CROSSROADS: WHAT LEADERS INTEND AND WHAT EMPLOYEES PERCEIVE

by

RACHELLE LEHNER

(Under the Direction of WENDY RUONA)

ABSTRACT

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. This study focused on differences and similarities in intents and perceptions occurring in the context of organizational change. In particular, this study attempted to surface the mental models held by leaders and hourly employees regarding specific changes that have been made.

An interpretive qualitative study was employed utilizing interviews and document analysis to compare intents and perceptions of three key changes. Purposeful sampling was utilized in selecting the organization and the participants. Three groups of employees were interviewed: co-owners, senior leaders, and hourly employees.

Analysis of the data revealed three findings: (a) Co-owners, senior leaders, and hourly employees did not identify the same changes as significant; (b)When asked about the three most frequently cited changes (as identified by senior leaders), there was a surprising level of consistency across the three groups; and (c) Even though employees could describe the three changes and the reasons for their implementation, they were not able to explain what they had to do differently in their specific job to contribute to the success of the change. These findings resulted in four conclusions. First, recognizing and addressing employee concerns is a crucial

role for change agents. Second, the roles of leadership and management are both necessary and should be fluid in nature. Third, understanding is a developmental process and can be fostered through a multi-tiered communication system. And, fourth, the “what” of change does not equate to the “how” of change. These conclusions lead to implications for both practice and research.

INDEX WORDS: Organizational Change, Mental Models, Perceptions, Leadership

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"...and the day came when the risk to remain tight in a bud was more painful than the risk it took to blossom." This quote by anais nin has been in my email signature line throughout this dissertation journey and reflects my feelings about the process. I want to thank everyone who helped me blossom. Although there were times it seemed as though the process was never ending, you knew it would eventually end and although I could not always see it, you knew that the light was not a train barreling toward me, but a light at the end of the tunnel. For this I have many people to thank who have supported me along the way.

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CHAPTER 1

INTRODUCTION

Change is a necessity in today's organization, yet change initiatives fail at staggering rates. St-Amour (2001) states "66 percent of organizations that completed restructuring initiatives showed no immediate increase in productivity, more than 50 percent realized no short-term profit improvement and only 30 percent actually lowered costs" (p. 22). Stebel (1996) reports corporate re-engineering success rates are between 20 and 50%. Jaffe (2000) cites a large consulting firm that acknowledges a 75% failure rate. Bolman and Deal (1999) say "two thirds of all organizational change efforts fail to meet their goals" (p. 7). These alarming figures indicate there is something missing in how change is handled in organizations and call for a closer look at why change fails at such a high rate.

Change fails for a multitude of reasons including poor communication and lack of employee involvement (Gorman & Overstreet-Miller, 1997) which can result in a "lack of acceptance of change by the people affected" (Palmer, 2004, p. 35). Other reasons include not establishing a great enough sense of urgency or lacking a clear vision (Kotter, 1995). Another reason, which has been receiving increasing attention is that there are many different cognitive frameworks found within an organization (Moch & Bartunek, 1990). It is this last reason, cognitive frameworks, that is the focus of this study.

Cognitive frameworks and their manifestation through language seem to be a key factor influencing the success or failure of change. Marshak (2002) identifies language as one obstacle to change in that words have multiple meanings and these meaning are often influenced by

worldviews. Worldviews (also called mental models) are mental representations of beliefs and influence how a person acts. For example, if a person holds a Newtonian worldview of organizations, change will "evoke images and ideas of inertia, forces, resistance, end-states, paths, and so on" (Marshak, 2002, p. 284). A person viewing an organization as a complex system assumes "change is continuous, and that complex systems can be self-organizing" (p. 285). Given these differing worldviews, how change is understood and approached would be very different. The result is that it is difficult to know what is meant by the word change, "except perhaps that something, at some level, due to some set of circumstances or processes will be different to some degree" (p. 281).

Marshak (2002) and others (Koltko-Rivera, 2004; Senge, Kleiner, Roberts, Ross, & Smith, 1994) imply that this lack of a common understanding is partly explained by the fact that people have individual worldviews or mental models through which they make sense of the world in which they exist. Senge (1990) and others (Chermack, 2003; de Geus, 1992; Senge et al., 1994) portray mental models as the cognitive maps through which individuals view the world. Perceptions of reality are formed based on one's worldview or mental model and "differences in mental models explain why two people can observe the same event and describe it differently" (Senge et al., 1994, p. 236; Starbuck & Mezias, 1996). Differing worldviews, therefore, can lead to different interpretations of another person's (or an organization's) actions. Additionally, Senge (1990) asserts that people make leaps of abstraction; not realizing that their mental models lead them to form what they believe is reality and they act accordingly. This creates interesting dynamics in an organizational context when individual realities intersect.

Differing perceptions of reality surfaced again in a study by Walston and Chadwick (2003) who found that individuals in different organizational roles were focused on different

details and, thereby, had different perceptions of the success of change outcomes. They found "individuals become increasingly negative about outcomes as one moves down organizational hierarchies from the top" (p. 1596). This is demonstrated in that 69% of the executives interviewed believed reengineering had resulted in lower hospital costs compared to 37% of nurses and other staff. None of the executives believed that costs had risen, while 17% of the RNs and other staff did. As for quality, 6% of the executives believed there was a decrease in quality while 50% of the RNs and other staff believed quality had decreased. Walston and Chadwick (2003) conclude "organizational position is highly associated with the perceptions of outcomes" (p. 1596). One reason offered to explain this difference was that positions lower in the hierarchy had limited involvement in the initial decision making process, yet, the outcomes of reengineering tended to effect the daily work activities of those employees lower in the hierarchy more directly than those higher up. It was also noted that lower level employees did not have ready access to financial data that may have demonstrated success to the upper level employees. This is a reflection of what details people are paying attention to and how it impacts their mental models.

Carley and Palmquist (1992) also define mental models as internal representations, but go further in stating that language is the key to understanding mental models and we can gain insight into social action by surfacing representations of individuals' mental models through language. This means that we can better understand individuals' action by understanding their mental models. Unfortunately, mental models are tacit and are not readily recognized. Working with mental models, according to Senge (1990), requires "the ability to carry on 'learningful' conversations that balance inquiry and advocacy, where people expose their own thinking effectively and make that thinking open to the influence of others" (p. 9).

Argyris also addresses this difficulty. He refers to mental models as "theories-in-use" in contrast with "espoused theories" (Argyris & Schön, 1974, 1996). Espoused theories are what we say we do, whereas theories-in-use are actually guiding what we actually do, meaning that individuals do not always do what they say they do (espoused theory) but are acting based on their mental models (theories-in-use). If people come together for the sake of change, yet act according to their unspoken, perhaps competing, mental models, there is likely to be less forward momentum and this could serve as a barrier to change efforts.

Buckle (2003) describes an organization as "typically comprised of a diverse array of individuals, assembled for their various 'knowledge worker' attributes" (p. 436) and states "business success is driven by what employees know, and how an organization mobilizes this knowledge" (p. 436). She develops this idea, stressing the importance of both explicit knowledge (which she equates with Argyris' espoused theories) and tacit knowledge (theories-in-use). She addresses the challenge of accessing theories-in-use (mental models) as they "generally are unknown to their owners: they exist at the pre-rational, unconscious stage of cognition" (p. 436). She concludes by saying "much of what an organization knows is unrecognizable and inarticulable" (p. 436). Finding ways to make this knowledge explicit is a challenge faced by organizational leaders and consultants.

Senge (1990) cites several examples where the surfacing of mental models has facilitated successful change. Royal Dutch/Shell "discovered that, by helping managers clarify their assumptions, discover internal contradictions in those assumptions, and think through new strategies based on new assumptions they gained a unique source of competitive edge" (p. 178). Another example in which surfacing mental models led to success is found in Hanover Insurance. In an effort to "revamp the traditional hierarchical values that had dominated the

organization" (Senge, 1990, p. 181), Hanover identified openness and merit as desirable values. As these values "took hold, a deep belief evolved from them: that decision-making processes could be transformed if people become more able to surface and discuss productively their different ways of looking at the world" (p. 182). Hanover employees have realized that "all we ever have are assumptions, never 'truths,' that we always see the world through our mental models and that the mental models are always incomplete…" (p. 185). In both of these examples, it was critical that people's assumptions (mental models) about important issues were brought to the surface as a way to explore and utilize the multiple realities that exist within the organization. This said, the goal is not necessarily agreement or congruency, but that there is dialogue around the different mental models so that the person making the decision can proceed in an informed manner with the best mental model possible developed from hearing various perspectives and leaving others feeling like their perceptions were heard.

Adding to the challenge of surfacing tacit mental models, Walston and Chadwick (2003) found that perceptions change over time. In Walston and Chadwick's study general perceptions of success became more positive as new ways of being became routine. Looking at how perceptions changed based on hierarchical level, however, showed that executives became increasingly positive over time while employees' positive perceptions began to decline over time. Reasons for the decline included (a) the fact that after an initial thrust, executives decreased their visibility and involvement, which was perceived as a lack of commitment, (b) processes were changed prior to employees receiving equipment or training to be successful, and (c) employees received little objective feedback to demonstrate continued success. This study demonstrated that not only do mental models exist at levels not easily accessed, but also that they are not static.

This has great implications for leaders who must pay attention to these varying perceptions to ensure that they are effectively facilitating the change effort. While leaders are not the only people responsible for successful change, senior leadership often makes conscious decisions about what to change and how to change it. Walston and Chadwick (2003) demonstrate how employees interpret leaders' behavior, as well as how employees form perceptions in light of little or no objective feedback. A successful change is dependent on all members of the organization understanding and working towards the big picture of where the organization is heading. Yet, undisclosed differences in mental models can inhibit this understanding of the big picture and equate to less successful and less sustainable change.

In order to mediate differences in mental models, leaders need to approach change in a different way. As demonstrated by the Hanover and Royal Dutch/Shell examples, this can be facilitated by surfacing mental models and engaging in dialogue that helps individuals assess various mental models before determining the best course of action. This can only occur if managers believe mental models affect how people act, are willing to address their own mental models, and are open to having these mental models challenged (Senge, 1990). This new type of leader, according to Senge, can "produce results that people truly care about" (p. 341).

Given the statistics and rationale for the high failure rate of change, and the turbulent environment in which organizations often find themselves, there is still much to learn about creating successful change. Marshak (2002) concurs that "examining organizational change from many perspectives is both timely and appropriate" (p. 280). He continues by suggesting areas for inquiry including, "…isolating what triggers, accelerates or retards organizational change" (p. 280). The current study aims to do just this.

Looking at differing perceptions as one reason for unsuccessful or unsustainable change, it is especially important to understand how hourly employees, who often have less input into discussions about change, actually view the changes. Walston and Chadwick (2003) have shown that hierarchical position in an organization affects the perception of the outcome of change initiatives and that these differences in interpretation can lead to lower levels of acceptance of change. Building on Walston and Chadwick's research, this study will examine perceptions regarding the intent of change, rather than perceptions of the outcome. By surfacing mental models on the front end of the change initiative, organizations can begin to bridge any existing gaps between mental models and facilitate a more clear understanding of the organizational change as it unfolds.

Purpose of the Study

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. While this phenomenon can occur in many types of interactions, this study focused on differences and similarities in intents and perceptions occurring in the context of organizational change. In particular, this study attempted to surface the mental models held by leaders and hourly employees regarding specific changes that have been made. The purpose was addressed by the following research questions:

1. According to leaders, what key changes have been implemented since May 2003?
2. According to hourly employees, what key changes have been implemented since May 2003?
3. According to the leaders, what was the intention of each of the changes identified?

4. How do implemented changes compare to the intentions of leaders?
5. For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?

Significance of the Study

This study is significant in that it offers both theoretical and practical contributions to the field of organizational learning and development. This study adds to the understanding of mental models as they impact change initiatives. In particular, it will focus on mental models as they affect employees' understanding of the intent driving change. By recognizing the role mental models have on perceptions of intent, Human Resource Development (HRD) professionals can gain insight from a new perspective on the impact mental models have on the change process. Although situated in an organizational setting, this knowledge is applicable to any social situation involving two or more people. Additionally this study highlights the necessity for organization leadership to be mindful of their role in change initiatives. This is demonstrated in how leaders support employees in adopting changes and argues for a balance between the traditional roles of management and leadership.

This study addressed a void in the scholarly literature by highlighting the role mental models have on the perception of intent, which may influence acceptance of change. Literature abounds regarding mental models and their role in relation to theories-of-action. Senge (1990) and others have described the importance of surfacing mental models as a path to success. A review of the literature, however, revealed few empirical studies in which mental models were examined in regard to change initiatives. One recent study, Walston and Chadwick (2003), connected mental models to perceptions of change outcomes and another study looked at various factors that influenced sensemaking in the face of organizational change (Taylor, 1999). No

studies were identified that explored mental models regarding the intent of change. This study will address this gap in the literature and offer a new platform from which researchers can study ways in which change can be more effectively facilitated.

From a practical stance, organizations must change to keep pace with an ever-changing society (Gorman & Overstreet-Miller, 1997; Schoonover & Dalziel, 1986; Sottolano, 2001). Organizations that do not change run the risk of not being competitive in today's market, which can often result in the need to downsize or close altogether. While many factors influence the change process, addressing the differing perceptions of senior leadership and hourly employees is one key. Within the realm of organizational change there is a high failure rate (Gorman & Overstreet-Miller, 1997; Kotter, 1995; Leitko, 1987; Svyantek & DeShon, 1993). Recognizing and acknowledging the existence of mental models as an organization approaches a change process removes one barrier to successful change. Being able to surface employees' and leaders' mental models and mediate the waters between them may result in greater commitment from all parties involved in the change. With this new awareness and steps to mediate the gap between employees' perceptions and managements' intent, organizations can set their course for more successful change efforts.

Definition of Terms

To enhance comprehension of this study the following terms are defined.

1. Attribution theory—This theory deals with cognitive processes individuals use to assign causes to events (McElroy, 1982).
2. Co-owner(s)—This term is used to refer to the two current owners of the research site.

3. Gainsharing—An incentive program to encourage employees to strive to achieve organizational goals.
4. Key change—This term is used to refer to the most significant changes leading to the end result. In the case of this study, key changes are identified by senior leadership.
5. Lean manufacturing—A means of maintaining or gaining market competitiveness through the identification and elimination of wasteful practices and behaviors.
6. Leaders—This term is used to encompass both senior leaders and the co-owners.
7. Mental models—This term is used to describe the cognitive maps which determine how individuals experience the world. In this document the term is interchangeable with the terms worldview, personal construct, and paradigm.
8. Occurrence—An incident that results in an employee receiving a “point” on their discipline record. Incidents include absences from work, arriving late, and leaving early. These are accrued for all absences, regardless of reason if the employee has utilized all personal days. Accumulated occurrences can result in termination of employment.
9. Order of Consciousness—Levels of cognitive development defined by the relationship between self and others or subject (that which is seen as part of self) and object (that which is seen as part of others) (Ignelzi, 2000; Kegan, 1994; "Kegan's orders of consciousness," 1999).
10. Pay for Skills—A compensation incentive program to encourage employee engagement, learning, and flexibility.

11. Perception—This term describes the truth an individual arrives at using their cognitive abilities and mental models/worldviews.
12. Personal constructs—This term is similar to worldview, schema, and mental model, however it is situated strictly in the psychology literature and is a very individualized cognitive structure based on experience.
13. Schema—This term is similar to worldview, personal construct and mental model. It is situated in cognitive psychology literature. Plural form—schemata.
14. Senior leadership—This term is used to refer to the upper-most tier of management within an organization. It does not include the co-owners.
15. Worldview—As used here, this term is synonymous with the terms paradigm and mental model. According to Koltko-Rivera (2004):

> Worldviews are sets of beliefs and assumptions that describe reality. A given worldview encompasses assumptions about a heterogeneous variety of topics, including human nature, the meaning and nature of life, and the composition of the universe itself, to name but a few issues. (p. 3)

CHAPTER 2

REVIEW OF THE LITERATURE

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. While this phenomenon can occur in many types of interactions, this study focused on differences and similarities in intents and perceptions occurring in the context of organizational change. In particular, this study attempted to surface the mental models held by leaders and hourly employees regarding specific changes that have been made. The purpose was addressed by the following research questions:

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Conceptual Framework

Although the practice of human resource development (HRD) is well established, HRD as an academic discipline is relatively young. As such, it relies on constructs from a wide range of disciplines, including philosophy, economics, and psychology to explain different phenomena

under study (Swanson & Holton, 2001). This study drew on constructs from psychology, anthropology, and philosophy, as well as from those already developed in the field of HRD, to generate a greater understanding of the role mental models have in how employees make meaning in the organization.

This chapter will begin with a review of the meaning making literature, including Kegan's orders of consciousness, attribution theories, and models of social perception, followed by the role of leaders in meaning making. Next, the evolution of thought on worldviews, personal constructs and mental models, all of which provide insight into how individuals approach the world and how this impacts social settings such as the workplace, will be explored. This chapter will conclude with a literature review on organizational change, as that is the context for this study.

Meaning Making

How does one go about interpreting the world around them? The answer lies where psychology and philosophy converge. The question of meaning making is philosophically grounded and the answer is contingent on both developmental and experiential factors. Developmentally, this section will explore Kegan's five orders of consciousness, which describe one's cognitive capacity for meaning making, attribution theories and models of social perception.

Philosophical Groundings

From a philosophical point of view there are three issues that inform how individuals make meaning: epistemology, axiology, and ontology. Different definitions exist for each of these terms. This study will use the terms as defined by Ruona and Lynham (2004). According to Ruona and Lynham, epistemology is "how we know and think about the world" (p. 154),

axiology is “how we act in the world” (p. 154), and ontology is “how we see the world” (p. 154). Ruona and Lynham operationalize these three tenets of philosophy in a circular model (See Figure 1) that demonstrates:

> …how we *see* the world shapes and directs how we *think* about the world; that how we *think* about the world shapes and directs how we *act* in the world; and that how we *act* in the world, in turn, reflects and influences how we *think* about and consequently *see* the world. (p. 154)

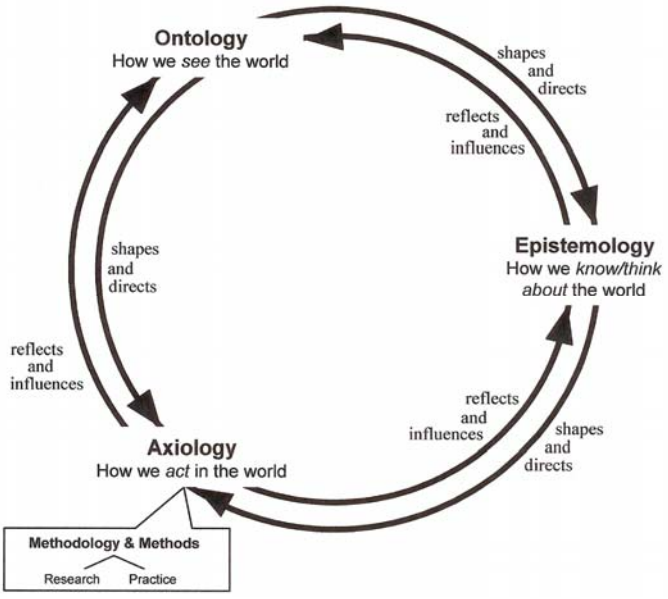

Figure 1. Ruona & Lynham’s (2004) A Philosophical Framework for Thought and Practice.

All of this is contingent on our cognitive capacity for meaning making and the experiences we have had. Worldviews and mental models, which will be discussed later in this chapter, are operationalizations of these philosophical concepts. The next section will provide a brief overview of Kegan’s orders of consciousness, attribution theory, and models of social

perception as a frame of reference for how individuals make meaning and why different people make meaning differently.

