who performed benevolent actions.
Roman and Martin (2007) noted that the average cost of a sales visit in the United States is $169.34 per visit (p. 1). In an era of heavy corporate reliance on telemarketing, the salesperson remains the primary point of customer contact. “Frequent contact facilitates relationship selling strategies focused on working with customers to give them what they need when they need it (p. 1).” The participants in the study stated hostility to telemarketers, and confirmed a correlation between sales visit frequency and the probability of placing an order.

Barney and Hansen (1994) differentiated between the different levels of trust that develop between a buyer and seller as weak, semi-strong, and strong trust. Strong trust seems to typify most long-running buyer-seller relationships among study participants. This form of trust does not emerge as a result of simple economic exchange, but “reflects the values, principles, and standards that partners bring to an exchange. Those values, principles, and standards may reflect an exchange partner's unique history, its culture, or the personal beliefs and values of critical individuals associated with it (p. 179).” The plant operators indicated a close bond with salespeople with whom they shared values. Milliken and Martins (1996) observed that the appreciation of shared values among diverse people begins to emerge and grow with the length of their relationships. Shared values do eventually trump diversity in observable attributes. The interviews in the study confirmed that shared values may reduce the perception of risk, echoing the findings of Chou, Wang, Wang, Huang and Cheng (2008). The authors found that holders of similar values may be willing to undertake higher risks due to a reduced chance of unexpected behaviors.
Blois (1999) discussed the time aspect of trust, observing that buyers and sellers may eventually regard each other as trustworthy in a slow process characterized by a series of small risks that ultimately prove worth taking. Plant operators stated that they would not consider purchasing high-cost or critical items from any salesperson on the first visit.

![Diagram showing interaction of trustworthy behaviors and relationship length](image)

*Figure 4.6 Interaction of trustworthy behaviors and relationship length (Levin, Whitener & Cross, 2006)*

Several operators indicated that a series of successful small-scale purchases, delivered as promised, were always necessary to reduce the sense of risk involved with higher-priced items. Levin, Whitener and Cross (2006), and Lewicki and Bunker (1995) studied different stages of relationships, finding that trustworthiness depends on different variables according to relationship length. In new relationships, there is an emphasis on demographic similarity — in intermediate relationships, attention shifts to observations of behavior. Plant operators echoed Levin's work in emphasis of trustworthy behaviors, including ability, benevolence and integrity.

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And in the mature relationships which typify the situations where study participants granted a high level of trust to a salesperson, the relationship is based on shared values or perspectives (Levin, et al., p. 1169) (Figure 4.6).

Swan, Trawick, Rink and Roberts (1988) investigated dependability, reliability, honesty, responsibility, and likeability as dimensions of buyer trust in business-to-business salespeople. They found that among these dimensions the dependability of a salesperson is the most critical to the development of trust. The cultivated expectations of benevolence by a buyer for particular salespeople, based on past experience and performance, underscores the importance of consistency and reliability in salesperson behavior. Plant operators preferred to deal with salespeople who demonstrated consistent integrity, honesty and benevolence in business exchanges over a long period of time.

Nicholson, Compeau, and Sethi (2001) found a clear relationship between the passage of time and the strength of buyer-seller relationships. "Clearly the relationship of one year between buyer and sales rep is going to be qualitatively different from one where the same people have worked with each other for many years...trust may become more affect based over time" (p.12). Operators in the study were asked to define the minimum time period for trust to evolve with any salesperson. Several operators firmly stated that one, two or five years must pass before trust could be granted. Other operators indicated that there was no relationship to time and trust as each salesperson would be considered on their individual merit.

**Grounded Theory View of Trust in a Technical Market – A Model**

The study participants described a series of judgments rendered on visiting salespeople, from the point of arrival at the plant to the evaluation of a subsequent
purchase, often not occurring until the conclusion of several sales visits. Based on the various inputs, decision points, outputs and activities involved in the ascertainment of trustworthiness by a buyer for any salesperson, a model (Figure 4.7) was developed on the basis of systems analysis flow-charting techniques (Martin, 1987; Leslie, 1986).