Kegan's Orders of Consciousness

A developmental perspective of meaning making comes from Kegan (1994) who identifies five orders of consciousness which occur in sequential order, each subsuming the previous. Two-thirds of adults are between the third and fourth orders of consciousness (Kegan, 1994). Orders one and two primarily deal with children and will only be addressed briefly. Orders three and four will be explored more in-depth as that is where the majority of adults are developmentally. And finally order five will be addressed only briefly, because it is rare to find individuals who have developed to this level (Kegan, 1994).

Kegan's orders of consciousness are defined by the relationship between self and others or subject (that which is seen as part of self) and object (that which is seen as part of others) (Ignelzi, 2000; Kegan, 1994; "Kegan's orders of consciousness," 1999). Order one is experienced by young children who see self and others (objects and people) as completely separate (i.e., there is no relationship between self and others). Individuals in this developmental order act on impulse, with no regard for others.

Around age six and into the teen years, children begin to recognize that objects (people and things) have properties all their own, unrelated to self. This is when a child begins to recognize that a quantity of liquid remains the same regardless of the width of the container. Kegan (1994) calls this the ability to make meaning by understanding durable categories; objects have lasting properties that define them. While individuals in this stage no longer act solely on impulse, they act based on their own needs and values, without consideration of the needs and values of others. Asked to relay what happened in a scenario, an individual making meaning at

the second order of consciousness will launch into a sequential retelling of what occurred without providing connections between elements.

Typically during the late teen years and into a person's twenties the transition to the third order of consciousness occurs. While making meaning from this perspective, individuals not only recognize durable categories, but they can see the relationship between categories. This allows individuals to co-construct meaning, however, in co-constructing, the "other" is taken in its entirety without reflection or adaptation. In the workplace a person making meaning at the third order of consciousness is dependent on external sources of validation (Ignelzi, 2000).

Ignelzi (2000) interviewed professionals regarding what they needed from their supervisors to feel supported. One individual operating at order three "stated that she needed her supervisor to validate that she was doing things right and in a way that her supervisor liked" (p. 11). This can be perceived as dependency on the supervisor and a belief that the individual may be willing to compromise his or her own beliefs and values for those of an "other." Additionally, this individual may be viewed as lacking skills or confidence, when actually he or she may be acting according to the dictate of the third order of consciousness. Kegan (1994) proposes that what is missing from corporate America is recognition that it takes more than technical skills for employees to be successful. If a supervisor can step back and recognize that this employee is operating from this place, a healthy balance of challenge and support can help move the employee to the fourth order. A supervisor, however, must understand the different challenges they will face with an employee operating at the fourth order of consciousness.

Individual's who develop into the fourth order of consciousness "begin to develop an independent selfhood" ("Kegan's orders of consciousness," 1999, p. 71) in which they become their own source of judgment and expectations. They no longer require external validation as

they have developed their own set of standards. It is during this developmental period that individuals develop the capacity for self-authorship, which is the “ability to take values and ideals as the object rather than the subject” (Kegan, 1994, p. 91). A fourth order participant in Ignelzi’s (2000) study indicated that she was able to reflect on many different points of view and formulate her own theory separate from those that already exist. Ignelzi says this is a reflection of meaning making which is “influenced by but not determined by external sources” (p. 8). Additionally, at this developmental point, individuals are able to “stand outside a relationship and make judgments about its demands without feeling the relationship itself …has been violated” ("Kegan's orders of consciousness," 1999, p. 73). Kegan (1994) explains this as the ability to have “a mutual appreciation of the other’s capacity to enter relation as a distinct human being…to recognize and respect both the other and themselves as complicated persons who bring something important and different, but often complimentary, to the relationship” (p. 310). This seems to have interesting implications in the workplace such that individuals operating at this level no longer accept information without reflecting on how it relates to their existing cognitive structures.

Successful managing implies managers are operating from the fourth order of consciousness in that they are self-authoring their jobs rather than being dependent on others for direction. While supervisors of employees operating at the third order of consciousness may feel these employees are overly dependent, employees in the fourth order present their own challenges. Even though supervisors may be operating from the fourth order of consciousness, they need to critically think about the impact of having employees at the fourth order. Fourth order consciousness requires self-correcting and internal standards, which can be deemed as

positive qualities. Employees operating from this place may also challenge the status quo and authority in their own effort to self-author their jobs.

Kegan ("Kegan's orders of consciousness," 1999) says fifth order consciousness is rare and “never appears before individuals reach their forties” (p. 73). While individuals operating at the fourth order of consciousness self-author their lives and perceive a wholeness about themselves, in the fifth order of consciousness, individuals transcend beyond this and recognize the possibility of identifying too much with their sense of wholeness as an individual, such that it prevents seeing the point of view of others. Kegan (1994) says “two distinct selves will inevitably have conflicts” (p. 312). Operating from the fifth order, reality is organized in a trans-system or cross-form which “begins with a refusal to see oneself or the other as a single system or form. The relationship is a context for a sharing and an interacting in which both are helped to experience their ‘multipleness’” (pp. 312-313).

This section described the type of meaning an individual can make based on cognitive development which was discussed in terms of Kegan’s orders of consciousness. Cognitive structures must be developed in order for experience to be meaningful. At the same time, experience, with a healthy dose of challenge and support, can facilitate movement through the cognitive structures of Kegan’s orders of consciousness. Kegan (1994) explains his orders of consciousness have to do with cognitive capacity; the ability to understand relationships between subject/self and object/other. Within an individual’s capacity, judgments about others are made. The next section will explore how these judgments or attributions are made.

Attribution Theory

Attribution theory has to do with the cognitive processes individuals use to assign causes to events (McElroy, 1982). Generally speaking, the cause can be attributed to personal

characteristics such as personality, or to the situation (Ferris, Bhawuk, Fedor, & Judge, 1995; Knapp, 1984). Negative behaviors or outcomes are typically attributed to external causes, while positive outcomes are attributed to internal causes such as personality or hard work (Knapp, 1984; Munton, Silvester, Stratton, & Hanks, 1999). Knapp suggests, however, "if we can't find a plausible situational cause, then we probably attribute the negative behavior to that individual's personality" (p. 129). Perhaps this is what occurs in the workplace when employees 'blame' supervisors or leaders for actions that negatively affect them.

Interest in studying attributions grew out of Heider's (1958) work. He theorized:

> How one person thinks and feels about another person, how he perceives him and what he does to him, what he expects him to do or think, how he reacts to the actions of the other…Generally, a person reacts to what he thinks the other person is perceiving, feeling, and thinking, in addition to what the other person may be doing. In other words, the presumed events inside the other person's skin usually enter as essential features of the relation. (Heider, 1958, p. 1)

He calls this common sense, or naïve psychology, due to its intuitive nature and offers that little study (in his time) had been done in this area. Although at the time it was given little credence by psychologists bound by the scientific world, Heider (1958) points out the value of common sense psychology: (a) it informs how we act toward others and (b) it contains intuitive truths.

Kelley (1971) explains this process of making attributions as "applying [one's]…knowledge of causal relations in order to exercise control of his world" (p. 2). Causal attributions are an important aspect of organizational life. They allow individuals to explain (and thereby control) their environment. Munton et al. (1999) say there are four levels of attributions

that are relevant to the workplace: (a) individual, (b) interpersonal, (c) intergroup, and (d) organizational. Each of these will be explored briefly.

Individual attributions are those made by an individual regarding their own behavior. In essence, this is how they justify their own performance (behaviors and actions). Interpersonal attributions are those made to explain another person's performance. This is evidenced in many workplace settings, including employment interviews and performance appraisals. Intergroup attributions and organizational attributions are slightly different from individual and interpersonal attributions. Individual and interpersonal attributions are made by individuals based on personal experience (whether it is observation, conversation, action, etc.,) with the person to whom the attributions are attributed. Intergroup and organizational attributions are of a group nature; each member of the group may not have direct exposure to the stimuli. Munton et al. (1999) indicate that attributions can be secondhand, passed through the group or organization via various communication channels (both formal, such as annual reports, and informal as in the indoctrination of a new employee into a work group). Intergroup attributions are made by a group to explain their performance or that of another group. Organizational attributions explain organization wide performance. This last level of attribution, organizational, can have a great impact on the organization. If, for example, a company has a bad year, the senior leadership can choose to attribute it to internal or external causes. If they choose external causes, such as an increase in competition or decrease in consumer interest, they will respond in a manner to overcome these obstacles. If, however, they choose to attribute their losses to internal causes, they will choose very different tactics, perhaps reorganization or firing individuals to whom they attributed the failure.

One thing that must be remembered in the study of attributions as a way of making meaning is that there is implicitly a reciprocal effect. Knapp (1984) calls this the spiral of reciprocal perspectives which he explains as: “What I think that you think of me reverberates back to what I think of myself. What I think of myself, in turn affects the way I act toward you” (p. 130). In other words the attributions a person places on another person, influences how the other acts towards them (Ferris et al., 1995; Knapp, 1984; Martinko & Gardner, 1987).

In addition to rational attribution tendencies that follow clearly from cause to effect, Kelley (1971) described those less rational attribution tendencies that have been documented. These are considered biases or errors. One bias he identifies is underestimating the influence of external forces when considering a person’s behavior. Called the fundamental attribution error (Ferris et al., 1995; Munton et al., 1999), the person making the attribution over emphasizes the dispositional causes and under emphasizes the situational causes. In an organizational context this may be seen when a supervisor blames a person for not succeeding, when in actuality there may have been some external forces at work. It may be perceived by some supervisors easier, or more politically astute, to place blame on someone specific (i.e., something they can control) than to attribute the cause to uncontrollable events in the environment.

Another bias is over attribution of one’s own influence on a situation. As an example of this, Kelley (1971) cites a 1964 study by Johnson, Feigenbaum, and Weiby in which a teacher has two pupils. Student A performs very well; student B performs poorly. In a consecutive teaching sequence, student A continued to perform well and in some instances student B improved, while others continued to perform poorly. When asked to explain why certain students improved the teacher attributed the success to his/her teaching. When asked to explain why some did not improve, the teacher attributed the lack of success to the student.

The final bias Kelley (1971) describes is attributing more responsibility to a person for actions taken for personal gain than actions taken to prevent loss or avoid punishment. In other words, if a person is benefiting from an action an observer would attribute it more to internal forces than if similar actions were taken to prevent a loss (in which case the loss would be considered an external force). A 1955 study by Thibaut and Riecken illustrates this premise. In this experiment, a subject was to persuade two other subjects (confederates of the experimenters) to help him. One confederate was given a higher status than the true subject, whereas the other was given a lower status. Both complied at the same point in time, and the true subject was asked to make causal attributions about the confederates' compliance. Many of the subjects attributed the higher status confederate's compliance to internal causes while attributing the lower status confederate's compliance to external causes. This takes into account issues of power and the influence or lack of influence a person's positional power can have on the perception of causal attributes (Kelley, 1971; Kelley & Michela, 1980).

Perceptual distortion is another issue that arises in forming attributions. That is, individuals do not always reveal the whole truth or may have a hidden intent. Knapp (1984) suggests this is a result of interaction between satisfying the inner needs of the perceiver and only presenting themselves as they would like to be seen, thereby potentially withholding information. In the work environment, for instance, managers may only reveal themselves as tough and detached leading employees to form a particular perception of them perhaps as unemotional, distant, uncaring, etc. This perception could be completely inaccurate, but was formed based on the information available. Based on the inaccurate perception, employees will relate to the manager in a certain way, which will cause the manager to respond accordingly, reinforcing the employees' perception. This "chain of reciprocal events" (Knapp, 1984, p. 133)

creates a self-fulfilling prophecy. Knapp says by recognizing what is occurring individuals can change their reality by changing their perception.

In summary, Kelley (1971) states,

> …attribution processes are to be understood, not only as a means of providing the individual with a veridical view of his world, but as a means of encouraging and maintaining his effective exercise of control in that world…The attributor is not simply…a seeker after knowledge. His latent goal in gaining knowledge is that of effective management of himself and his environment. (p.22)

This section introduced attribution theory as one theory that explains how individuals form attributions regarding others. The next section will further explore how perception gleaned through interactions relates to making meaning.

Social Perception

Social perception has four key components: (a) the perceiver, (b) the individual or group perceived, (c) the input or stimuli available to the perceived, and (d) the outtake or judgment made by the perceiver (Gage, 1953). Additionally, Neisser (1976) suggests the perceiver has "anticipatory schema" (p. 20) that prepares the perceiver to attend to certain stimuli. This section will introduce the concept of perception, ending with a model for social perception.

Neisser (1976) explains that perceiving is a cognitive act like remembering and imagining and offers that humans develop their perceptual abilities as they are exposed to experiences. The earliest studies in perception were experimental in nature and focused on visual perception. While seemingly unrelated to the study at hand, Neisser uses the visual examples as a way to understand other kinds of perception. Therefore, a brief overview will be provided here as a foundation.

Descartes may have been one of the first to study visual perception (Neisser, 1976). After dissecting a bull's eye, he aimed it at an object and examined the inverted image on the back of the retina. Neisser claims, however, that there is more to perceiving than the direct receipt of images, indicating that there are connections and relationships that are made simultaneously. In other words, "the image is not looked at but *processed*" (p. 16). Internal information processing theories were developed and often represented by flow charts such as Figure 2.

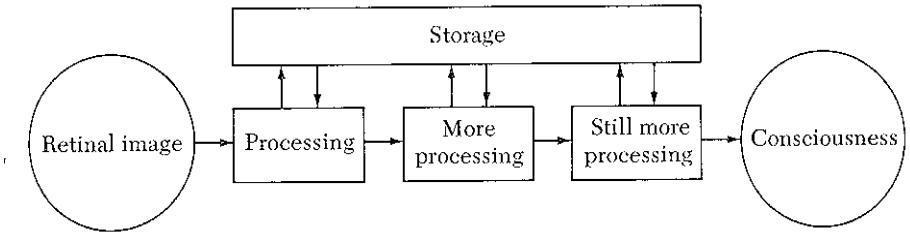

Figure 2. Neisser's (1976) The internal information-processing model of perception.

Neisser (1976) contends, however, that while these models address some aspects of perception, they do not address many other issues including selection, meaning, and perceptual development. He proposes that humans have existing schemata that prepare them to attend to certain kinds of information. Neisser defines schemata as "anticipations, they are the medium by which the past affects the future…" (p. 22). He says, "Because we can see only what we know to look for, it is these schemata (together with the information actually available) that determine what will be perceived" (p. 20). He elaborates on this by explaining that after the anticipatory schemata picks up information, the schemata get modified, which in turn redirects the search for additional information in a reiterative manner (see Figure 3). Neisser further clarified the definition of schema as "that portion of the entire perceptual cycle which is internal to the

perceiver, modifiable by experience, and somehow specific to what is being perceived" (p.54). According to this theory, information already received influences what will be picked up next. Perception consists of the entire cycle, with schema being one part of the process. There have been studies involving perception through senses other than sight (Neisser, 1976). Most of these studies have been conducted in an experimental setting, assessing the use of one sense or another. Neisser points out that most events in real life stimulate multiple senses and he says this "multiplicity of information" (p. 29) must have a role in the act of perceiving, emphasizing that individuals pay attention to multiple aspects simultaneously.

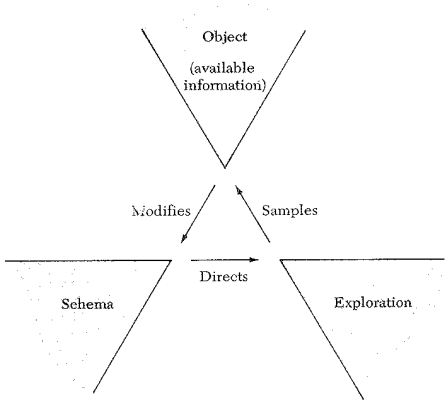

Figure 3. Neisser's (1976) The Perceptual Cycle.

As the act of perceiving changes what is attuned to, and no two people have exactly the same schemata, "Every persons' possibilities for perceiving and acting are entirely unique, because no one else occupies exactly his position in the world or has had exactly his history" (Neisser, 1976, p. 53). According to Neisser, perceptual development is dependent on information the world offers to the perceiver:

> In one respect, discussions of the object concept are bound to be misleading…they implicitly suggest that the function of perception is to inform us about things as mere

> objects: geographically and physically defined hunks of matter that are what they are whether we look at them or not. This is true, but it is far from being the whole truth. In the normal environment most perceptionable objects and events are *meaningful*. They afford various possibilities for action, carry implications about what has happened or what will happen, belong coherently to a larger context, possess an identity that transcends their simple physical properties. These meanings can be, and are, perceived. (pp. 70-71)

He goes on to say, "In reading or in listening, one perceives the meaning of words and sentences, the drift of an argument, or the undertones of feeling that may be represented" (p. 71). The perception is quick and direct, realized without paying close attention to the physical details of the messenger.

Using selective perception, perceivers can determine what behaviors to focus on (Knapp, 1984). Selective perception allows perceivers to choose what information to focus on to fulfill their own "needs, desires, or temporary emotional states" (p. 125). Selective perception is particularly evident when contradictory information is present; perceivers must make justification for how they interpret contradictory information in order to make sense of it.

What happens to information for which the perceiver has no schema? According to Neisser (1976), nothing. In the workplace this can create an interesting phenomenon. A manager (or even a colleague) makes a request or shares something recently discovered; yet it is possible that others are unconsciously unable to make meaning of the information. This is often evidenced when information is shared in a meeting and at the moment it does not pertain to the perceiver. Later, if the perceiver finds himself in a similar situation, he may not recall in a useful way what had been shared in the meeting.

Steins and Wicklund (1996) talk about this in terms of “subjective press” (p. 321). Press is the “resultant tendency to act toward” an other based on the combination of inner needs of the perceiver and the qualities of the other. If press is high, that is, if the perceiver is motivated, the perceiver will be more attentive to the context of the other and make more accurate perceptions of the other. If press is low, on the other hand, the focus is more on self. This is evidenced in situations of conflict. In conflict, the perceiver is less likely to be concerned with the context of the other. Rather, the perceiver is focused on their subjective self within the conflict as opposed to the interaction in its entirety.

Accuracy of perception is influenced by the types of tasks observed, the frequency of observation, and the relationship between the perceiver and the other, as well as other variables that impinge upon the other during periods of observation (Soskin, 1953). Soskin offers, for example, that an employer may do well perceiving an employee’s behavior at work, but not well perceiving how he behaves in regards to his family. The reverse may also hold true. A wife may be able to make accurate perceptions of her husband in regard to family life, but inaccurate perceptions of his work life. On the other hand a perceiver that has the opportunity to observe the other in many situations encounters much data, yet much of it is redundant or irrelevant to the perception being formed. Soskin (1953) says perceivers use past experience in relationships to determine what information is significant.

Gage (1953) also addresses this issue, accuracy of perception, in terms of relevancy. He cites an experiment by Chowdhry and Newcomb in which they found that the accuracy of social perception increased with relevancy to the relationship between the perceiver and the other. Gage challenges the reader, however, to consider the question of relevancy and states “it is not always obvious what kinds of outtake are relevant” (p. 131). That which is considered relevant to the

perceiver, may not be relevant to the other and vice versa. Reflecting back to the situation of a meeting in which a person is relating a recent experience with the purpose of informing or educating others in the meeting, although it is relevant to the speaker, at the present moment it may not have relevancy to others. This would effect the social perception of the speaker generated by members of the group. In turn, their actions or reactions inform the perception formed by the speaker of the members of the group.