At several decision points, based on the interviews, the buyer makes a judgment whether to grant a salesperson an incremental degree of trust, or form a summary judgment of distrust which, in the case of an early-stage relationship, may result in the outright dismissal of a salesperson by the plant manager. Non-verbal factors, including relational demographics and attire, generally precede an evaluation of a salesperson's verbal representations of personality and product. Each stage is characterized by an opportunity to prove salesperson trustworthiness.

The model is oriented toward the series of buyer judgments in an early relationship where, as described by Lewicki and Bunker (1995), trust is based on salesperson ability to satisfactorily conduct a commercial transaction (Calculus-Based Trust), or has established a sufficient degree of comfort through repeated positive transactions to graduate to the knowledge-based trust threshold typifying the majority of buyer-seller relationships. The late stage identification-based trust (Lewicki & Bunker, 1995) is characterized by the buyer's recognition of a similarity of interests and values, and falls into a category of trust described by other scholars as strong-form trust (Barney & Hansen, 1994), resilient trust (Ring, 1996), or the commitment stage of a relationship described by Dywer, Schurr and Oh (1987).

Until the buyer makes the mental commitment to become vulnerable to a salesperson, where trust as defined in the study truly occurs, plant operators indicated
salespeople, at best, enjoyed the tenuous position of weak-form trust. Barney and Hansen (1994), described this type of trust as "... clearly endogenous: i.e., it emerges out of a very specific exchange structure (p.177)." Weak-form trust can be strengthened, according to the participants in this study, through repeated personal contact and small transactions that increase the buyer’s faith in the salesperson. Trust may be vanquished, however, in the event that a salesperson provides sufficient cause by the commission of an offense that triggers distrust, terminating a weak relationship.

The model portraying the dynamics of the buyer’s decision-making process is based on the chronology of events and buyer judgments which result in the formation of trust in the sales relationship, or distrust, or summary dismissal. The model indicates that though a salesperson may be successful in navigating the labyrinth of preconceived attitudes, biases and stereotypes held by operators, the buyer will be comparing the salesperson to others in the context of earlier experiences. After successfully passing the buyer’s evaluation and approval as a benevolent, knowledgeable and courteous salesperson, the buyer will view a transaction through an objective business lens, looking for acceptable price, delivery and payment terms. When the product is finally delivered and put into service and meets the expectations created by the salesperson, the relationship begins to take on an established dynamic that to be reinforced over years of repeated, favorable transactions.

At the conclusion of the study, the researcher returned to the field to discuss the general study findings and the Grounded Theory Model with three plant operators. All operators expressed agreement with the findings and the model. Each operator asked for a copy of the model, and one operator pinned the model on his bulletin board to explain
to future salespeople how trust evolved in their relationships. In addition, a summary of the study and a copy of the grounded theory model was mailed to all ten participants, requesting feedback. One response was received, in writing, expressing agreement with the study findings and the model.

**Practice**

The Grounded Theory View of Trust in a Technical Market illustrates the consecutive series of hurdles a salesperson must overcome to get to the point of serious consideration for a plant operator's business. Salespeople and their managers may utilize the model to get off on the right foot during initial sales visits and avoid simple pitfalls, such as wearing a three-piece suit to a wastewater treatment facility, that evoke negative cognitive reactions, or being unkind to the plant's pet animal. Based on the study interviews, salespeople should demonstrate a willingness to embrace the operators' interests as their own. Salespeople can earn the confidence and tentative trust of a buyer in benevolent actions, such as providing a free sample of product for a trial use.

Sales managers and trainers may consider the importance of technical product and industry knowledge as crucial in gaining a business foothold in a wastewater treatment facility. Poorly-prepared salespeople are quickly discarded as poor business partners by plant operators. A sputtering, malfunctioning wastewater treatment facility is at best a producer of unpleasant odors that may erode community property values – and, at worst, become a producer of deadly waste imperiling fish, wildlife and the unfortunate human being who may come into contact with contaminated discharges.