Gage (1953) also conducted a study on accuracy of perception in which he looked at how people perceived others. Data included stereotype behavioral descriptors of the group being perceived; videotape of the group being perceived; and answers to descriptive questions completed by the group being perceived. Individuals viewed the videotapes and then made attributions about individuals in the tape. Two kinds of accuracy were identified. The first is based on perceptions generated from the stimulus presented, and the second based on ability to take the role of the other (i.e., to recall similar situations and make judgments based on existing schemata). He suggested, “the most accurate perceiver would be the one who achieved highly in both types of accuracy” (p. 140).

Characteristics of individuals considered to be good perceivers include “breadth of personal experience, ability to process complex stimuli and complex relationships, intelligence, self-insight…and the ability to assume a detached role, like a third-person observer” (Knapp, 1984, p. 127). Just as Gage (1953) said that the best judgments came from individuals who scored high on both types of accuracy, Knapp (1984) says that the best judges possess multiple characteristics of those listed above.

There are more stimuli present at any moment in time than an individual can process. One way individuals handle this is by clustering or grouping stimuli into categories that have

meaning for them, so that if any one stimuli is present, many other assumptions can be made (Knapp, 1984). An implicit personality theory, for example, allows individuals to group personality traits that go together within that person's experience. The result is, for example, if the perceiver is told a person is kind, the perceiver may also assume the person is warm, honest, and self-respecting. Another perceiver may have different traits associated with the trait "kind" and therefore would formulate a different perception of the person. When perceivers have a high degree of consistency with other perceivers, it is recognized as a stereotype.

Brehm and Kassin (1990) pulled the various aspects of attribution theory and perception together in a model of social perception (Figure 4). This model depicts the process perceivers cognitively engage in as they form impressions. Beginning with an observation of a person, situation or behavior, attributions are formed. The attributions are compared to the known or supposed dispositions (personality, attitudes, abilities, etc.) of the actor. The perceiver weighs and integrates all the gathered data and forms an impression. The impression then influences the perceiver's future perceptions. The top of the model demonstrates how snap judgments are made when the cognitive processing steps are skipped.

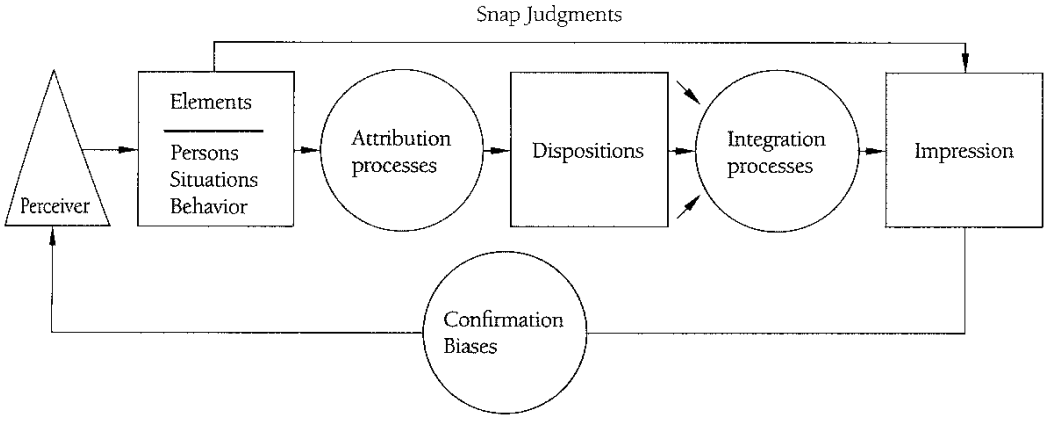

Figure 4: Brehm and Kassin's (1990) Processes of Social Perception.

The Role of the Leader

As the literature on attribution theory and social perception has demonstrated, these processes are reciprocal in nature in that how an individual perceives another affects how the other responds to them (e.g., Herold, 1977; Knapp, 1984; Martinko & Gardner, 1987). Herold (1977) found this to be an important consideration in leader-follower relations. Hollander and Julian (1969) offer a framework for studying the effects of leader and subordinate actions on each other, indicating the reciprocity of the influence. Herold (1977) conducted a study to demonstrate the bi-directional influences and the degree of influence each has on the other. His study, "demonstrated that both processes are active within the same context and in a given leader-subordinate relationship" (p. 235).

Attribution theory may also provide a viable explanation for conflict between a leader and an employee. Leaders and employees are each acting on their own causal attributions of a situation, which are likely to be different based on position within the organization and their own mental models (Martinko & Gardner, 1987). Additionally, the false consensus effect states that individuals tend to see their behavior as "common and appropriate" (p. 240). In making attributions, individuals use themselves as the standard against which they compare others because they believe their own performance is more representative than it actually is (i.e., false consensus). This section will further explore the role of the leader in the organization and demonstrate how the leader-follower relationship presents itself.

There are many definitions of leadership; Northouse (2004) defines it as "a process whereby an individual influences a group of individuals to achieve a common goal" (p. 63). Gardner (1990) offers a similar definition: "Leadership is the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the

leader or shared by the leader and his or her followers" (p. 1). These definitions seem particularly relevant in light of attribution theory and social perception concepts. Northouse further makes a distinction between assigned leaders and emergent leaders, although he says the principles he describes are applicable to both. Emergent leaders are the informal leaders that arise in an organization, while assigned leaders are the formal leaders. The emphasis in this study is on the distinction between perceptions of formal leaders and employees.

Defining precise roles of leaders in organizations is complicated by the fact that organizations are each their own entity, often defining roles as they are needed for survival in the organization. Further complicating the study of organizational leadership is the many different ways in which leadership is understood. Bass (1990a) identifies five categories of leadership theories: (a) personal and situational theories, (b) interaction and social learning theories, (c) theories and models of interactive processes, (d) perceptual and cognitive theories, and (e) hybrid explanations. Northouse (2004) considers leadership theories as person-oriented or process-oriented. This section of the literature review will examine the differences between managing and leading, provide a high level overview of select leadership theories, and explore transactional and transformational leadership theories as those deemed most relevant to understanding the leaders' role in portraying messages of change to employees.

The Differing Roles of Leadership and Management

One distinction found throughout the literature is between leadership and management (Bennis, 1989; Gardner, 1990; Kotter, 1990; Mintzberg, 2001; Northouse, 2004; Tichy & Devanna, 1986). The perspective taken by these authors is that while a balance of management skills and leadership skills is critical, their purposes are different. Field Marshall Sir William Slim, leader of the 14th British Army from 1943-1945 said, "Managers are necessary, leaders are

essential… Leadership is of the spirit, compounded of personality and vision… Management is of the mind, more a matter of accurate calculation, statistics, methods, timetables, and routine" (as cited in Bennis, 1989, p. 7). Management focuses on gaining control by seeking order and stability within a system. Leadership, on the other hand, is more focused on helping the organization cope with change.

As stated in the introductory chapter, change is a necessary condition for organizations in this fast changing society (Bennis, 1989; Kotter, 1990). Factors such as technological advancement, globalization, deregulation, and changing workforce demographics force organizations to change to remain competitive (Kotter, 1990). Both management and leadership must decide "what needs to be done, creating networks of people and relationships that can accomplish an agenda, and then trying to ensure that those people actually do the job" (p. 104). The difference is in how this is accomplished. For example, managers do this by focusing on organizing and staffing while leaders focus on aligning people around the vision. Managers try to ensure success by controlling and problem solving, while leaders do so by motivating and inspiring (Kotter, 1990; Sharma, 1997).

Another distinction between a manager and leader is in how they move an organization forward. Managers engage in planning, a deductive approach "designed to produce orderly results" (Kotter, 1990, p. 104), while leaders use an inductive approach, engaging with employees to "create visions and strategies" (p. 104). Neither approach can be successful without attention to the other, yet to those who are "overeducated in management" (p. 105) the leadership approach is overlooked:

> To executives who are overeducated in management and undereducated in leadership, the idea of getting people moving in the same direction appears to be an organizational

problem. What executives need to do, however, is not organize people, but align them. (p. 105)

Sharma (1997) says that while leaders need to be able to manage, not all managers are capable of being leaders.

In order to align people around the vision, Kotter (1990) stresses the importance of talking to "anyone who can help implement the vision and strategies or who can block implementation" (p. 107). "Getting people to believe the message" (p. 107) is another key factor in aligning people. Credibility of the message is enhanced by the messenger's own credibility, their track record for being believable. While the message is important, "…observers make sense of intentionality or underlying motives through the attribution process" (Ferris et al., 1995, p. 239). Furthermore, it is "…the sincere, genuine intentions of the executive" (Ferris et al., 1995, p. 249) that provide the real impact, as that is what employees will base their impressions on. Therefore, the role of the leader includes image management by the conveyance of sincerity. Employee attributions of behavior they deem to be sincere will facilitate alignment.

An outcome of alignment is a sense of empowerment (Kotter, 1990; Sharma, 1997). Empowerment is generated when employees at all levels are informed and trust that they can act independently towards the vision without fear of retribution. This is reflected in how leaders and managers respond to issues; while managers take corrective actions when plans get off course, leaders motivate to "ensure that they [employees] will have the energy to overcome obstacles" (Kotter, 1990, p. 107) when they arise. Calling on these forms of power is highly relevant in determining the effectiveness of the change message (e.g., Cervero & Wilson, 1994; Forester, 1989).

There are many studies that support this dichotomy between leader and manger. A study by Bennis (1982) of 90 effective CEOs, found consistent competencies among those leaders. First, each leader had vision and the ability to effectively and clearly communicate that vision. Second, each exhibited persistence, consistency, and focus in order to maintain the organization's direction, and finally each leader utilized empowerment to bring about the necessary changes. Additionally, these leaders were more concerned about "their organization's basic purposes, why it exists and its general direction" (p. 44) than with how to get things done.

A case study of leadership's role in the change process demonstrated the need for fluidity in the leaders' role during organizational change (Denis, Langley, & Cazale, 1996). As the situation in the organization under study evolved, the roles of the leader revolved between leader and manager in order to withstand the changes and continue the forward momentum. The setting for this study was a hospital in which there were two distinct leaders (one representing administration and one representing the physicians), both of whom reported to the governing Board. This structure left questions as to who was really in charge. In its original state, the two entities operated fairly independent of one another. The goal of the change process was to become more integrated with an external focus on the customer. The CEO hired a medical consultant to oversee the strategic planning process and build relationships to bridge the entities. The consultant was an employee of the hospital's Community Health Department who had demonstrated success in other change scenarios and had had relationships and credibility established with both the hospital administration and physicians.

What Denis, Langley, and Cazale (1996) found was that the consultant engaged in distinct behaviors that fostered his success. These behaviors, at various times, represented skills of both a leader and a manager. The relationships the consultant built created alignment around

the change initiative. One way in which he did this was to motivate the employees by recognizing their current successes, which were aligned with the new direction.

Additionally, his credibility was enhanced when he successfully responded to a crisis situation. He also sought opportunities to adjust his role to facilitate the change as the political environment changed. This was demonstrated when he obtained a formal administrative position that gave him authority to have control over parts of the organization as necessary in order to balance his role as leader and manager. Finally, he built networks of people throughout the organization that allowed forward momentum in spite of minor resistance from some employees. Many of the qualities represented in this case are the same as those described by Kotter (1990).

Another example of a leader who exemplified the qualities of both manager and leader is Lawrence A. Bossidy, formerly of AlliedSignal and Honeywell International. In an interview (Tichy & Charan, 1995), he described his leadership style which revealed that while he is serious about management (in the sense of ensuring there is order and control with an emphasis on results), he also portrays many of the skills of a leader as described by Kotter (1990). Bossidy describes his perspective as the "'burning platform' theory of change" (Tichy & Charan, 1995, p. 70). He says that people will only respond if they can see the flames. In other words, they have to see and feel the reasons the organization is changing and it is the leaders' role to make them see it. As expressed by both Kotter (1990) and Denis et al (1996), Bossidy stressed the necessity of talking to people and creating an environment that invites people to talk back in order to create alignment and a sense of empowerment.

Bossidy also expressed the importance of getting the right people in the right places (and those that do not agree with the new direction out of the organization) and the fact that goals need to be clearly communicated so that everyone is moving in the same direction. These points

resonate with the findings of Jim Collins (2001). Collins and his research team examined Fortune 500 companies that met certain criteria indicating that they had gone from good to great (and maintained their success) over a specified amount of time. In Collins' *Good to Great* study, eleven organizations made the good-to-great cut and were more closely examined to draw lessons on how they did it. Eleven additional organizations that were in the same markets and had similar success stories up until a certain point were also studied as comparison organizations.

Collins (2001) and his research team discovered that the leaders of all the organizations that successfully changed from good to great shared some common characteristics and beliefs. Leaders of successful, sustained change exhibited a deep sense of humility and professional will, or ambition. Their ambition, however, was not for their personal success, but for the success of their organization. This was seen in how they talked about success and how they developed others in the organization. Successful leaders are concerned not only for the present, during his or her tenure in the organization, but also for the longevity of the organization. They want the organization to develop in such a way that success will be last beyond their leadership tenure. Finally, when things go well, they are quick to point to others in the organization, while pointing to themselves when things go wrong.

Leadership Theories

Throughout the previous section the various descriptions of leader and manager indicate that a balance of leadership and management skills is necessary to navigate today's organization. In order to more clearly understand how leadership is portrayed, several of the many leadership theories are presented below. Leadership theories serve various purposes (i.e., description, process, etc.) and different theories are utilized to serve different needs of researchers and practitioners (McElroy, 1982). The theories presented here represent those that appear to have

evolved over time into the theory that is most closely associated with change—transformational leadership.

Trait Theory

Trait theories of leadership were originally conceived through observation of individuals identified as leaders (Bass, 1990a). Researchers were seeking to find characteristics that distinguished leaders from other people. These ranged from physical characteristics to psychological characteristics such as integrity and confidence (Bass, 1990a; Northouse, 2004). Trait theories of leadership imply that what makes a person a leader is innate, making it difficult, if not impossible, for someone who does not display "the" traits to be a leader.

Situation Theory

In direct contrast to pure trait theory, situational theorists said it was the situation that caused the leader to emerge (Bass, 1990a). Leaders responded to "time, place and circumstance" (Bass, 1990a, p. 38). An example of situational leadership is the Hersey-Blanchard (1977) model, which portrays the leader adapting her style to the followers' needs at a given point in time. This model considers two dimensions in defining the situation: directive behavior (task) and supportive behavior (relationship).

Situational leadership takes the definition of a leader outside of the person, which leaves the door open for someone to *become* a leader. In other words, a person can learn how to be a leader by learning how to respond to various situations. This is more explicitly seen in theories in which leadership is seen as a process and this is the type of leadership that is most relevant to this study. Viewing leadership as a process conjures up images of action and exchange. These theories include House's (1971) path-goal theory which grew out of the expectancy theory of motivation and attempts to explain why contingent rewards work as motivators (Bass, 1985a).

Path-Goal Theory

House (1971) developed the path-goal theory after reading research by Evans in 1970 which led him to recognize that "leader behaviors are likely contingent on the organizational context in which the leaders and followers worked" (House, 1996, p. 324). This aligned with findings from his own research in a manufacturing organization, which to this point he could not explain. The new understanding was that that the amount of structure or guidance from the leader varied according to the needs of the subordinates and therefore was different in different situations.

House and others (Evans, 1996; Yukl, 1994) agree that the theory was not adequately tested. They also agree that the theory had its place in history (Evans, 1996; Schriesheim & Neider, 1996; Yukl, 1994). Evans (1996) quotes Donald Hebb as saying "a good theory was one that stays around long enough to help one get to a better theory" (p. 307).

Charismatic Theory

The 1976 charismatic theory of leadership grew out of the path-goal theory (House, 1996). House describes charismatic leadership as leadership that "primarily addressees the effects of leaders on followers' valences, emotions, nonconscious motivation, and self esteem" (p. 333). Charismatic leaders have characteristics such as "being dominant, having a strong desire to influence others, being self-confident, and having a strong sense of one's own moral values" (Northouse, 2004, p. 171) such that others are drawn to them. Charismatic leaders use these characteristics to their advantage by being role models for the values they want others to adopt, appearing competent to followers, articulating "ideological goals that have moral overtones" (p. 172), and communicating high expectations to followers. This extended the path-goal theory to incorporate notions of empowerment. House views charismatic leadership as

leadership that changes people instead of responding to their needs as in path-goal leadership (House, 1996). Charismatic leadership is a bridge from transactional leadership (fulfilling subordinates' expectancies in exchange for performance) to the early stages of transformational leadership (Evans, 1996).

Peter Drucker reflected this notion of transactional leadership versus transformational leadership when he said, "In the traditional organization—the organization of the last one hundred years—the skeleton or internal structure, was combination of rank and power. In the emerging organization, it has to be mutual understanding and responsibility" (as cited in Day, 2000, p. 581). For effective, sustained change there needs to be a balance between these two types of leadership. The next section will distinguish transactional leadership from transformational leadership.

Transactional and Transformational Leadership

Two theories of leadership that are particularly relevant to the study of organization change are transactional and transformational leadership. Originally identified by Burns (1978) in regard to political leadership, Bass (1985) applied this concept to organizations (Kuhnert & Lewis, 1987). Transactional leadership is contingent on an exchange, either a reward for complying or punishment for failing to comply (Bass, 1990b; Bass, Jung, Avolio, & Berson, 2003; Northouse, 2004; Pearce et al., 2003; Seltzer & Bass, 1990), while transformational leadership

> …occurs when leaders broaden and elevate the interests of their employees, when they generate awareness and acceptance of the purposes and mission of the group, when they stir their employees to look beyond their own self-interest for the good of the group. (Bass, 1990b, p. 21; Northouse, 2004; Seltzer & Bass, 1990)

Transformational leadership is leadership that can withstand turbulent and changing environments as a result of the type of relationships formed between the leader and employees (Bass, 1985a; Bass et al., 2003). Tichy and Devanna (1986) say that transactional leadership was sufficient in times of no competition and stability. Transactional leaders were able to come into an organization, reward employees for compliance, and change little. They purport that transformational leadership "is about change, innovation, and entrepreneurship" (p. vii). Transformational leaders effectively deal with change and innovation by inspiring employees to be successful by attending to their needs. Yukl (1999) states,

> In contrast to the rational processes emphasized in earlier theories, the new theories emphasize emotions and values, which are necessary to understand how a leader can influence followers to make self-sacrifices, commit to ideological objectives, and achieve much more than they initially believed was possible. (p. 33)

Burns described transactional and transformational leadership as opposite ends on a continuum, whereas Bass describes them as independent dimensions (Bass, 1985a; Bass et al., 2003; Seltzer & Bass, 1990). Bass (1985a;1985b; Bass et al., 2003) indicates that leaders portray patterns of both transactional and transformational leadership, with transformational leadership augmenting transactional leadership behaviors.

Numerous studies on leadership conducted by Bass (1985a) identified three factors that correspond with transformational leadership (charisma, individualized consideration, and intellectual stimulation) and two that correspond with transactional leadership (contingent reward and management-by-exception). These factors closely align with the literature that demarks management from leadership (Kotter, 1990; Northouse, 2004).

Bass et al. (2003) conducted a study of 72 platoon leaders to examine how transformational, transactional, and passive-avoidant leadership behaviors related to potency, cohesion, and performance. They found transformational leadership and transactional leadership both predicted unit performance. Transformational leadership, however, was also positively correlated with ratings of unit potency and cohesion. When the transactional leadership scale was segmented into higher and lower contingency rewards, transformational leadership had a greater influence when the rewards were based on contractual exchanges than when the rewards were of a more intrinsic nature, demonstrating a bridge between transactional and transformational styles. Based on this study, Bass et al. (2003) indicated, "transactional leadership is needed to establish clear standards and expectations of performance" (p. 216) and this type of leadership can build a base of trust in the leader, which a transformational leader can then build on.

Tichy and Devanna (1986) interviewed transformational leaders with whom they had personal knowledge and had observed in action. They identified seven common characteristics of these leaders. First, the leaders saw themselves as change agents. Each of the leaders found themselves responsible for leading an organization through a change, and internalized the identity of a change agent. Second, transformational leaders were courageous. They took risks and stood up for what they believed in. Third, transformational leaders believed in people. They each worked toward empowering employees and had a set of guiding principles to do so. Fourth, transformational leaders were value-driven. Each leader had a core set of values that guided their behavior. Fifth, transformational leaders were life long learners. All of the leaders were able to talk about learning from mistakes they had made over the years. Sixth, transformational leaders had the ability to deal with complexity, ambiguity, and uncertainty. These leaders were all disciplined thinkers, enthralled by ideas. They were "individuals who build theory, articulate

principles, [and] examine assumptions" in order to deal with the complex world in which they work. And, finally, transformational leaders were visionaries. They were able to take their ideas and dreams and convey them so others could share them.

Reflecting back on the two definitions of leadership presented at the beginning of this section: "a process whereby an individual influences a group of individuals to achieve a common goal" (Northouse, 2004, p. 63) and "…the process of persuasion or example by which an individual (or leadership team) induces a group to pursue objectives held by the leader or shared by the leader and his or her followers" (Gardner, 1990, p. 1) one can see how attribution theory and social perception are relevant to the study of leadership. Given that existing schemata guide the social perception and the formation of attributions, the next section will focus on various connotations of where these "maps" come from and how individuals use them.

Mental Models: A Historical and Modern View

The literature on worldviews, personal constructs, and mental models provides some guidance in understanding why people interpret the same stimuli differently. Ruona and Lynham (2004) state, "Our views of the world are constructed in a variety of ways and how one views the world impacts all else that flows from that view" (p. 152). This corresponds to Neisser's (1976) explanation of how schemata determine what information is perceived and how that information influences what is perceived next.

Worldviews are lenses through which individuals interpret the world. Kelly (1955) uses the term personal construct to describe this cognitive map through which individuals make meaning, while Senge (1990) uses the term mental model. Worldviews, personal constructs, or mental models not only affect how individuals perceive the world, but how they act in it. I will use the term mental model whenever possible to refer to this concept, as that is the term more

frequently seen in the HRD literature. I will, however, defer to the terminology used by the authors cited when it is appropriate.

Theories-of-Action

Action is represented in two theories provided by Argyris and Schön (1974; 1996): (a) espoused theories and (b) theories-in-use. An espoused theory is a "theory of action which is advanced to explain or justify a given pattern of activity" (p. 13), and a theory-in-use is a "theory of action which is implicit in the performance of that pattern of activity" (p. 13). Theories-in-use are tacit and "must be constructed from observation of the pattern of action in question" (p. 13). Theories-in-use are the worldviews or mental models individuals develop to understand and operate in the world.

As will be explored in this section, worldviews, personal constructs, and mental models often remain undisclosed and unexamined. Argyris and Schön (1996) offer two reasons theories-in-use remain tacit: (a) the individual may not be able to describe their theory-in-use or, (b) they may feel insecure or threatened if the theory-in-use does not match their organization's espoused theory. A further discussion of worldviews, personal constructs, and mental models will shed light on how they are formed and why they are not easily discussed.

Worldviews

Historically, the term worldview has been used to describe the framework (ontology) for how people understand the world (epistemology), and this understanding influences how they act in the world (axiology). For example, if a person believes people are generally good-natured, they will interact with people in a different way than if they are suspicious of people's intent. Koltko-Rivera (2004) clarifies, "Not all beliefs are worldview beliefs. Beliefs regarding the

underlying nature of reality, 'proper' social relations or guidelines for living, or the existence or nonexistence of important entities are worldview beliefs. Others are not" (p. 5).

Koltko-Rivera (2004) traces the understanding of worldviews back to Friedrich Nietzsche (1872-1956). Before this time, the understanding of worldviews was based on theogony (how the gods came to be) and cosmogony (how the earth was created and populated). Nietzsche believed there was more. "Nietzsche's insight was that different worldviews have an independent validity and appeal for those who hold them, and that it is worthwhile to compare worldviews in other ways than merely to claim that a given one is exclusively true" (Koltko-Rivera, 2004, p. 6), which is how worldviews had been justified in the past. In *The Genealogy of Morals* (1956) Nietzsche specifically calls for people "to know the conditions from which those values have sprung and how they have developed and changed…" (p. 155) so they may be discussed. Put in terms of the philosophical model introduced earlier in this chapter, Nietzsche was challenging people to think about epistemology—"how we know and think about the world" (Ruona & Lynham, 2004, p. 154).

Nietzsche (1956) also addressed the capacity of man to store in memory and use experiences to open "a whole world of new things, conditions…" (p.190). He even goes so far as to say man will find agreeable others with like views:

> Being truly free and possessor of a long-range, pertinacious will, he also possesses a scale of values. Viewing others from the center of his own being, he either honors or disdains them. It is natural to him to honor his strong and reliable peers…Yet he will inevitably reserve a kick for those paltry windbags who promise irresponsibility…His proud awareness of the extraordinary privilege responsibility confers has penetrated deeply and become a dominant instinct. (p. 191)

He calls this awareness “conscience” (Nietzsche, 1956, p. 192). This individualized influence over action is one of the earliest depictions of the modern understanding of worldviews.

From a psychological perspective, Freud did not believe that worldviews had utility (Koltko-Rivera, 2004). He saw “worldviews as concepts that individuals hold consciously, philosophical constructions… designed to tie the world up into neat and explainable packages…” (Koltko-Rivera, 2004, p. 6-7). Although Freud acknowledged the concept of worldview, he objected to the concept arguing it left little room for “knowledge derived from revelation, intuition or divination” (Freud, 1964, p. 159). While many agreed with Freud, there are numerous critiques of his approach to worldview. Freud described worldviews as “an ontological catechism” (Koltko-Rivera, 2004, p. 8) that offered a description of reality, yet Freud’s critics saw worldviews “as a lens through which one reads reality” (p. 8). Additionally Koltko-Rivera points out Freud “seemed to consider worldviews optional” (p. 8) while his critics saw worldviews as a necessary way to organize the world. Finally, Koltko-Rivera says critics addressed Freud’s “apparent assumption that worldviews are consciously chosen” (p. 8) describing worldviews in a more subtle sense as a behind the scenes influence on the activities of life.

Moving to the field of cultural anthropology, Kluckhohn and Strodtbeck (1961) describe worldviews as being formed by how individuals respond to five basic value oriented issues common to all individuals. They proffer that there are a limited number of human problems people deal with and a set range of responses. These problems relate to: (a) how one views human nature, (b) the relationship of man to nature, (c) the temporal (past, present, or future) focus of human life, (d) the activity level of humans (being vs. doing), and finally, (e) how they view human relationships (Kluckhohn & Strodtbeck, 1961; Koltko-Rivera, 2004). Kluckhohn

and Strodtbeck (1961) acknowledge possible variation in worldviews, however the only variation is within the ranking of these values. This ability to consciously alter a worldview (by answering the questions differently) seems to be a precursor to our modern day understanding of how individuals have different mental models and how it is possible to alter mental models.

Royce (1964), a psychologist, described worldviews as constructs that, with difficulty, can be changed. In *The Encapsulated Man* (1964), Royce explains "man is encapsulated. By encapsulated I mean claiming to have the whole of truth when one has only part of it...looking at life partially and proceeding to make statements concerning the whole of life" (p. 2). If man wants to broaden his worldview, he must first recognize that he is encapsulated, which Royce acknowledges as very difficult because it "demands that we be able to get completely inside and outside ourselves, our culture, and our time" (p. 6) in very much the same manner present day writers on worldviews and mental models talk about surfacing the tacit, cognitive maps that guide our actions. Royce says the "unencapsulated man has an awareness of the validity and value of the many avenues to life…he claims to have a world-view or a conception of ultimate reality projected from a broad rather than a narrow reality image" (p. 7). Becoming unencapsulated seems to be a goal in order to have a broader view of reality. The goal of surfacing mental models in the workplace is to achieve the same end.

Personal Constructs

Kelly (1955) used the term personal constructs to describe how people make meaning. Personal constructs allow individuals to "represent the environment, not merely to respond to it" (p. 8); they are templates that can be laid over an experience and assessed for a match. If there is no correlation between the template and the experience, the template can be altered. This ability to alter a personal construct to fit a situation differentiates it from many early concepts of

worldviews. When a personal construct is held close (as often is the case with religious beliefs) a person is less likely to change the construct to fit the situation, resulting in a dissonance.

The ability to alter personal constructs allows for "alternative constructions" (Kelly, 1955, p. 8) upon which man can act. The result of thinking along these lines is that "what he perceives may not exist, but his perception does" (p. 8) and this is how he represents himself in the world. In other words, a person's perception is his reality upon which he acts. In addition to being used to make meaning, personal constructs are used to predict future outcomes. It is this predictive capacity of personal constructs that influences how an individual acts in the world.

Kelly (1955) addresses the transferability of personal constructs as a possible, but not precise act. Communication is the mechanism that allows for personal constructs to be transferred from one person to another. The process is not precise, as language is a symbolic representation of the construct being transferred, and the receiver may have constructs of their own that influence their understanding of the symbols (words). This results in only an approximation of the personal construct being transferred.

Mental Models

Moving from the foundations of worldview formation to the practical use of worldviews, Senge (1990) defined mental models as "deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action" (p. 8), or the cognitive maps which we use to navigate the world (Chermack, 2003; de Geus, 1992; Senge, 1990; Senge et al., 1994). Senge et al. (1994) say, "Differences between mental models explain why two people can observe the same event and describe it differently; they are paying attention to different details" (p. 236).

Surfacing Mental Models

Determining what mental models are at work provides leverage for change and can enhance an organization's ability to get through change episodes (Roberts, 1994). Much as Kelly (1955) offered communication as a means of surfacing personal constructs, Carley and Palmquist (1992) state:

> (1) Mental models are internal representations, (2) language is the key to understanding mental models…(3) mental models can be represented as networks of concepts, (4) the meaning of a concept for an individual is embedded in its relations to other concepts in the individual's mental model, and (5) the social meaning of a concept is not defined in a universal sense but rather through the intersection of individuals' mental models. (p. 602)

Essentially Carley and Palmquist (1992) argue that we can gain insight into social action by surfacing representations of individuals' mental models through language.

Argyris and Schön (1996) warn, however, that asking someone to recreate their intention can result in a retelling that may not be accurate. They indicate a number of reasons for this including that the informant may not be able to make an accurate recollection of their intention or that the informant may recreate the intention to better suit what actually occurred. Argyris and Schön also identify that the informant may be trying to please the researcher or engaging in image management. Their recommendation for overcoming this barrier, in the long term, is to engage informants in action science so that their mental models can be surfaced throughout the process, rather than after the fact. Action science is an approach to change that involves people throughout the process as "designers of their actions in the service of achieving intended consequences" (Watkins & Shindell, 1994, p. 43).

Returning to Carley and Palmquist's (1992) belief that mental models can be surfaced through language, the focus must turn to how best get at those tacit theories-in-use. Two skills that can facilitate the process of uncovering mental models are inquiry and reflection (Ross, 1994). Inquiry forces the question "what is happening here?" while reflection helps the individual understand why it is happening. The ladder of inference (Figure 5) is one tool to guide this process. Ross (1994) describes the ladder of inference as a "common mental pathway of increasing abstraction, often leading to misguided beliefs" (p. 243); it helps a person explain their leaps of abstraction (Senge, 1990). This principle seems to parallel Brehm and Kassin's (1990) model, "process of social perception," particularly in the way individuals often make snap judgments without taking the time to be reflective.

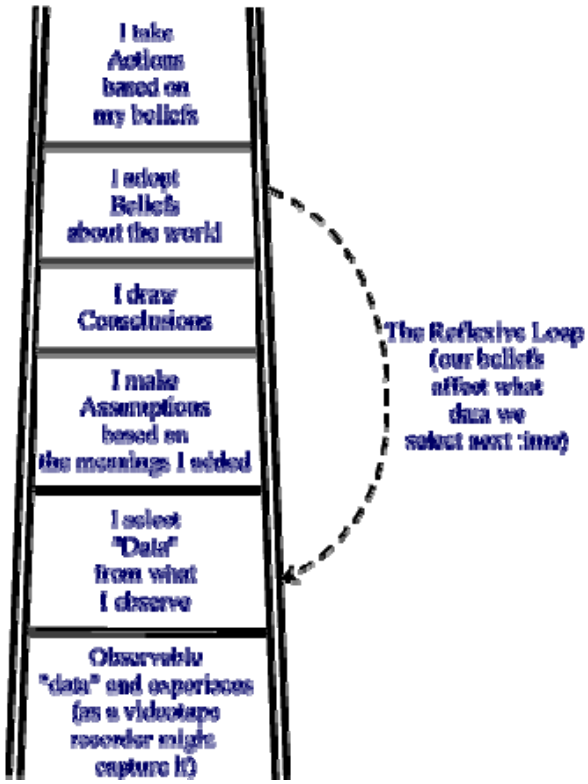

Figure 5. Senge's (1994) Ladder of Inference.

The ladder of inference begins with observable data from which a person unconsciously selects particular details to which they pay attention. From these details, meaning is generated based on the individual's mental models, accepting that meaning as truth, assumptions are made. Based on the assumptions, conclusions are drawn and beliefs are adopted to confirm these conclusions. The individual then acts based on these beliefs. Typically, a person goes from the bottom of the ladder (observation) to the top (action) in a matter of seconds without questioning how he got there; this is how one takes a leap of abstraction. Although depicted as a ladder, the process is cyclical in that beliefs then inform which data is paid attention to (selected) and the process continues. In order to understand what is going on, the person must engage in inquiry (asking what is happening at each ladder rung) and reflection (why is it happening that way and what alternatives were there for this situation). In a social setting, such as the work place, each and every person is climbing the ladder of inference, often without realizing what is happening. Although mental models play such an important role in our understanding of reality, they are often unexamined.

Changing Mental Models

In general, the mental models we carry with us paint our reality and these deep-seated cognitive maps are hard to intentionally change. Chermack (2003) suggests, however, mental models are constantly changing as individuals interact with their environment. Walston and Chadwick (2003) found that over time the mid and senior managers' perceptions of the change grew more positive, while perceptions of the front line employees became more negative. In their study, for example, the overall effect was a 4%-5.7% increase per month in overall positive perception. This percentage, however, factors in "a significant and stronger negative effect…" (Walston & Chadwick, 2003, p. 1597) from the responses of RNs and staff level employees.

Kleiner (Senge et al., 1994) agrees, stating “changes in short-term everyday mental models, accumulating over time, will gradually be reflected in changes in long-term deep seated beliefs” (p. 237). While mental models are difficult to intentionally change, Walston and Chadwick (2003) found there is evidence that they can and do change based on accumulated experiences.

As this study is situated in the context of change and, as Bierema (1998) notes, “change occurs through learning” (p. 89), it is important to look at how learning and change are related. One way to look at this is through Argyris’ (1977) two types of learning: (a) single loop learning and (b) double loop learning (see Figure 6). Although Argyris coined these terms referencing organizational learning processes, this distinction has been used at the individual level and is particularly relevant in this discussion of changing mental models. Single loop learning is when the response to a situation is chosen from a set of prescribed responses, which results in somewhat predictable outcomes and creates little or no change. The purpose of single-loop learning is to “achieve existing goals and objectives, keeping … performance within the range specified by existing values and norms” (Argyris & Schön, 1996, p. 22). Double loop learning (resulting in change) requires a questioning of underlying beliefs and assumptions that govern theories-in-use. It “turns the question back on the questioner, exploring not only the objective facts surrounding an instance of inefficiency, but also the reasons and motives behind those facts” (p. 27). Double loop learning is what allows an individual or organization to change fundamental beliefs.

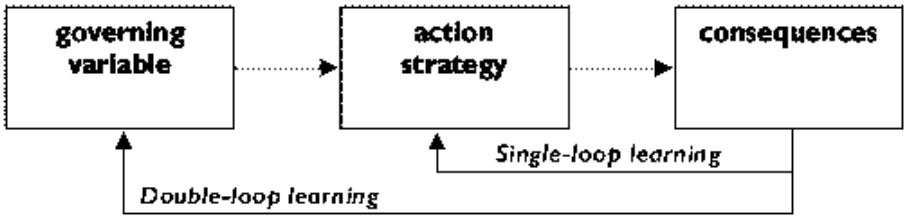

Figure 6. Aryris and Schön's (1974) Single and Double Loop Learning Model (adapted).

Triple loop learning (Figure 7) is yet another, more complex way of making meaning and changing mental models. In addition to reframing and seeing things a new way as in double loop learning, triple loop learning requires one to understand the implications of the change and understand the change in context. In his book *Masterful Coaching*, Hargrove (2002) equates single loop learning with adding new skills, double loop learning with changing patterns of thinking, and triple loop learning with shifting the context.

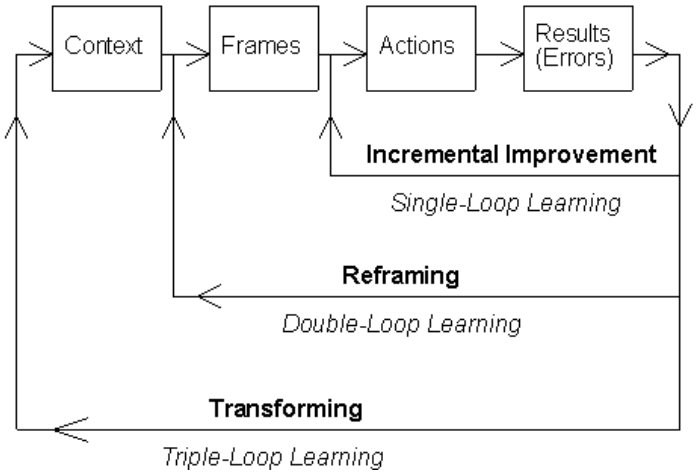

Figure 7. Hargrove's Single, Double and Triple Loop Learning (from website).

In a 1982 essay Argyris claims it is unlikely that organizations can learn! What he further explains, is that it is very difficult and requires much diligence for organizations to learn, therefore many organizations will not learn. de Geus (1988) concurs, stating that "A full one-third of the Fortune '500' industrials listed in 1970 had vanished by 1983" (p. 70) due to their inability or unwillingness to learn. The difficulty Argyris and de Geus are referring to is that in order for organizations to learn, individuals must learn, and he has found that most individuals are programmed for single loop learning in which beliefs are so ingrained they are accepted as reality and not questioned. Inquiry and reflection do not occur in most situations. What this means is that even if an organization says it wants to utilize double loop learning and creates an environment conducive to inquiry and reflection, the individuals in the organization are not programmed to operate in this manner. Argyris says for an organization to shift into double loop learning, an intervention has to occur at the individual level, starting with the highest-level employees. As the leaders' behavior begins to reflect the desired double loop learning, the next level employees should be brought in and supported as they learn to be intentional in using double loop learning, and so on until the entire organization has adopted this way of being (Goodman, 1982).

With this rudimentary understanding of how learning occurs, and the knowledge that change occurs through learning, we turn our attention to various theories of change. The next section will begin by addressing the literature on conditions required for organizational change and conclude with a review of the literature on four specific frameworks for organizational change: (a) incremental, (b) revolutionary, (c) punctuated equilibrium, and (d) chaos.