Zolin and Hinds (2004) posited that trust evolves in proportion to a buyer's natural propensity to trust wherein the salesperson has been perceived as generally trustworthy and the situational risk of bestowing trust is considered reasonable and acceptable. Buyer
perception of seller trustworthiness may be related to "how capable (ability), how benevolent, and how honorable (integrity) (Zolin & Hinds, p. 215)" the buyer views the seller to be. Salespeople seeking to do business with wastewater treatment plant operators must overcome the propensity of buyers to distrust based on negative stereotypes. A successful salesperson must conform to the expectations of plant operators. Wastewater plant managers are technicians and do not think in terms of social justice. A prospective salesperson of any race, age or gender must learn the expectations of plant managers and meet them.

Given the opportunity to sell a product for the first time, the salesperson must then insure that the product is delivered at the price it was sold, in a timely manner, while performing in a manner consistent with the promises made during the sales presentation. Misrepresentations, lies or manipulation of invoices may result in permanent distrust of all salespeople visiting a plant in the future.
Figure 4.7. Model of Grounded Theory of Trust in a Technical Market

Operator Personality and Preconceived Views
(Propensity to Trust or Distrust)

Salesperson Visits

Operator's Bandwidth of Acceptance
(Judgment of seller's non-verbal attributes)

Listen to Sales Presentation?

Salesperson Visits

Operator Judges Personality Factors

Operator Judges Professionalism

Trust?

Operator Assessment of
• Need
• Price
• Delivery
• Risk

Operator Places Purchase Order

Receive Product

Product Performance

Grounded Theory View of Trust in a Technical Market
Successful sellers in this technical market would do well to politely inform the operator of products that may improve some aspect of the plant’s performance or reduce operating costs. Kramer (2004) painted an accurate picture of the wastewater treatment plant operators involved in this study: "The portrait of the social perceiver that emerges from this research is that of an interpersonal bookkeeper, or ‘social auditor,’ who attempts to maintain an accurate accounting of past exchanges and transactions.” The plant operators were intelligent individuals with long memories.

The research interviews indicated that buyer trust is a precious and fragile commodity, easily lost through pushy or inconsiderate words and deeds. A seller’s needs for rapid results and resultant “pushy” behaviors may be driven by the short-term focus of employers. Employers may ponder the claim of Beugelskijk, Koen and Noorderhaven (2006) that organizations with an emphasis on quick results may hinder the formation of long-term, high-quality, binding relationships (p. 844). The study participants stated that most of their business was conducted with salespeople known for more than 10 years.

Public sector officials charged with the oversight of municipal water treatment facilities may consider the implementation of training programs designed to enhance an awareness of diversity among their employees. Pitts (2006) stated that “many employees may view valuing diversity programs as fluffy and without merit... (p. 252).” Thomas and Wetlaufer (1997) observed that Whites are reticent to discuss the possibility of racism in the workplace, but a frequent topic of conversation among African-Americans. Minimization of racism among the Whites who dominate the wastewater industry does nothing to ameliorate the exclusion of minorities based on age, gender or race. Through diversity training, water treatment plant operators may come to recognize the benefits of
dealing with salespeople who may not be similar to them in attire or appearance, finding value in different perspectives, life experiences and cultures that could bring new approaches to the management of an important infrastructure industry.

Kellough (2004) studied diversity advocacy and program initiative among agencies of the federal government. Moving “from affirmative action to affirming diversity (Thomas, 1990, p. 112),” a paradigm shift in diversity gained ground two decades after the passage of national laws establishing Equal Employment Opportunity and Affirmative Action. Though slower than private sector organizations to embrace diversity management, by 1999 many federal departments had changed gears for a more proactive policy to insure the systematic inclusion of traditionally excluded minorities. The difference between managing diversity and the older Affirmative Action approach was illustrated in a table prepared by the National Institutes of Health (Figure 4.8), people of all colors in the industry. Diversity management is behavioral and strategic in nature, and contrasts to the EEO’s legislative and quantitative approach (Riccucci, 2002). The study participants indicated they would welcome an increased presence of racial minorities in the market, and were unable to explain the low involvement of people of color in their industry as buyers or sellers. Diversity training among the executives responsible for hiring operators or industry salespeople could contribute to positive steps to increase the participation of people of all colors in the industry.
National Institutes of Health Definitions of Equal Employment Opportunity/Affirmative Action (EEO/AA) and Managing Diversity

<table>
<thead>
<tr>
<th>EEO/AA</th>
<th>Managing Diversity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Legal, social, moral justification</td>
<td>Productivity, efficiency, and quality</td>
</tr>
<tr>
<td>Focuses on race, gender, ethnicity</td>
<td>Focuses on all elements of diversity</td>
</tr>
<tr>
<td>Changes the mix of people</td>
<td>Changes the systems/operations</td>
</tr>
<tr>
<td>Perception of preference</td>
<td>Perception of equality</td>
</tr>
<tr>
<td>Short term and limited</td>
<td>Long term and ongoing</td>
</tr>
<tr>
<td>Grounded in assimilation</td>
<td>Grounded in individuality</td>
</tr>
</tbody>
</table>

*Figure 4.8 Equal Opportunity vs. Managing Diversity (National Institutes of Health, 2009)*

Exclusion was institutionalized by Woodrow Wilson's administration in order to keep African Americans and other minorities out of some areas of government service, particularly out of middle and upper level positions (Gest & Maranto, 2000, p. 55)."

Government policy makers have come to recognize that the bureaucracy of government should reflect the diversity of its citizens (Kellough, 2004). In 2009, the New York State Department of Civil Service published a report that described the progress in increasing the diversity of the state's workforce (NY Department of Civil Service, 2009). The report stated that African-Americans held 15.7% of state jobs, and composed 13.46% of the state’s workforce. Reviewing employment of minorities by department, however, revealed that the state agency that exercises the authority over all New York water and wastewater treatment plants, the New York Department of Environmental Conservation, employs few people of color. This trend was evident in other agencies including the Transportation Department, where African-Americans have found employment in 4% of

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From National Institutes of Health Diversity Home Page  
http://www1.od.nih.gov/OEO-WDI/managing_diversity.htm

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the jobs but comprise 14% of the state’s population. David Paterson, the state’s first African-American governor, expressed disappointment in the report stating, “These findings are unacceptable. Government should be a model of inclusion, but a model that has some groups faring well while others do not is really no model at all. New York can do better…” (Paterson, 2009).

The plant operators of the study were middle-aged White males. The researcher’s experience in the industry, visiting plants around the United States confirms that few non-whites or females hold jobs as treatment plant operators. Several plant operators in the study observed that treatment plant jobs are not highly publicized. Potential non-white or female applicants may be unaware of plant job opportunities.

Public organizations function in an environment characterized by highly-monitored and limited resources (Meier & Bohle, 2007). Despite this suggested degree of oversight which should insure complete compliance with the full letter and spirit of Equal Employment Opportunity, the informal standards of many organizations may work against minorities, especially if policy-makers tacitly indicate that discrimination is acceptable (Gest & Maranto, 2000, p. 55).

McPherson and Smith-Lovin (1987) found a distinction between organizationally-mandated homophily, and the homophily resulting from individual volition, suggesting improvements in diversity appreciation may be a function of a person’s free willingness to encapsulate and practice a spirit of tolerance for, and acceptance of, others. It appears that the force-feeding of diversity awareness may be the necessary first step of long-term progress in hide-bound government organizations. The New York State Civil Service Commission has oversight of the entrance examinations to applicants for wastewater
plant jobs, and should consider efforts to publicize these opportunities to female and non-white applicants.