Planned Organization Change

The next section will begin by addressing the literature on conditions required for organizational change and conclude with a review of the literature on four specific frameworks for organizational change: (a) incremental, (b) revolutionary, (c) punctuated equilibrium, and (d) chaos.

Kurt Lewin developed one of the earliest models of change in 1947. Recognizing that the outcomes of change were often short lived, he proposed a three step model: (a) unfreezing, (b) moving, and (c) refreezing (Lewin, 1947). This process was to facilitate change that would last. Building on Lewin's model of change, Schein (1992) describes a process of how organizations change. He describes how an organization's culture (beliefs, values, attitudes, assumptions, and artifacts) works to create a state of equilibrium to sustain the organization. When this state of equilibrium encounters a disturbance, the organization must unfreeze those beliefs embedded in the culture and examine them in the current context. Schein (1992) lists three conditions that would prompt an organization to move into the unfreeze stage of change. There needs to be:

1. enough *disconfirming data* to cause serious discomfort and disequilibrium;
2. the connection of the disconfirming data to important goals and ideals causing *anxiety and /or guilt*; and
3. enough *psychological safety*, in the sense of seeing a possibility of solving the problem without loss of identity or integrity, thereby allowing members of the organization to admit the disconfirming data rather than defensively denying it. (pp. 298-299)

All three conditions must be present for an organization to be motivated to change. It is not uncommon for disconfirming data to be present for long periods of time without motivating

action. Reasons for this could be that organization members did not feel the psychological safety necessary or the data may not have presented a big enough dilemma to motivate action.

Once organizations have been motivated to change (i.e., they are unfrozen), new learning and change can occur. To be successful, the organization must refreeze the new learning so that it is once again in a state of equilibrium.

Schein's (1992) and Lewin's (1947) models are process models, describing what must occur for change to be enduring. They do not address how deep the change must be or the rate of the change. There are, however, several frameworks of change that utilize the process models, yet address the issues of depth and rate. The next section will address these frameworks.

Frameworks of Change

The organization change literature reveals, roughly, four frames of reference regarding how organizations change: (a) incremental, (b) revolutionary, (c) punctuated equilibrium and (d) chaotic. Each of these frameworks revolve around the early process model proposed by Lewin (1947), but also address either the depth of the change or the rate of the change. The change frameworks discussed herein are referred to using many nomenclatures. Some of the more common terminology is highlighted here in order to minimize confusion. First-order change, Alpha change, and continuous change are frequently used to refer to incremental change. Second-order change, gamma change, radical, discontinuous, fundamental, and transformative change are terms for revolutionary change. New science, complex adaptive systems, complexity, and radical are frequently used in reference to the chaotic theory of change. I will use the terms incremental, revolutionary, and chaos whenever possible. In citing literature I will defer to the author's terminology.

Incremental Change

Incremental change is a change "within a relatively fixed system or state" (Golembiewski, Billingsley, & Yeager, 1976, p. 135) and can be equated with single loop learning. This is a gradual change that is often expected in the normal progression of development and is often motivated by an internal or external catalyst exerting pressure on one or more parts of the organization. Bartunek and Moch (1987) put this in terms of organizational development (OD) interventions saying, "many OD interventions have been designed as first-order interventions—that is, they focus on solving problems so that established patterns can function more effectively" (p. 487). They also indicate that since the changes are not revolutionary, little attention is given to the political consequences of the changes.

Schein (1992) describes incremental change as a gradual evolution that occurs when organizations assimilate what works into the culture. He further posits two processes of evolution, general and specific. General evolution is described as the natural development of an organization as it grows and "involves diversification, growing complexity, higher levels of differentiation and integration, and creative synthesis into new and higher-level forms" (p. 305). This type of evolution can result from internal or external forces, as the organization strives to survive in its current environment. Specific evolution, on the other hand, is focused on individual parts of an organization. These parts, or subcultures, each exists within their own environment and evolve to ensure their own survival (Schein, 1992).

Weick and Quinn (1999) take a less optimistic view of organizations experiencing incremental change. They describe organizations as being in a state of inertia, slow to respond to the need to adapt. However incremental change is viewed, it tends to be less traumatic than other types of change, as it is the result of a felt need at the local level. People who are affected by the

change are often involved in the determination of the need for action (Meyerson & Martin, 1987). Considering incremental change in light of Lewin's (1947) model of unfreezing, moving, and refreezing one would find the movement (or change) to be small and slow, not requiring a deep examination of the fundamental assumptions of the organization, and the rate of change is typically slow.

Revolutionary Change

A 1985 study by Lorsch found that making incremental changes did not result in the "kinds of changes that were necessary to improve adaptation to a rapidly changing environment" (Schein, 1992, p. 302) and called for a "more substantial restructuring of concepts" (p. 302). In regard to this restructuring of concepts Cummings and Worley (2000) say, "Organization transformation implies radical changes in how members perceive, think, and behave at work" (p. 499). In contrast to incremental change where the change occurs "within a relatively fixed system or state" (Golembiewski et al., 1976, p.135), revolutionary or transformative change is concerned "with fundamentally altering the organizational assumptions about its functioning and how it relates to the environment. Changing these assumptions entails significant shifts in corporate philosophy and values and in the numerous structures and organizational arrangements" (Cummings & Worley, 2000, p. 499). This degree of change can be equated to double loop learning and, as a result, revolutionary change can be traumatic to employees as it entails a change in worldview (Meyerson & Martin, 1987). Bartunek and Moch (1987) say, unfortunately, many change programs fail due to lack of attention to these organizational (and human) aspects. When attention is paid to these events and employees truly grasp the concept and context of the change, it may be considered triple loop learning.

In contrast to incremental change, transformative or revolutionary change radically alters the nature of an organization (Cummings & Worley, 2000; Gersick, 1991; Golembiewski et al., 1976). In this type of change, change encompasses "structure, information systems, human resources practices, and work design" (Cummings & Worley, 2000, p. 500) in order to support changes in values and assumptions. In order for the change to be deemed successful, according to Cummings and Worley, "a majority of individuals in the organization must change their behavior" (p. 500). While Cummings and Worley state, "…[revolutionary] change may occur rapidly so that it does not get mired in politics, individual resistance, and other forms of organizational inertia" (p. 500), Weick and Quinn (1999) say it may be "slower because of wide scope" (p. 368). In regard to Lewin's (1947) process model, the movement (change) is much deeper and more involved than incremental changes. The rate of the change also tends to be quicker than incremental changes.

Revolutionary change can be initiated in numerous ways. Schein describes five initiators of revolutionary change. Three will be discussed here. The remaining two initiators of change identified by Schein, *change through turnaround* and *change through reorganization and rebirth*, utilize a combination of the techniques that follow.

One way revolutionary change is initiated is through new leadership brought in from the outside. A new CEO often brings people with her that are of similar mind and terminates employment of individuals resistant to change. Not only does this infuse the organization with the new way of doing things, it sends a clear message about the new leader's intent to change the culture. Cummings and Worley (2000) cite research that states, "externally recruited executives are three times more likely to initiate such change than are existing executive teams" (p. 501).

Change can also be initiated when members of an organization recognize an incongruence in espoused theories and theories-in-use. Argyris and Schön (1974) define these terms as what people say they do (espoused) and what actually happens (theories-in-use). While there is often a difference in the two, the disparity typically goes unrecognized until a trigger brings it to the surface. Schein (1992) purports, "nothing changes until the consequences of the actual operating assumptions create a public and visible scandal that cannot be hidden, avoided, or denied" (p. 326). At this time leaders must quickly institute new ways of operating.

Yet another technique to prompt revolutionary change is through coercion. Schein (1992) found that if individuals do not have an alternative, they could be coerced and rewarded to adopt new behaviors. Creating a psychologically safe environment for trying out new behaviors allows individuals to begin to explore the new options and integrate them into their current beliefs.

Punctuated Equilibrium

Regardless of how revolutionary change is initiated, some theorists believe it is not an on-going state of being. Weick and Quinn (1999) use the term episodic change to describe changes that "tend to be infrequent, discontinuous, and intentional" (p. 365). Episodic change occurs when an internal or external force precipitates the need for revolutionary change that interrupts periods of convergence or equilibrium. This state of equilibrium punctuated by periods of revolutionary or episodic change is what Tushman & Romanelli (1985) call punctuated equilibrium.

Punctuated equilibrium (Gersick, 1991; Tushman & Romanelli, 1985), is another framework that explains change as periods of stability, which allow only for incremental changes, interjected with revolutionary changes (Gersick, 1991) or reorientations (Tushman & Romanelli, 1985) which foster double or triple loop learning. Tushman and Romanelli (1985)

describe the periods of reorientations as indicators of the end of one convergent (stable) period and the beginning of the next. “Reorientations (re-creations) punctuate on-going processes of convergence” (p. 179). Without using the term punctuated equilibrium, Cummings and Worley (2000) also describe the change process as one of relatively stable periods, in which any change is minimal and incremental, interjected by periods of revolutionary change. Holding this framework up to the Lewin (1947) model, one can see the steady incremental changes interspersed by periods of transformative change (see Figure 8).

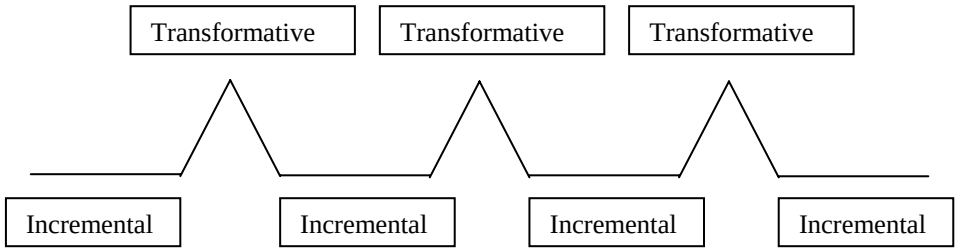

Figure 8. The rate and pace of change experienced in punctuated equilibrium.

Chaos Theory in Organization Development

Chaos in the organizational setting is a relatively new framework and is included to demonstrate its existence and viability as a way to understand change in the organization. Theorists in this vein assert that the change theories previously discussed are only sufficient if organizations are viewed from a traditional, Newtonian, mechanistic perspective. However, in the last two decades many researchers have begun to view organizations as organisms that respond independently to influences in their environment. This perspective effects how organizational change is understood. From this perspective, members of an organization “share some viewpoints, disagree about some, and are ignorant of or indifferent to others” (Meyerson &

Martin, 1987, p. 637). Individuals move in and out of roles based on the saliency of the issue at hand and different issues result in different configurations of the organization.

Chaos or complexity theory is considered "new science" and provides a new way of looking at existing phenomena. It not only addresses change efforts, but the state in which organizations exist. From this perspective, change is not planned, but is constant and emerges from naturally occurring patterns (Shaw, 1997). New science is contrasted with old science, which is based on Newtonian laws of order and machine-like systems, in which an action on one part affects the next part and so on in a relatively linear fashion. New science is comprised of many disciplines, but most closely resembles quantum physics. In *Leadership and the New Science*, Wheatley (1992) describes "chaos that contained order" (p. 2). Changing any part of an organization changes the entire organization, even if there is not a direct linear relationship. Wheatley describes, "activities in one part of the whole [that] create non-local causes that emerge far from us" (p. 42).

Mink (2004) describes chaos theory as having three key principles: (a) unity, (b) interconnectedness, and (c) a connection to the environment. Complex systems consist of infinitely smaller parts that are replicas of the whole. What this means is that in a complex organization each smaller entity, whether it is an individual or a group, mirrors the whole and changing any aspect has a direct impact on all other aspects of the organization (Mink, 2004). Again, holding this framework of change up to the process model introduced in 1947 by Lewin, change is a constant state (pace), yet the depth of change can vary.

This section began by reviewing the literature on general change and its relation to learning, followed by a review of the literature on four frameworks for organizational change: (a) incremental, (b) revolutionary, (c) punctuated equilibrium, and (d) chaos. How change is

perceived in an organization has to do with the mental models of the people that comprise the organization and the attributions employees make when they learn about changes. Referring to different mental models, Taylor (1999) states that "we should expect there to be differences in how people interpret the change" (p. 524). He found that employees in lower level positions experienced changes as incremental, while those in higher levels viewed the same changes as revolutionary. As discussed earlier, leaders play a role in how employees understand the organization. The final section of this literature review will look specifically at the role leaders have in the context of change.

Leadership in the Context of Change

As stated in Chapter 1, the rate of failure for organizational change initiatives is high (Gorman & Overstreet-Miller, 1997; Kotter, 1995; Leitko, 1987; Svyantek & DeShon, 1993). Bolman and Deal (1999) suggest two thirds of change interventions fail to meet some or all of their goals, while a consulting firm admitted to a seventy five percent failure rate (Jaffe & Scott, 2000)! This section will highlight some of the many reasons for the failure of change efforts cited in the literature.

In a content analysis of a dozen action research studies in which lower level employees were interviewed using open-ended questions, Beer (2003) found "employees perceive a gap between rhetoric and reality" (p. 628). Beer puts forth that "management's behavior and the organization's emergent culture must become consistent over time…or employees will become cynical. Such cynicism in turn undermines commitment. Thus a company seeking to make a fundamental…transformation faces significant organizational and managerial change challenges" (p. 625). Beer continues by saying when commitment wanes and programs begin to fail, managers "reduce their commitment and withdraw resources (time and money)" (p. 625).

This is the equivalent of what Collins (2001) calls the doom loop. Leaders implement a change initiative, it fails (for any number of reasons), they withdraw support, and shoot off in a different direction. The result of this behavior was evidenced in Walston and Chadwick's (2003) finding that as leadership disengages or moves on, employees become less positive about the outcomes of the change effort. Collins compares this type of behavior to the actions of his Level 5 leaders who, through dialogue, have chosen their course and stick to it, modifying where necessary, but making decisions within a pre-established framework.

In an organization with Level 5 leadership, if things veered off course, fingers were not pointed and abrupt decisions were not made. Instead, Level 5 leaders engaged in more dialogue and debate to create an understanding of what went wrong. Additionally, "red flag" mechanisms were built in to alert the organization to potential problems in such a way that the incoming information could not be ignored. Armed with information, the organization makes adjustments and continues moving on the predetermined course.

Other ways in which leaders prevent change from being successful include:

1. Unclear strategy and conflicting priorities
2. Leadership style of general manager – too top-down or too laissez faire
3. An ineffective top team
4. Poor coordination
5. Inadequate down-the-line leadership or management skills and development
6. Closed vertical communication (top-down and bottoms up). (p. 629)

Based on these findings, Beer (2003) states leadership needs to have a clear direction that is dependent "on an effective senior team—one that has developed real agreement about and commitment to objectives, strategy, and priorities" (p. 629). Additionally, he suggests that failure

is the result of a top down approach in which the senior management fails to get input from employees about the impact of the implementation of such programs. Sharma (1997) concurs, saying successful leaders portray fairness, clarity of message, and a willingness to expend a great deal of energy, time, and effort" (p. 35).

In another study, Larkin and Larkin (1996) emphasize that often leadership spends too much time communicating values and not enough time communicating the facts of the change. Larkin and Larkin propose values should be modeled while the facts of the situation should be communicated. They cite several studies indicating front-line employees believe that senior leadership lies and cannot be trusted, including a 1989 study by Philip Mirvis and Donald Kanter and one by the Council on Communication Management in 1994. This belief results from ineffective communication. To remedy this, Larkin and Larkin say, "The best way to communicate a major change to the frontline workforce is face-to-face. Do not use videos or video hookups, do not introduce the change in a company publication, and do not hold large meetings with frontline employees" (p. 97). According to various studies (e.g., a 1993 study by International Survey Research and research conducted by major companies including AT&T, Exxon, and Hewlett Packard) employees want to hear about change first hand from their immediate supervisor (Larkin & Larkin, 1996). This is not to say that top leadership can disengage from the process (Jaffe & Scott, 2000). Top leaders are critical in "defining parameters, providing resources, and keeping the goal and the inspiration alive" (Jaffe & Scott, 2000, p. 50).

Still another reason change efforts fail is not allowing enough time to pass for the full effects of the change to become evident. Change takes time and goes through various phases or

steps, rushing the process or taking shortcuts only leads to failure (Kotter, 1995). A misstep in any of phase of change can cause the change to slow to a halt and perhaps fail.

When leadership moves too quickly to assume the change has not been successful and change their focus and direction, they send that message to employees. This is represented n Collin's (2001) doom loop and in Walston and Chadwick's (2003) study. Employees take their cues from leadership, and if leadership acts prematurely they contribute the failure of the change effort.

Additionally organizational readiness can contribute to the success or failure of the change endeavor. Palmer (2004) states changes fail most often due to "human rather than technical reasons" (p. 35). Stating that people have to accept the change for it to be successful, he recommends organizations assess their readiness to engage in the change initiative. Readiness is affected by many variables, including amount of change already undertaken, time available, and the likelihood of success.

Additional factors that contribute to organizational readiness are organization culture and climate (Weeks, Roberts, Chonko, & Jones, 2004). Leadership plays a distinct role in shaping organization culture. Schein (1992) says, "organizational cultures are created in part by leaders, and one of the most decisive functions of leadership is the creation, the management, and sometimes even the destruction of culture" (p. 5). Schein describes how an organization's culture works to create a state of equilibrium to sustain an organization and he contends that if this equilibrium is disrupted and the organization's survival is threatened "because elements of its culture have become maladapted, it is ultimately the function of leadership to recognize and do something about the situation. It is in this sense that leadership and culture are conceptually

intertwined" (p. 5). By attending to the culture of the organization, leadership can contribute to an organization's readiness for change.

Chapter Summary

This review of the literature addressed five areas of research related to the current study: (a) meaning making, (b) leadership and meaning making, (c) worldviews, personal constructs, and mental models, and (d) planned organization change. The literature on meaning making answers the philosophical questions regarding how we understand the world through a social psychology lens, while the literature on worldviews answers the same question from a more philosophical stance.

The history of worldview formation is vast and varied, yet the outcome is the same: individuals have different cognitive maps for how they make sense out of what they experience. This is relevant to current study in that individuals bring these differing cognitive maps to the workplace and subconsciously analyze occurrences through these lenses. Theories-of-action provide an explanation for how worldviews and mental models influence individuals' actions.

The literature on change theory was presented to establish the context of the current study, an organization engaged in change. The change theory literature provides numerous ways to understand and approach change in organizations. Four frameworks for change were reviewed: (a) incremental, (b) revolutionary, (c) punctuated equilibrium, and (d) chaos. The first three are most suited for the traditional view of an organization, while chaos is not only an approach to change but also a new perspective on the organization as a self-organizing entity. The review of the literature concluded with a look into the role of the leader in the context of change and how leaders contribute to the success or failure of change in organizations.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter will describe the qualitative methodology used in this study, the purpose of which was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. In particular, this study attempted to surface the mental models held by leaders and hourly employees regarding specific changes in the organization. The purpose was addressed by the following research questions:

1. According to leaders, what key changes have been implemented since May 2003?
2. According to hourly employees, what key changes have been implemented since May 2003?
3. According to the leaders, what was the intention of each of the changes identified?
4. How do implemented changes compare to the intentions of leaders?
5. For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?