**Recommendations for Further Study**

This study was conducted among ten wastewater treatment plant managers located in the northern part of the State of New York. Many of the participants managed facilities in rural locations, far from urban centers which contain higher minority populations. A study designed to measure the perceptions and attitudes of treatment plant operators in larger plants, located in larger urban areas with high populations of racial minorities might reveal a different level of participation in technical sales from African-Americans and other racial minorities.

The “other side of the coin” in these buyer-seller relationships is the technical salesperson. A grounded-theory study could be conducted among the salespeople who visit rural northern New York wastewater treatment plants to reveal the seller’s perceptions of relational demographic relationships with plant managers, and perhaps, other salespeople in the industry.

The water treatment industry is one of many government-owned infrastructure activities. Other agencies, such as highway departments, could provide other information which might explain how relational demographics affect the development of trust between government-employed buyers and specialized sellers. Qin (2007) has observed that “the same demographic characteristics might yield different work-related attitudes [and] behaviors in different research contexts (p. 252).” noting that considerations of diversity will vary from the societal, organizational, group and individual levels (Qin; Roberge, 2007).
This study used grounded theory to seek an explanation for the effect of relational demographics on the formation of trust among wastewater treatment plant operators. Other qualitative methods, such as ethnography, could uncover more of the reasons why minorities have limited participation as salespeople in the wastewater industry. Using chain sampling techniques, a researcher could reasonably pursue the effect of relational demographics on the formation of buyer trust among plant operators, their superiors, and the state technocrats with regulatory control over the treatment plants and their municipal owners. Moving in the other direction, toward salespeople, an ethnographer could also interview the salespeople who visit a particular treatment facility, then interview the salesperson’s manager, and the owners of the sales firm to discover additional factors that might affect the buyer-seller relationship, and the effect of relational demography on trust.

American manufacturing has suffered a significant decline over the past two decades with a concomitant reduction in research by industrial sociologists. Thompson and Ackroyd (1995) offer a partial explanation in the gradual disappearance of the production worker from many industrial organizations as manual labor passes offshore to cheaper hands. The study of industrial subcultures through the sociological lens, however, could provide insight into norms, rituals and symbols that define technical industry sub-cultures, and describing how trust evolves among members of those subcultures.

The research was conducted by a White, middle-aged male with a long career inside the wastewater marketplace, bringing along attendant biases and views that may have tainted various aspects of the study, its analyses and findings. Professional roles and
cognitions are difficult to shed even present the best of intentions. Another research project using the same methodology could be conducted by an industry-outsider, perhaps of different race, age or gender, and could in theory uncover other findings.

This study was a qualitative research endeavor. Other scholars may see an opportunity to examine the affect of relational demographics on buyer trust in a quantitative manner in the wastewater market, searching for correlations based on similarity in race, gender and age.

Conclusion

In 1841, Ralph Waldo Emerson wrote, “Society everywhere is in conspiracy against the manhood of every one of its members...The virtue in most request is conformity. Self-reliance is its aversion. It loves not realities and creators, but names and customs.”

Though populist notions of rugged individualism are celebrated as the true inner strength of the American psyche, the primacy of conformity in our society is expressed in norms of appearance. Though “bling” may be shunned as acceptable personal adornment in the chambers of the U.S. Congress, but would be considered suspect without such ostentatious displays of jewelry if attempting to establish a serious reputation as a hip-hop star. Framing constructs of acceptability among buyers based on conformity to the values and symbols of a subculture may be operative in many technical industries beyond the wastewater treatment marketplace. Howard-Grenville (2006) offers hope for the future of buyers and sellers in culturally-bound organizations, given that members revise their personal cultures every day, “rewearing the very webs of meaning that guide their
actions (p. 69),” holding forth the opportunity to ignore surface-level attributes, and embracing a progressive paradigm of inclusion and diversity.
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CA: Sage.