Design of the Study

This study was an interpretive qualitative inquiry (Merriam, 1998) seeking to describe differences and similarities in the understanding of intent for organizational changes as perceived by hourly employees, co-owners, and senior leaders. Qualitative methodology was chosen because it approaches inquiry with "the view that reality is constructed by individuals in interaction with their social worlds. Thus, there are many 'realities' rather than one, observable,

measurable reality…" (Merriam & Simpson, 2000, p. 97). This is directly aligned with the current research questions in that the questions seek to understand the reality created by the co-owners, senior leaders, and hourly employees engaged in change efforts common to all parties. Additionally, qualitative research draws on phenomenology and symbolic interactionism as ways of understanding "how people interpret their experiences, how they construct their worlds, [and] what meaning they attribute to their experiences" (Merriam & Simpson, 2000, p. 98). Researchers (Carley & Palmquist, 1992; Kelly, 1955) have found that language, a symbolic representation of mental models, is the tool to surface mental models (personal constructs), further confirming the choice of qualitative methodology for this study.

Qualitative research is an umbrella term that encompasses many types of research (Glesne, 1998) and is delimited by a set of core assumptions. In addition to the first assumption that "reality is constructed by individuals in interaction with their social worlds" (Merriam & Simpson, 2000, p. 97) there are four additional assumptions. First, the researcher is the instrument for both data collection and data analysis (Glesne, 1998; Merriam & Simpson, 2000). The researcher must be aware of her biases and subjectivity, as they have an influence on the research process, and take responsibility for them (Merriam & Simpson, 2000). One approach to articulating biases is to write a subjectivity statement prior to starting the research process. This core assumption also allows the researcher to adjust data collection methods by "refining data collection procedures; clarify and summarize material, checking with respondents for accuracy of interpretation; [and] explore atypical or idiosyncratic responses" (Merriam & Simpson, 2000, p. 98). Second, as the primary instrument, qualitative research usually involves fieldwork (i.e., going to the "field" to collect data). This allows the researcher to become "intimately familiar with the phenomenon under study" (Merriam & Simpson, 2000, p. 98). Third, qualitative

research is primarily inductive, meaning it emerges as new data is discovered. This makes qualitative research "a particularly appropriate strategy to use where there is little knowledge about the problem" (p. 99). The fourth and final characteristic is that qualitative research consists of rich, descriptive language in the portrayal of the data.

This study was primarily an interview study with a secondary component of document analysis. Kvale (1996) identifies seven stages of designing an interview study starting with the conceptualization (thematizing) of the study and concluding with the final report. These are:

1. Thematizing "refers to a conceptual clarification and a theoretical analysis of the theme investigated, and the formulation of research questions" (p. 89).
2. Designing refers to planning the study.
3. Interviewing refers to conducting the interviews.
4. Transcribing is the converting of the oral data to written data.
5. Analyzing is the process of data reduction, data display, and conclusion drawing and verifying (Miles & Huberman, 1994).
6. Verifying refers to ensuring measures are taken for generalizabilty, reliability and validity.
7. Reporting is how the findings of this study will be communicated.

The following pages will address these stages as they apply to my study.

Theoretical Framework

"Theoretical framework is derived from the orientation or stance that you bring to your study. It is the structure, the scaffolding, the frame of your study" (Merriam, 1998, p. 45). This qualitative study was guided by interpretivism and grounded in constructionism.

Qualitative Interpretivism

Interpretivism "attempts to understand and explain human and social reality" (Crotty, 1998, pp. 66-67). This study laid the groundwork for understanding how organizational change is understood by employees. By documenting the perceptions of the employees and comparing them to the intent of the senior leaders, I began to surface mental models, which can help to facilitate future aspects of the change process.

Interpretivism was well suited for the study of mental models, which are created from experience and determine how individuals interpret their world. Crotty (1998) describes interpretivism as looking for "culturally derived and historically situated interpretations of the social life-world" (p. 67). Therefore, it was appropriate to use interpretivism to understand the role mental models can have in interactions. For example, in this study, I examined the individuals' mental models, which are both culturally derived and historically situated in their experiences. One stream of interpretivism that was particularly appropriate for this study was symbolic interactionism, which seeks to explore "the understandings abroad in culture as the meaningful matrix that guides our lives" (Crotty, 1998, p. 71).

Symbolic interactionism focuses on an often taken for granted feature of social life, human interaction (Blumer, 1969). Blumer sets forth three basic assumptions of symbolic interactionism. First, he says, "human beings act toward things on the basis of the meanings these things have for them" (p. 2). Second, "the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows" (p. 2). And, third, "these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters" (p. 2). These premises align with the literature reviewed in Chapter 2 regarding mental models, yet go a step further by implying that it is not simply what the

individual brings to the situation that generates meaning, but views meaning as "arising in the process of an interaction" (p. 4). In this study, the mental models examined fit these criteria in that they were initiated based on one's own experience and mediated by social encounters with others in the organization. For example, when discussing the organization's values, one senior leader explained that the values did not need to be written down because they were *"almost intrinsic… they are so constant I don't think they need to be* [written down]*."* This is an example of how social encounters influence an individual's mental models.

Social Construction and Constructivism

Qualitative research is based on the belief that reality is constructed by each individual, resulting in multiple realities (Merriam & Simpson, 2000). Qualitative research draws on phenomenology and symbolic interactionism as ways of understanding how people bring meaning to their world (Merriam & Simpson, 2000). Therefore, qualitative research methods are certainly appropriate for the study of differences in perception as perception is reality.

Constructionism posits that meaning is constructed through interaction with the world one is trying to understand and that meaning is made as individuals engage in that world (Crotty, 1998). Related, constructivism focuses on the "unique experience of each of us" (p. 58) that contributes to the making of meaning. This is in direct opposition to the objective positivist view that says a truth exists to be found. In social construction and the constructivist view (researchers seem to use these terms interchangeably) there are three assumptions that are the foundation for the theory (Neimeyer & Neimeyer, 1993). These are "beliefs that human beings (a) are oriented actively toward meaningful understanding of the world in which they live, (b) are denied direct access to any external reality, and (c) are continuously in the process of development and change" (p. 3). It then follows that individuals create their own reality, which may vary from one

person to another, based on how different individuals interact with the objects or situations they are interpreting. This epistemological approach was well suited to understanding how different employees make meaning of stimuli in their environment.

Neimeyer and Neimeyer (1993) explain "…our understandings … are contextually embedded, interpersonally forged, and necessarily limited" (p. 2) which parallels our understanding of mental models. As the research on mental models demonstrates (Taylor, 1999; Walston & Chadwick, 2003) and social constructivism purports, "different people may well inhabit quite different worlds. Their different worlds constitute for them diverse ways of knowing, distinguishable sets of meanings, separate realities" (Crotty, 1998, p. 64). The focus is on assessing the "viability (utility) as opposed to the validity (truth) of an individual's unique wordview" (Neimeyer & Neimeyer, 1993, p. 2). Additionally, Patton (2002) states, "constructivists study the multiple realities constructed by people and the implications of these constructions for their lives and interactions with others" (p. 96). Using a constructionist approach, the researchers would "attempt to capture these different perspectives through open-ended interviews and observations, and then would examine the implications of different perceptions (or multiple 'realities') but would not pronounce which set of perceptions was 'right' or more 'true' or more 'real,' as would a reality-oriented" (Patton, 2002, p. 98) researcher. This is the crux of this study; comparing the multiple realities found in the workplace and identifying where they intersect without judging for correctness.

Sample Selection

In both site selection and participant selection, I used purposeful sampling to ensure the rich, thick data desired in qualitative research. Additionally, I used criterion sampling to identify individuals to participate in this study (Patton, 2002). Patton stresses that purposeful sampling

leads to “selecting information-rich cases for study in depth” (p. 46). Purposeful sampling and criterion-based sampling will be discussed in the sections that follow.

Site Selection

This study could be conducted in any organization that has undergone recent change. Merriam (1998) states, “purposeful sampling is based on the assumption that the investigator wants to discover, understand and gain insight and therefore must select a sample from which the most can be learned” (p. 61). The site in which the study was conducted was engaged in a long-term change initiative. An additional consideration in choosing this site was the fact that the new owners were change consultants who were approaching the extensive changes with intentionality.

The site was a heavy manufacturing factory in the Southeastern United States. For the purposes of this study it is referred to as Presto. In May 2003, two consultants, whose areas of interest were organizational culture and change, purchased this struggling factory. Having worked previously with this organization, they decided to purchase it with the intent to transform it into a world class manufacturing facility that would eventually be employee owned. This organization was approximately 18 months into its change process.

Presto produces products for more than 3,000 companies in North America, Central America, Asia, and other markets. According to the organization’s website, Presto’s goal is to:

> achieve total customer satisfaction and industry leadership through continuous process improvement. The company’s environment is team-based and measurement-focused, and is built upon disciplined processes. Our company is innovative, reliable and safe, and we are driven by an informed, highly trained and committed workforce. [company website]

Presto received the Area Chamber of Commerce Industry of the Year Award in 2004, which is awarded to a local manufacturing company that grows employment, invests in its facility, and supports the community through volunteerism, United Way and other philanthropic projects. In this short time Presto has also received recognition from several non-profits for contributions to the community.

I gained access to this organization through the new owners, whom I knew from their consulting business. When I saw in the newspaper that they had purchased this facility and were going to try and turn it around, I contacted one of the co-owners, who welcomed my interest in studying their organization as they began the transformation process. I was introduced to several members of the leadership team and worked closely with them to plan several smaller studies including a survey study and an interview study, which was the pilot for the current study. My two primary contacts at the organization were one of the co-owners and the Vice President of Human Resources.

Participant Selection

There were approximately 500 employees at Presto. Participants represented three groups of employees: the co-owners, senior leadership, and hourly operators. Senior leaders were defined as the uppermost tier of management, excluding the co-owners. Hourly employees were the plant operators who worked on the shop floor enacting the various manual processes that contribute to the finished product.

I used criterion sampling to determine which of the employees to engage in the study. In criterion sampling the researcher establishes criteria for choosing the participants (Patton, 2002). The criteria for selection were that participants must: (a) have worked at the plant for at least two

and one half years, and (b) anticipate remaining employed at the plant until the end of my research in 2005.

The first criterion, working at the plant for at least two and one half years, was established to ensure that participants would have experienced the changes that will be explored in the interview. The official changes began in May of 2003. Using the emergent philosophy of qualitative research, it was not possible to know in advance which changes would be discussed in the interviews, therefore, it was beneficial to have participants who had experienced many of the changes that have occurred. Further, this criterion ensured that the participants had experienced working in this facility prior to the change initiatives, enabling them to recognize the changes in their workplace.

The second criterion, anticipate remaining at the plant until the end of this research project in 2005, was established to increase the likelihood that participants would be available for member checks once the initial analysis was complete. Again, given the emergent nature of qualitative research, it is not possible to predict a precise plan. While the employee base at this facility was fairly stable, there was a natural turnover and attrition that was not related to this study.

In addition to the above criteria, I was cognizant of the diversity of the sample. Several factors considered were shift, race, and gender. The organization was comprised of three shifts. The racial and gender breakdown (as of September 2004) is portrayed in Table 1.

Using the two criteria stated above, I worked with the Vice President for Human Resources at Presto to generate the potential pool of participants. I sent each of these employees a letter (Appendices A and B) inviting them to participate. The letter contained my contact information, an explanation of the study, and a request for them to contact me if they were

interested in participating. When employees contacted me, I collected demographic information (Appendix D) that was used as background data.

Table 1

Demographic breakdown of Presto employees.

	Male		**Female**		**Totals**	
Asian	3	.01*	-	-	3	.01*
Black	152	.31	119	.25	271	.56
Caucasian	160	.33	32	.07	192	.40
Hispanic	13	.03	4	.01*	17	.04
N/A	2	.01*	-	-	2	.01*
Totals	330		155		**485**	

* Number equals less than 1% of total.

Based on previous work with this organization, I anticipated some difficulty in getting enough volunteers that met the criteria; therefore I offered an incentive. I had planned to enter all hourly employees that signed up into a drawing for a $15 Wal-Mart gift certificate and all hourly employees that were interviewed into a drawing for $40 Wal-Mart gift certificate. However, I had fewer employees volunteer than I needed, so I only held one drawing—for the $40 gift certificate. Senior leaders that were interviewed were also entered in a separate drawing for a $40 Wal-Mart gift certificate. Information about the drawings was included in the introductory letter sent to all qualified employees.

Both co-owners agreed to participate. Five senior leaders met the minimum criteria of working for the organization for at least 2.5 years. One declined to participate. There were 346 hourly employees who met the criteria and were invited to participate. Twelve volunteered to participate. Of the 12 hourly employees, five were women. This is 42%, which is slightly higher than the percentage of women in the organization (32%). Seven, or 58%, of the hourly employees were African American; the other five (42%) were White. Interestingly, of the 12 hourly employees, five worked in the same part of the organization. Hourly employees who participated had worked at the organization from four years to 39 years with the average being 21 years. One hourly employee worked third shift, five worked second shift, and six worked first shift. Kvale (1996) indicates 15 plus or minus 10 is a standard number of interviews for a qualitative study (unless there is a specific reason for more or less interviews). Between all groups, 18 interviews were conducted.

At the time of the interview, I gave each participant an informed consent form (Appendix C) containing information about the study, the risks, and my contact information. I had participants sign two copies—one which they kept and one which I collected from them.

The Participants

Nate Nate was a co-owner and the CEO. A white male, he has extensive experience in both industry and consulting.

Susan Susan was a co-owner and the Vice President for Culture. A white female, she has extensive consulting experience in manufacturing settings, with expertise in change management.

Ann

Ann was the first senior leader interviewed. A white female, she was the only female senior leader that met the established criteria for participation in the study. She has been with the organization for 15 years.

Bob

Bob was a white male, senior leader. He had worked for the organization from 1984-1996 then moved to a corporate position in Research and Development at another location. He returned to this plant in 2003. Recently he had been "moved" from a manager position to a member of the continuous improvement team. During his initial interview he was not sure whether this was a positive thing or not. In a follow up interview, he explained that there were various types of leaders,

> *some who manage others well and some who may be leaders in different ways, who aren't as good at the people side of the business, and maybe I am describing myself…I was in a management position…and was removed from that position because I didn't have as strong people management skills as [CEO] was looking for. Now, I had other kinds of leadership skills and he was willing to hang on to…*

Danny

Danny was a white male, senior leader. As in many employee responses, Danny demonstrated deference to the co-owners throughout his interview. He has worked for the organization for 28 years.

Travis

Travis was a white, male, senior leader who joined the organization in July 2003, shortly after the new owners took over.

Curtis

Curtis was an African American male who works third shift. He had worked for the organization for five years. His interview was held shortly after an all-

employee meeting in which the organization's financial issues were disclosed to employees.

Martha — Martha, an African American woman, has been with the organization for four years. She worked second shift. I felt that she was negative and almost sarcastic throughout the interview, however, she expressed that the interview process was *"like going to a psychiatrist."* She said it was good to be able to talk and *"take a load off."*

Mary — Mary was an African American woman who has worked for the organization for almost 19 years. She worked second shift. Mary had negative, almost sarcastic responses throughout her interview.

Benny — Benny was a white male who worked second shift. He has worked for this organization for 34 years. Although he was an operator, he described his role as a pseudo lead due to his vast knowledge of the organization.

Sherman — Sherman was a white male who has worked at the plant for 38 years. He worked second shift.

Gena — Gena was an African American woman who has worked for the organization for 18 years. She worked second shift. Her responses indicated a neutral attitude towards the changes occurring in the plant.

David — David was a white male who worked first shift. He has worked for the organization for 36 years. David had strong opinions and explained many of his points by drawing diagrams.

Jerome — Jerome was an African American male who worked first shift. He has worked for the organization for 30 years.

Linda — Linda was an African American woman who worked first shift. She has worked at the plant for nine years. Her interview lasted less than 20 minutes and she was very suspicious about why I was allowed to do the interviews during work time if it was not on behalf of the owners.

Carl — Carl was a white male who worked first shift. He has worked at the plant for 39 years.

Billy — Billy was a very positive, young African American male who has worked for the organization for five years. He worked first shift and loved his job. He said he worked hard to provide a bright future for his family.

Sandy — Sandy was a white female who worked first shift. This was the second time she has worked for the organization. In 1984 she worked for the organization for 12 years. She returned to the plant in 2003.

Pilot Study

In spring 2004, I conducted a pilot study at Presto. The purpose of the study was to gain insight into how employees perceived the changes occurring during the culture change in their organization. The research design for the study used critical incident interviews to collect data from five employees and both of the co-owners. While the interviews did not provide particularly rich data, what stood out was how employee perceptions of certain actions differed from the owners' intent. For example, the owners seemed excited about bringing in key leadership from outside the organization and believed this to be a very positive change. Employees, based on the interviews, did not always perceive bringing in outside people as a positive move. From their perception, the people from outside the organization did not know the organization and would make changes without consulting the employees who have worked there

for many years. In the employees' perception, the changes did not work and sometimes had to be undone and redone. One employee indicated that if they had been consulted, the way things were redone is what they would have suggested in the first place.

I found this interesting knowing that the owners have tried to keep employees informed and in the loop, and have several mechanisms in place to do so. This made me curious to explore other topics that had been communicated to employees to see what their perceptions or understandings might be. I started asking employees to tell me what it means when they hear the word "culture," because I know that culture had been a focus of the organization—they even have a vice president of culture. Interestingly, their definitions of culture revolved more around what it means to be changing a culture. It was not completely clear that the employees interviewed understood what culture was; just that things were changing.

When asked what it meant when they heard talk about "culture," one employee could not produce an answer and one employee provided an explanation saying it was *"the way everybody sees things or we all see it the same way."* Another employee said culture was about setting and achieving goals, *"like to produce and stuff like that, to set a goal…."* Yet another employee said, *"The culture of the plant is how it is changing and how we need to change…"* And, the last employee explained culture by stating,

> *Well, it meant having a better plant, understanding employees, I think they have a really good feel for wanting to know what the employees are thinking…that is what I get from them when I talk to them…They want to bridge the relationship between what it was when [the previous owners] was here and what they are.*

I thought this was a salient example of how we often assume when we communicate that everyone knows what we are talking about. While I cannot say for sure that if employees could

define culture they would better understand how the changes fit into the big picture, this phenomenon of differing interpretations was of great interest to me and shaped the current study. I began researching this phenomenon of differing interpretations and found the literature on this subject to cover diverse fields of study including philosophy, psychology, anthropology, and HRD. What I did not find was information on how these different perceptions can impact change efforts if they are overlooked. Therefore, I chose to continue working with this organization and do a retrospective study of what perceptions existed about the changes in this organization when they were first introduced.

Data Collection

There are three kinds of qualitative data: (a) interviews, (b) observations, and (c) documents (Merriam & Simpson, 2000; Patton, 2002). This study used "standardized open-ended interviews" (Patton, 2002, p. 344) and documents to understand perceptions and theories-of-action in play at Presto. Each of these will be discussed in the sections that follow.

Interviews

In-depth interviews are purposeful conversations (Marshall & Rossman, 1989). More than just asking questions, the interviews are structured in the "form of a dialogue…" (Erlandson, 1993, p. 85) whose purpose is to "obtain valid and reliable information" (Marshall & Rossman, p. 82). Interviews "allow us to enter into the other person's perspective" (Patton, 2002, p. 341). Marshall and Rossman remind us that when interviewing, the "participant's perspective of the social phenomenon of interest should unfold as the participant views it…" (p. 82) not as the researcher views it.

There are many benefits to using interviews for data collection. First, "interviews allow the researcher and respondent to move back and forth in time; to reconstruct the past, interpret

the present, and predict the future" (Erlandson, 1993, p. 85; Lincoln & Guba, 1985). Second, interviews allow for immediate follow up and clarification (Marshall & Rossman, 1989; Merriam & Simpson, 2000). Additionally, Creswell (2003) points out that interviews are helpful in situations when observation is not possible or practical.