National Institutes of Health Diversity Home Page
http://www1.odd.nigh.gov/OEO/WDI/managing_diversity.htm


Appendix A

Research Project Demographic Questionnaire  Wastewater Operator Trust

Age: ____________

Race: (circle one)

White  
Black or African American  
American Indian or Alaska Native  
Asian  
Native Hawaiian or Other Pacific Islander  
Some other race  
Two or more races

Gender: (circle one)

Male  Female

Do you have Hispanic / Latino heritage? Yes No

Highest Level of Education: (circle one)

High School or GED Completion  
Attended Some College But No Degree  
Associate Degree  
Bachelor’s Degree  
Master’s Degree or Higher

Years of Plant Operator Experience: _______ yrs.

What is the class of your Operator License? Class_______
Appendix B

Interview Questionnaire

(1) In your opinion, how has your industry changed since you started?

(2) How many sales people visit your plant, on the average, every month?

(3) When you meet a sales person for the first time, what signals a positive visit to you?

(4) When you meet a sales person for the first time, what signals a negative visit to you?

(5) What can a sales person do, without saying anything, that can influence your attitude toward that salesperson?

(6) Trust has been defined by some people as a willingness to take a risk, or become vulnerable to someone else, in the expectation that that person will act in your best interest. Do you have this kind of relationship with a salesperson who visits you? What kind of things has that person done to make you willing to take a risk on him or her?

(7) Can you remember a time when you were first visited by a sales person, and how you just KNEW that you could trust that sales person? Why?

(8) Can you remember a time when you were first visited by a sales person, and you knew that you could NOT trust that sales person? Why?

(9) Do you feel that the way a salesperson looks can affect your decision to trust that salesperson or not? Why? Can you give an example?
(10) Have you been approached by sales people of a gender different than your own?
Do you do business with sales people who are of a different gender than your own? Why – or why not?

(11) Have you been approached by sales people of a different race than your own?
Do you do business with sales people who are of a different race than your own?
Why – or why not?

(12) Have you been approached by sales people of a different age than your own? Do you do business with sales people who are of an age different than your own?
Why – or why not?

(13) Distrust has been described by some people as a feeling that you can NOT take a risk, or become vulnerable to someone else. Do you have relationships with salespeople that you distrust? Can you tell me about one of these relationships?
What sort of things led you to distrust the salesperson?

(14) Some people think that it is possible to trust people in some ways, but distrust them in others. Can you think of a salesperson who you trust in some ways, but distrust in other ways?

(15) Do you think that trust is something that must be earned over time? If so, how long does it take for a salesperson to earn your trust?

(16) Have you ever had a situation with a salesperson who you trusted, but something happened, and then you distrusted that salesperson? Can you tell me what happened to cause this? Can you tell me how that relationship worked out?
I mean [he does not dress] fancy, but he also does the actual calibration and the work so he has, you know, a nice polo shirt or a semi-dress shirt, and a pair of appropriate pants to do that stuff. Now if a guy comes in here, if he comes in with a tie and everything; this is a wastewater plant, so his chances for success won’t be good.

The operators felt that similarity in attire may stimulate an attraction for a seller based on the perception that such similarity may reflect the operator’s own attitudes and beliefs. The interviews indicated that sellers wearing formal clothing, such as suit jackets and ties represented an antagonistic disconnect from the plant operator’s world. Shorty, Perry, Gary, and Clifford shared views on their perception of acceptable attire for visiting salespeople and expressed a collective bias against upscale attire, especially if that attire involved a three-piece suit.

Shorty said:

If he [the seller] comes in with a three piece suit into a waste water treatment plant, he doesn’t belong in a waste water treatment plant. Serious to do business is casual clothes or anything there about. If you dress like you’re planning to go to church you’re going to make a negative impression on me. It costs too much money to do business with you.

Perry said:

Well, I mean I deal with some salesmen that they walk in here just like I am, work boots, jeans, you know, right off the bat you’re more comfortable with them. You know, with the guy that walks in with a three piece suit on and a briefcase, you know...it’s the three piece suit attitude, it doesn’t matter whether you’re talking