As with all data collection methods, interviewing has limitations which include the possible lack of cooperation of participants, lack of honest responses or filtered responses, and lack of comprehension on the part of the researcher or participant (Creswell, 2003; Marshall & Rossman, 1989). Additionally, people are not equally able to articulate their thoughts which in turn can complicate the analysis process, especially when comparing data between interviews (Creswell, 2003; Marshall & Rossman, 1989). Some of these limitations can be addressed in how the interview is structured.

Interviews can range in format from extremely structured to very open-ended (Erlandson, 1993; Lincoln & Guba, 1985; Marshall & Rossman, 1989; Merriam & Simpson, 2000). Structured interviews require the researcher to have a standard set of questions that each interviewee is asked. In an unstructured interview, on the other hand, the researcher serves as a guide through the areas of interest in the investigation. The most common type of interview in qualitative research is the semi-structured interview (Erlandson, 1993; Merriam & Simpson, 2000). Patton (2002) refers to semi-structured interviews as "the general interview guide approach" (p. 342) due to the use of an interview guide which is used to prompt the researcher and ensure that the same topics are covered in the same order from interview to interview while also leaving the door open to explore additional issues that emerge (Kvale, 1996). Questions are arranged from simple to more complex (Merriam & Simpson, 2000).

Patton (2002) described a standardized open-ended interview in which the questions are fully written in the interview guide. This ensures that participants are asked the same questions and that the same probes are used; the less deviation from the guide, the more consistent the responses. Focused questions also "serve to establish priorities" (Patton, 2002, p. 346) when participants will only be interviewed once for a designated period of time. This amount of structure also allows for a careful choice of questions and vocabulary to allow researchers to get the best information possible in their given time. Having standardized questions facilitates the data analysis process by creating a degree of consistency between respondents in spite of their open-ended nature (Merriam & Simpson, 2000; Patton, 2002).

After considering both a semi-structured interview and the standardized open-ended interview, I decided to use the standardized open-ended approach. Based on my pilot study, in order to ensure the rich, thick data desired in a qualitative study, I knew I needed to keep the participants focused on the issue under study—their perceptions of specific changes identified by the senior leaders. In the pilot study, I utilized a semi-structured approach to solicit critical incidents and while they were interesting, the data were laden with stories unrelated to the change process being studied.

Based on my pilot study, I anticipated each interview would last 30-45 minutes; this was accurate. The interviews were audio taped for the purposes of transcription and I took notes to supplement what was captured on the tape. I scheduled interview times in one-hour blocks so that the interviews did not feel rushed and I tried to allow a 15-minute window between interviews for reflection. This accommodated interviews that ran long.

Patton (2002) describes six kinds of questions that can be used in an interview: (a) experience and behavior questions, (b) opinion and values questions, (c) emotions and feelings

questions, (d) knowledge questions, (e) sensory questions, and (f) background or demographic questions. Determining which type(s) of questions to ask "forces the interviewer to be clear about what is being asked and helps the interviewee respond appropriately" (p. 348). Additionally, questions can be framed in terms of the past, present, or future (Patton, 2002).

I utilized two different interview guides. The first, for the senior leaders, asked for their opinion on what the most significant changes had been since May 2003 and had several questions to delve into their mental models about those changes (Appendix E). The questions were repeated for each change identified. Through an initial analysis, the key changes were identified based on the frequency with which they were named in the senior leader interviews. The second interview guide, designed for the hourly employee interviews, had a similar format (Appendix F). It began by asking employees to identify the planned changes in the organization. Each of these changes was explored using a series of questions to delve into their mental models regarding how they understood or perceived the change. If an employee did not identify one or more of the key changes from the senior leader interviews, they were specifically asked the same series of questions about those changes.

Document Analysis

Documents can provide rich organizational data and access to such data must be negotiated at the beginning of the research (Patton, 2002). "Documents are things we can read and which relate to some aspect of the social world" (Macdonald & Tipton, 1993, p. 188). They are socially produced based on the mental models of those producing them, which makes them correct only "given certain socially accepted norms" (p. 188) in the organization.

Researchers "should begin on the assumption that if an event happened, some record of it exists" (Lincoln & Guba, 1985, p. 278). Lincoln and Guba also made a distinction between

records and documents. Records were prepared “for the purpose of attesting to an event or providing an accounting” (p. 277) of an event. Documents, then, were any other written or recorded information. In this study I used records such as newsletters, meeting minutes, and presentation slides that attested to actions taken in the organization in order to corroborate the data obtained from the interviews. This allowed for a comparison between what the co-owners, senior leaders, and employees expressed, and what actually happened.

There are several issues that need to be considered in the use of documents (or records) (Macdonald & Tipton, 1993; Scott, 1990). These are (a) authenticity, (b) credibility, (c) representativeness, and (d) meaning. Authenticity means verifying that the document is “genuine, complete, reliable and of unquestioned authorship” (Macdonald & Tipton, 1993, pp. 195-196). Credibility refers to inquiring into whether the document is “free from error or distortion” (p. 196). Macdonald and Tipton suggest finding out “who produced the document, why, when, for whom and in what context so as to be assured of the quality of the document” (p.196). As for representativeness, if the document is part of a collection of like documents, the researcher can be confident in its representativeness; if however, like documents are unavailable questions must be raised as to what is missing and how does the surviving document fit into a larger corpus of documents. And, finally, meaning, which has two levels to be considered. There is the literal, or surface meaning, of the words on the paper and a deeper level, which is “arrived at by some form of interpretive understanding or structural analysis” (p. 197). This analysis may include a quantification of the frequency with which words or ideas appear as a way to grasp relevancy to the author of various concepts (Macdonald & Tipton).

Lincoln and Guba (1985) draw attention to the benefits of using documents. First, they are low cost in that it is primarily the researcher’s time that is involved. Second, documents are

stable, meaning that each time they are analyzed they contain the same information compared to an interview in which the interviewee can alter their story each time they are questioned. Third, documents are rich sources of context and language used in the context under study. Fourth, documents are "often legally unassailable" (p. 277) in that they were prepared for purposes of accountability. And, fifth, documents are non-reactive in the analysis process. Additional benefits include the fact that document analysis is an unobtrusive method of data collection, the data can be accessed at any time (for the most part), and documents usually contain well thought out information in contrast to the often spontaneous information collected in interviews (Creswell, 2003).

Scott (1990) draws attention to the issue of access. He delineates between (a) closed access, (b) restricted access, (c) open-archival access, and (d) open-published access. Documents which have closed access are only available to a restricted group of people who have some relation to the document and falls on one end of the access spectrum, where as open-published documents fall on the other end. Open-published documents are those printed for public circulation and are the most easily accessed documents. The documents I accessed were of the restricted nature in that they were produced for internal circulation within the organization and "are accessible on an *ad hoc* basis under specified conditions to those outsiders who are able to secure permission of insiders…" (p. 14). The documents I utilized were maintained on the organization's computer network and I obtained permission from one of the co-owners to request such documents on an as needed basis.

Phases of Data Collection

Data was collected in four phases. The first phase consisted of interviews with the organization's leaders. The second phase consisted of a document analysis. The third phase of

data collection consisted of interviews with hourly employees. Following these initial phases, a fourth phase was added to follow up with the co-owners and senior leaders on issues that arose after their initial interviews were conducted. Each phase will be discussed in the sections that follow.

Phase One

During the first phase of data collection individual, standardized open-ended interviews were conducted with the senior leader participants and the co-owners. During these interviews, participants were asked to identify the changes they deemed most significant since May 2003. Each of these changes was explored in-depth, guided by the interview guide (Appendix E), to try to uncover the mental models underlying the change. Data from these interviews addressed research questions number one and three (i.e., According to leaders, what key changes have been implemented since May 2003? and According to the leaders, what was the intention of each of the changes identified?).

Phase Two

Documents, including newsletters, meeting minutes, and training materials, were collected that supported the key changes senior leaders identified. This helped determine whether co-owners' and senior leaders' (and later, employees') espoused theories, gained through the interviews, aligned with the theories-in-use as portrayed by the organization's documentation. Data generated in this process addressed research question number four (i.e., How do implemented changes compare to the intentions of leaders?).

Phase Three

Based on data from interviews with the senior leaders, standardized open-ended interviews were conducted with the hourly employees. Participants were asked to identify

significant planned changes in the organization since May 2003 and about their perceptions of the specific changes identified by the senior leaders. Their perceptions were explored in-depth, guided by an interview guide (Appendix F). After the first interview, the interview guide was modified to facilitate the flow of information and to ensure that the participants easily understood the questions. Data collected through these interviews addressed question five (i.e., For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?).

Phase Four

Phase Four was added after the employee interviews were complete. I requested follow up interviews with the co-owners and senior leaders to get their thoughts on any of the changes that were identified in interviews that occurred after their initial interview. I gave them a choice of a face-to-face interview, a phone interview, or the option to email their responses to me. One co-owner (the VP) and one senior leader chose to email their responses to me. Two senior leaders chose phone interviews. The CEO and one senior leader did not respond.

Data Analysis

"Qualitative analysis transforms data into findings" (Patton, 2002, p. 432). It is the process of making meaning from the multitude of data gathered during the data collection phase. Huberman and Miles (1994) describe analysis as three linked processes: (a) data reduction, (b) data display, and (c) conclusion drawing and verification.

Data Reduction

Data reduction is the process of coding and reducing data into manageable chunks that can be further analyzed. I intended to use the constant comparative method of data analysis to analyze the transcripts. The constant comparative method allows the researcher to identify initial

codes and/or themes in the first few interviews and to use those as the initial codes for the subsequent interviews. With each additional interview, more codes or themes may emerge and the codes may change. The new coding scheme must then be applied to the previous and subsequent interviews. By the end of this iterative process, the data can be collapsed into themes for further analysis and display. However, I altered this process for the within group analysis. After an initial analysis, I decided that the data could be analyzed according to the change and questions about the change. For example, one change was "gainsharing." In this example, I could then analyze how each participant defined gainsharing and how they understood the intent behind the implementation of gainsharing. This began to address research questions one, two, and three (i.e., According to leaders, what key changes have been implemented since May 2003? According to hourly employees, what key changes have been implemented since May 2003? and, According to the leaders, what was the intention of each of the changes identified?). Further data reduction occurred when I applied a similar process to the employee interviews to address research question four (i.e., For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?). Finally, I used the constant comparative method to compare the co-owners' and senior leaders' data with the data from the employee interviews, beginning to address the purpose of this study—How do employees' perceptions compare to the leaders' intent?

Data Display

Data display is the depiction of the reduced data in a visual form. There are many ways in which data can be displayed including "matrices, graphs, charts, and networks" (Miles & Huberman, 1994, p. 11). I displayed the data is in three charts (see Chapter 4). The first chart depicts the changes that senior leaders identified as significant. The second chart shows what

hourly employees identified as significant and compares these items with those identified by the co-owners and senior leaders. The third chart shows the responses co-owners, senior leaders, and hourly employees gave regarding the intent behind each of the three key changes. The purpose of the charts is to show at a glance any differences or similarities that were found within and between groups.

Making Conclusions

The third linked process identified by Miles and Huberman (1996) is conclusion drawing and verification. I drew conclusions based on comparisons of the data across groups (co-owners, senior leaders, and hourly employees), as well as from the comparisons of interview data with the documents analyzed which indicate what "really" occurred. By verification Miles and Huberman (1996) were referring to validity. As such, I took measures (see below) to ensure the validity or trustworthiness of the research, which served as verification.

Data Analysis

These three processes (data reduction, data display, and making conclusions) occur throughout the research project informing one another (Miles and Huberman, 1996). I began the initial analysis of interviews as soon after each interview as possible. I began the analysis of the senior leader (and co-owner) interviews prior to starting the hourly employee interviews. I needed to reduce the data enough to be able to identify the key changes indicated by this group, as this information served as the foundation for the hourly employee interviews.

I gave the tapes to a transcriber after each day of interviewing so that the transcripts were done in a timely manner. This also allowed me to listen to the tapes and edit the transcripts while the interviews were fairly fresh in my memory. This served as one form of verification that the transcripts were accurate.

After I reviewed and edited the transcripts (and to some degree during that process) I began coding according to changes identified and questions about the change. In regard to coding, Coffey and Atkinson (1996) said, “researchers need to be able to organize, manage, and retrieve the most meaningful bits of our data” (p. 26). I used both the computer (word processing software) and manual means for coding and sorting the data.

I chose to use a data coding tool created by Ruona (2005) due to the flexibility of the tool and the ease of learning the technique compared to other qualitative analysis software. Ruona’s method utilizes Microsoft Word tables in order to sort data. After a thorough review and appropriate editing of the transcripts, the text was converted into a table with each meaningful segment of data in its own row. Prior to beginning the coding process, I added four columns to the left of the data and one to the right as in Figure 9 below. After adding the appropriate column headings, I completed the “C#”, “Q#”, and “Turn#” columns. C# was used to indicate specific changes identified by participants. Each change was assigned a number. Q# was used to indicate the specific question the data related to. Turn # was used to indicate the order in which the data was originally presented. If a question arose about context, I was able to sort (using the Microsoft Word sort function) by turn number to return the transcript to its original order.

This process was used for each transcript, and then the tables were copied and merged into one document. Once the merged table was complete, I was able to sort the data in various ways to further analyze it by change, question, or participant. After an initial analysis, I decided that the data could be analyzed according to the change (C#) and questions about the change (Q#). As described above, one change was “gainsharing.” For example, I could compare how each participant defined gainsharing or how they understood the intent behind the implementation of gainsharing.

Code	C#	Q#	Turn #	Data	Notes

Figure 9. Table Format for Analysis.

Additionally, I sorted the individual transcripts first by change then by question and copied each transcript (in table format) onto a different color paper. I cut out data as it related to each question for each change. These data strips were then used to sort in multiple ways.

The first way I sorted and analyzed the data was by change. For each change I hung the data strips (from all transcripts) on the wall by question number. For example, I started with gainsharing. I created columns on the wall for each question and hung related data in the appropriate column. This allowed me to visually see how each participant responded to each question about gainsharing at a glance. This was repeated for each of the key changes.

The second way I used the colored strips was to do an overview of positive and negative responses to gain a sense of overall perceptions. For this analysis I had three columns: (a) positive, (b) neutral or mixed, and (c) negative. Noticing which columns the various colors (which represented the different participants) were in allowed me to see trends in how individual participants felt about the changes in general. This analysis helped me see that most employees' responses were balanced (i.e., most employees made some positive statements, some negative statements, and some neutral statements). It was negative comments such as: *"Rip off, I should of got a raise instead of this…"* from Mary and *"Okay to me that is the biggest hoax of all..."* from Martha that led me to perceive them both as negative and sarcastic.

The third way I used the cut strips was to look at the data by finding. I created columns for each finding and sorted the strips into the appropriate columns. This analysis helped me see what was said that supported each finding. For example, to support the finding that the different groups (co-owner, senior leader, and employee) understood things similarly, we can look at how a representative from each group explained gainsharing.

Vice President: [A strategy] *to reward an earning mentality is to literally take waste out and on the money saved turn around pay it back out, a better proportion of it, plus the taxes on it…Everybody gets a check or they don't get a check. And of course if the business gets better, we all get to keep our job.*

Danny (senior leader): *Well it is measurement of performance of basically the entire organization on specific measures relating to what's most important to us.*

Sandy (employee): *Well if the company,…all the employees together, …make our goals, we benefit out of it, from the fact that we get amount of money.*

Analyzing the Documents

Concurrent with the analysis of the transcripts, I used the constant comparative method to compare organizational documents and the data from the leader interviews, beginning to address research question number three (i.e., How do implemented changes compare to the intentions of leaders?). The interviews and the documents described the changes and the intents behind the changes in much the same manner.

Trustworthiness

The nature of qualitative research creates interesting issues around trustworthiness, as there is not an instrument that can be assessed in terms of validity and reliability. Trustworthiness in qualitative research is different than in quantitative work. The common terms from the quantitative paradigm—internal and external validity, and reliability—need to be looked at in different ways. Internal validity, for example, is often replaced with credibility in qualitative research. How credible or believable is the research? One way credibility is ascertained is through triangulation, in which the researcher looks at multiple sources for the same data (Glesne, 1998; Merriam & Simpson, 2000). I triangulated data by using audio taped interviews, written transcriptions, and organization documents.

Merriam and Simpson (2000) also offer four additional strategies to strengthen the reliability and validity of qualitative research. These are (a) member checks, (b) peer/colleague examination, (c) statement of researcher subjectivity, and (d) submersion/engagement in the research setting. The process of conducting member checks entails returning data collected and tentative interpretations to the participants for their feedback. This ensures that what the researcher believed they understood from the data is aligned with the understanding of the participants. I gave each participant a copy of the transcript from their interview and requested that they review the document and notify me of any corrections or clarifications. The VP, two senior leaders, and one employee responded. None offered any suggestions.

Peer/colleague examination is a process in which the researcher asks peers or colleagues to examine the data and interpretations for their “plausibility” (Merriam & Simpson, 2000, p. 102). I had a colleague who is familiar with qualitative research review the data, findings, and

conclusions for logical connections. This helped ensure that the participants' voices remained the central focus of this document.

Merriam and Simpson (2000) also suggest the researcher prepare a statement of subjectivity, stating his or her biases, assumptions, and related experiences, before engaging in data collection. This serves two primary purposes. First, it positions the researcher in the study, drawing out any biases that may influence the research and, second, it alerts the reader of the researcher's biases. For this study, I wrote a statement of my subjectivity, which placed me within the study and exposed my biases as I approached the research. This is included as Appendix G and discussed below.

Finally, Merriam and Simpson (2000) suggest that a strategy for producing reliable research is submersion in the research situation by collecting data over an extended period of time to have a good understanding of the phenomena under study. While I was not submerged in the research site for an extensive period, I did have repeated exposure to the organization prior to this study.

External validity refers to transferability. To what degree can this research be transferred to another setting? While qualitative research cannot be generalized based on the statistical findings (as in quantitative research), Merriam (2003) refer to reader generalizability. Generalizability relies on the reader to determine to what degree the research setting is like their own in gauging the usefulness of the specific findings to their own setting. I will assist the reader in this process by providing rich, thick descriptions that will aid in determining similarities with their own settings.

Subjectivity

Appendix G contains my subjectivity statement. As stated there, I assumed that my gender, race and educational background would not be an issue as it was similar to one of the co-owners. The employees appeared to respect this co-owner, and I hoped that respect would transfer to me. Based on the responses I was able to get from the employees, I do not believe my race, gender, or education level was a barrier. One employee did question why I was allowed to come into the organization and ask questions if I was not doing so on behalf of the co-owners, but this skepticism was more a factor of being an outsider than a result of my race, gender, or educational background.

One of the other obstacles I anticipated in my statement of subjectivity was different socio-economic backgrounds. To account for this, I worked with one of the co-owners to be sure my questions were worded in such a way that employees would understand what I was asking; I did not encounter any obstacles with this. Where I had difficulty, was in understanding some of what the employees were telling me. At times, it was just their southern accent and slang terminology that I did not understand. Other times it was in the factory specific lingo. Examples of this were “side shields” (eye protections) and “cell” (a self-contained, complete work station).

Finally, I anticipated that there would be vast differences in what I heard from the leaders and the employees. Both my personal experience and the literature (e.g., Walston & Chadwick, 2003) supported this assumption. I was surprised to find that for the most part the responses were quite similar. I think this forced me to look more closely for differences, than if they had been obvious.

Overall, I do not believe my subjectivity had a positive or negative influence on the outcome of the study. It did make me look closely at how I approached employees and how I

interpreted what I heard them saying. It also made me aware that I was going in looking for one thing (differences) and found many more similarities.

Chapter Summary

This chapter began with a general overview of qualitative methodology and its appropriateness for this study. I then described the theoretical framework for this study, which is grounded in interpretivism and constructionism. Following a description of each of these I described the design for the study beginning with sample selection, data collection, and data analysis methods for this study. The site was chosen using purposeful sampling and the participants were selected using a combination of purposeful and criterion based sampling. I described the data collection methods of interviewing and document analysis as they applied to this study, followed by a description of the processes I used for data analysis. In this study data analysis began with a review of the transcripts, then I used a Microsoft Word table to organize, code, and conduct a comparative analysis. The final sections of this chapter contained a discussion of trustworthiness in qualitative research focusing on the issues of validity and reliability, and addressed how my subjectivity affected the study.

CHAPTER 4

FINDINGS

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. While this phenomenon can occur in many types of interactions, this study focused on differences and similarities in intents and perceptions occurring in the context of organizational change. In particular, this study attempted to surface the mental models held by leaders and hourly employees regarding specific changes that have been made. The purpose was addressed by the following research questions:

1. According to leaders, what key changes have been implemented since May 2003?
2. According to hourly employees, what key changes have been implemented since May 2003?
3. According to the leaders, what was the intention of each of the changes identified?
4. How do implemented changes compare to the intentions of leaders?
5. For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?

Three groups—co-owners, senior leaders, and hourly employees—were interviewed to identify what changes they deemed significant since May 2003. Co-owners and senior leaders were asked about their intent in implementing the changes they identified. Employees were asked what they believed (perceived) leadership's intent was in implementing the changes they identified.

The analysis yielded three findings:

1. Co-owners, senior leaders, and hourly employees did not identify the same changes as significant.
    a. The co-owners, who set the direction for the organization, had very different responses from one another.
    b. There was little overlap within the group of senior leaders.
    c. There was some overlap within the group of hourly employees, but there was a wide array of responses.
    d. Looking at the most frequently mentioned responses from each group, co-owners, senior leaders, and employees identified different issues as significant.
2. When asked about the three most frequently cited changes (as identified by senior leaders), there was a surprising level of consistency across the three groups:
    a. All three groups had a similar conceptual understanding of each change.
    b. Hourly employees' perceptions of why the changes were implemented were consistent with senior leaders' expressed intent.
3. Even though employees could describe the three changes and the reasons for their implementation, they were not able to explain what they had to do differently in their specific jobs to contribute to the success of the change.

Each of these findings will be discussed in the pages that follow. This chapter provides a descriptive account of how co-owners, senior leaders, and hourly employees understand the changes in their organization, including the intent behind the changes. Participants' comments are indicated with italics.

Finding One: Different Ideas Regarding Significance

Co-owners, senior leaders, and hourly employees did not identify the same changes as significant: (a) the co-owners, who set the direction for the organization, had very different responses from one another; (b) there was little overlap within the group of senior leaders; (c) there was some overlap within the group of hourly employees, but there was a wide array of responses; and (d) looking at the most frequently mentioned responses from each group, co-owners, senior leaders, and employees identified different issues as significant. Each of these areas will be explored in this section.

Changes Identified as Significant by Co-Owners

Nate, one of the co-owners and the CEO, was very focused on financial issues, with three out of four of his responses dealing directly with money. These were: (a) material price increases which were ultimately passed on to the customer in an unprecedented move for this particular industry, (b) new product lines to increase revenue, and (c) the overall financial situation and financial strategies of the organization. The fourth change related to staff and leadership changes.

The other co-owner, Susan, held the title of Vice President for Culture (VP). Her list of significant changes included: (a) communication systems; (b) leadership; (c) training; (d) safety; (e) gainsharing, an incentive program contingent on meeting organizational goals; (f) visual factory, adding visual organizational aspects to the factory layout; and (g) lean manufacturing, a system of reducing wastes and streamlining processes to improve efficiency and profitability. In concluding the interview, she also mentioned changes from the previous owner's IT system to their own, and maintenance's proactive planning for plant shutdowns.

Although both the Nate and Susan mentioned leadership changes, they approached them from different perspectives. Nate, the CEO focused on the bigger picture of getting the right people on board, stating:

> *An unfortunate reality in most change processes, and turn around in particular, is that not everybody gets on the bus quickly enough, and we…help people find roles that they can be successful in, in the change. But at the end of the day, some folks by their own choice, some folks by our choice, don't work out.*

Susan, the VP, on the other hand, focused more on the specific changes in the organizational chart, the removal of the supervisor level position, and the creation of the positions of lead and coach:

> *We…took out parts of the old job of supervisor and* [put them] *into a new role called "Lead Person." We gave the Lead Persons…twenty-four hours of accountability training to help them cope with the role. They are still hourly workers, but they take care of communicating, for example, goals and so on. Being a good role model, a teacher for safety, and things like that. And that was a change in leadership.*

Susan also discussed changes in training for organization leaders and meetings that supported the new leadership structure of the organization.

It is evident that although the co-owners were both focused on the end goal of a profitable and sustainable operation, they were focused on different aspects through which this could be attained. Susan focused her responses around an organizational culture assessment conducted in 2000. The three levers for change identified in that assessment were communication, leadership, and training. She believed focusing on these three areas would take the organization a long way in reaching its goals.

When asked whether the differences in focus were by design or default, both of the co-owners said that they *"played to their strengths"* but they were in very close communication with one another about all issues. While Nate, the CEO, was more focused on the customer and factors external to the organization's daily operation, Susan, the VP, had more of an internal focus. Susan indicated, however, that their roles *"constantly evolve"* to meet the needs of the organization.

In summary the co-owners appeared to be focused on systems (structure) and profitability (financial issues). Issues such as changes to the leadership team, the organization chart, and getting the right people on the *"bus"* can be viewed as issues of control. Statements such as *"they are still hourly workers"* used to refer to the position of lead person also suggest a position of control. The specific changes mentioned by Nate, the CEO, dealt with external financial issues, while the purpose of many of the changes identified by Susan, the VP, such as lean manufacturing and gainsharing had to do with internal structuring for profitability.

Changes Identified as Significant by Senior Leaders

As with the co-owners, there was little overlap in changes the senior leaders' identified as significant. Figure 10 shows changes each senior leader identified as significant. Shading is provided as a tool to help delineate one change from another and to allow the eye to quickly track across the table to see how many people identified a particular change. The changes "gainsharing," "lean manufacturing," and "leadership changes" have sub-parts, which are broken out with bullets but are related to the larger change.

Change	**Ann**	**Bobby**	**Danny**	**Travis**	**TOTAL**
Gainsharing	X		X		**2**
• Score Cards	X				**1**
Lean Manufacturing	X	X	X	X	**4**
• Trigger			X		**1**
• [Functional Area] Rearrangement			X		**1**
• 5S+1			X		**1**
Pay for Skills	X			X	**2**
Strategic planning		X			**1**
New product lines		X			**1**
Teams				X	**1**
Leadership Changes				X	**1**
• Principled Leadership				X	**1**

Figure 10: Changes identified by senior leaders.

As can be seen in Figure 10, nine of the twelve changes identified by the senior leaders, such as the implementation of score cards, changes in leadership, and the implementation of 5S+1 (a workplace organization system) were mentioned by only one person. In order to determine the "most" significant changes, frequency of response was considered. All four senior leaders identified lean manufacturing as a significant change, while two identified both gainsharing and pay for skills (a compensation program that rewards employees for learning and applying new skills). Lean manufacturing, gainsharing, and pay for skills were selected as the changes to be used for comparison purposes in this study since more than one senior leader mentioned each of them. From this point forward, these will be considered the "key changes."

Changes Identified as Significant by Hourly Employees

While employees could talk about the key changes at a high level, they got more animated and specific about changes that they identified as significant. As is depicted in Figure

11, employees were more focused on changes that directly or immediately affected them. For example, when changes to the machines were made or the overhead conveyor was removed, they immediately had to do their job differently. While lean manufacturing, gainsharing, and pay for skills ranked high in significance for the senior leaders, issues that affected employees' in a more direct manner were seen as most significant to them.

Figure 11 shows changes identified as significant by participants. Changes deemed significant by co-owners and senior leaders are represented by the number of individuals who stated that change. For a more detailed depiction of which senior leaders identified each change as significant, see Figure 10. Changes identified by hourly employees are marked with an X. As with Figure 10, shading is provided as a tool to help delineate one change from another and to allow the eye to quickly track across the table to see how many people identified a particular change. The change "lean manufacturing" has sub-parts, which are broken out with bullets but are part of the larger change named lean manufacturing. Similarly, the changes "gainsharing," "leadership changes," and "financial/bankruptcy issues" have sub-parts. The last column, "Total Employees" indicates the number of hourly employees who identified each change. Looking at Figure 11, eight out of 12 hourly employees identified changes in the occurrence policy, while seven out of 12 identified communication issues and six out of 12 identified changes in leadership.

Change	**Co-Owners**	**# of Sr. Leaders**	**Curtis**	**Martha**	**Mary**	**Benny**	**Sherman**	**Gena**	**David**	**Jerome**	**Linda**	**Carl**	**Billy**	**Sandy**	***TOTAL Employees***
Lean Manufacturing	1	4													**0**
• Trigger		1												X	**1**
• [Functional Area] Rearrangement															**0**
• Waste Reduction														X	**1**
• Installation of computer in [Functional Area]								X							**1**
• Change in machines					X			X		X		X			**4**
• Elimination of Overhead Conveyor					X		X					X			**3**
• 5S+1		1			X							X			**2**
Gainsharing	1	2		X								X		X	**3**
• Score Cards		1													**0**
Pay for Skills		2	X	X									X		**3**
Strategic planning		1													**0**
New product lines	1	1													**0**
Teams		1										X			**1**
Leadership Changes	2	1		X		X			X	X	X		X		**6**
• Principled Leadership		1													**0**
Communication	1		X	X		X			X	X	X	X			**7**
Hours – Overtime & Reduction of Scheduled Hours				X	X		X		X			X			**5**
Safety	1		X								X	X			**3**
Occurrence Policy			X		X	X	X	X		X		X		X	**8**
Bankruptcy/Financial Status of Organization			X	X							X			X	**4**
• Price Increases	1														
• Bounced checks								X							**1**
Morale					X			X							**2**
Break area					X										**1**
Vacation policy							X								**1**
Furloughs								X							**1**
Standards									X						**1**
Training	1														
Visual Factory	1														
Miscellaneous								**X**					**X**		**2**

Figure 11. Changes identified by employees compared to changes identified by co-owners and senior leaders.

Comparison of Changes Identified as Significant by Co-owners, Senior Leaders, and Employees

By design, this study determined what changes the senior leadership (senior leaders and co-owners) deemed significant and compared their beliefs about these changes to employee perceptions regarding these same changes. Comparing Figure 10 and Figure 11 shows that changes that are significant to leaders are not necessarily significant to employees. Figure 10 shows that senior leaders identified lean manufacturing, gainsharing, and pay for skills most frequently as significant changes implemented in the organization since the new owners took over. These are related to profitability and efficiency. Figure 11 demonstrates that employees, on the other hand, identified changes to the occurrence policy, communication systems, and leadership to be the most significant from their perspective. These changes affect their daily work life.

Many of the changes identified by hourly employees' were by-products or sub-components of the larger intentional changes identified by the senior leaders. An example of an employee-identified change being a by-product or sub-component of a larger change was that four employees identified changes to the machines in one area of the plant. While the senior leaders and the co-owners did not mention this specifically, "changes to the machines" could be considered part of the larger change of implementing lean manufacturing. Another example was that three employees identified the elimination of the overhead conveyors, which is also part of converting the pant to lean.

Interestingly, a closer look at each group individually reveals that even within groups participants had different ideas about what changes were significant. For the purpose of this study, what is considered significant to a group is based on how many people in that group identified it.

Finding Two: Shared Understandings of Concept and Intent

Since there were a wide range of responses regarding what changes were significant, the three changes most frequently cited by the senior leaders (gainsharing, lean manufacturing, and pay for skills) were used to compare co-owners' and senior leaders' intent and employees' perception of intent behind the implementation of these changes. These are referred to as "key changes." Although there was disagreement about what was significant, all participants were asked to talk about the three key changes. When specifically asked about the key changes, hourly employees not only had an understanding of what the changes were (conceptually) that was similar to the co-owners and senior leaders, they also had (with a few exceptions) a good sense of why the changes were implemented.

Related to this shared understanding of both concept and intent, it was interesting that in analyzing the senior leaders' responses (over all the changes they identified as significant, not just the key changes) each of them, at least once, referred to the influence of the co-owners. For example:

Ann: *"I think [the CEO] helped kick it off as far as his ideas…."*

"[The CEO] was committed to this process."

"When [the co-owners] purchased the company they came in knowing…."

Bob: *"It came from the leadership team, and principally from [the co-owners]."*

"I think [the co-owners] brought the idea in…."

"[The co-owners] were pretty convincing…."

Danny: *"Initially it was [the co-owners] explaining it [gainsharing] and the leadership team buying into it…."*

"Well certainly [the co-owners] were very convincing…."

Travis: *"It was driven straight from the top…."*

By expressing this influence in such a noticeable manner, it seems co-owners were conveying their mental models regarding the various situations within the organization and the changes they deemed appropriate according to these mental models. The way in which the co-owners conveyed their messages was persuasive enough for the senior leaders to adopt them as their own, at least in part, and to communicate them down to the lowest levels of the hierarchy, the hourly employees. The evidence reviewed in this finding is that "the message" was driven from the top to the extent that many employees were able to talk about each change in a similar fashion using their more simplified language.

Additionally, a team of senior leaders and hourly employees that convened to work on communication issues developed a multi-tiered communication system to facilitate the process of communicating information in the organization. Using a multi-tiered communication system provided multiple opportunities for employees to hear consistent messages about the key changes and other relevant organizational information. As an example, gainsharing was introduced to employees at the August 2003 all-employee meeting and further explained in a letter distributed with paychecks on August 28, 2003. This letter stated the purpose of gainsharing as two-fold:

1. *make the factory less wasteful and costly*
2. *puts wasted dollars into our paychecks!*

The letter also further explained the metrics that comprised gainsharing and what needed to happen in order for employees to receive a payout for the month.

A second letter dated September 4, 2003 explained that although there were many successes accomplished in August, there was not a payout because there were too many

absences. The letter explained that it was written to demonstrate that the established metrics were attainable (they achieved them all during August) and to encourage employees to keep striving for the goals the next month.

Beginning in December 2003, the organization produced a monthly internal newsletter which contained a monthly update on gainsharing. Each issue contained the metrics for the upcoming month and the previous month's scores and payout, along with occasional articles relating examples or tips for improving the likelihood of future payouts.

At the January 2005 all-employee meeting, employees were told that the gainsharing program was on hold so the metrics could be studied and recalibrated. An employee update was issued on January 7, 2005, which explained:

> *As we begin a new year…we are taking the opportunity to review our gainsharing programs for improvement opportunities. The month of January will be used to conduct this process and by 2/1 a newly updated program will be communicated and launched…As you know from our many previous discussions, the primary objective of gainsharing is to create a maximum team effort and a focus on improving all day-to-day aspects of our business.*

On February 1, 2005 an email was distributed for posting on bulletin boards informing employees to look for *"brand new Gainsharing Charts and Metrics"* posted on all boards. At the February 10, 2005 all-employee meeting, the new metrics were explained in detail.

In addition to the mechanisms utilized in the above example (letters, all-employee meetings, notices on bulletin boards, emails, and newsletters), the organization implemented several other communication systems. At the start of each shift, the lead holds a five minute start of shift meeting to keep employees updated on organizational information and progress on the

various metrics for gainsharing. This meeting is also supposed to serve as a conduit for information and questions that employees have. Scrolling monitors in the break rooms provide an on-going message board and contain announcements and organizational updates. Manuals were also created for certain change initiatives, such as pay for skills. Used in combination, these communication systems create a multi-tiered system that facilitate the process of ensuring employees receive consistent messages. As will be described in the sections that follow, it was successful in conveying the concepts and intents of the key changes.

Similar Understandings of Key Changes

Conceptually, co-owners, senior leaders, and employees offered similar understandings of the key changes. When employees were asked about the three key changes, their responses were more similar to than different from the responses of the co-owners and senior leaders.

Gainsharing

An example of this similarity can be found by looking at how the co-owners, senior leaders, and employees described gainsharing. Susan, the VP, described gainsharing as a *"big new strategy… to create an involved collaborative organization…[it is a] way to reward an earning mentality… literally take waste out and, on the money saved, turn around* [and] *pay…out a better proportion of it"* to the employees. Two of the four senior leaders identified the implementation of gainsharing as a significant change in the organization. Danny said gainsharing was the *"measurement of performance of basically the entire organization on specific measures relating to what's most important to us."* Ann explained it more specifically as:

Basically gainsharing is… you measure the shop against those four [established] *metrics. If we perform and meet the objective*[s] *then there is a payout, usually the maximum can be $200.00 a person, basically down to 0 if we meet no objectives.*

Curtis, an hourly employee, responded, *"It is like a bonus check that you get for doing good jobs in five or six areas."* Other employees also expressed an understanding of gainsharing that closely resembled the explanation provided by the VP and senior leaders. Sandy described gainsharing as *"…the company…all the employees together, if we make our goals, we benefit out of it, from the fact that we get [an] amount of money."* Similarly, Gena said:

Gainsharing consists of you meeting certain criterias, to get to a certain point, and if you reach it…if it is 4.0 and you go below 4.0 that is good, if you go above it, that is bad. Certain…ones you go over and certain ones you go under, (long pause) if we reach all of those goals we get a huge bonus, which is good money….

Generally speaking, gainsharing was described similarly by all three groups of employees (co-owners, senior leaders, and hourly employees). According to members of this organization gainsharing is a system of encouraging employees to attain organizational goals by rewarding them financially for doing so.

Lean Manufacturing

Another example of how participants at all levels of the organization expressed similar understandings of the key changes can be found by looking at how Danny and Travis, senior leaders, described lean manufacturing and comparing it to how Billy and Sandy, hourly employees, described it:

Danny: *"…reducing non-value added activities throughout the process."*

Travis: *"It means taking waste out of the organization, both the physical processes of making [products], and the soft, kind of office administrative processes that lead us to the ability to make [products]."*

Billy: *"…I just think they just try to keep everything easier, just right there for you where you won't go too far to [get materials]…."*

Sandy: *"Lean manufacturing, to me, is just with the least amount of inventory and just the easiest way to get everything out, I guess without a lot of inventory and even after…the [products] are made, they don't sit out in the parking lot. They are ready as soon as we make them, they are ready to go on a truck."*

Additionally Gena and David, hourly employees, both described lean manufacturing as putting things in a logical order. After searching to find an answer and a long pause, Gena said lean manufacturing: *"Consists of…everybody working together as a team to get a product line within a specific time limit, which is two days I believe. From the beginning of the line to the end."* David explained it like this:

> *Well, I am going to show you, this is what it* [lean manufacturing] *means to me* [draws picture with boxes] *if I repair this tank, I have to put this tank in this square,* [pointing to the boxes] *and then this tank that I have already repaired goes here. Okay, then it should be finished right here, …but what it is, is like moving the product through the line, basically one part at a time.*

Although Gena could explain it in a manner consistent with the senior leaders, she still had her doubts about whether it was working*: "what I think, we have to handle these things too*

much, you know, handle these tanks, in other words, I think we ought to modify somehow or another." She continued, explaining that the problem came in when there were defects:

> *[If] they have a defect, see that just screws up the whole deal, when you got a defect in here somewhere, that means you have got to set it aside…and this unit here or [part] here or whatever is behind the rest of them and it is out of sequence. You see what I am saying? And that is the only thing wrong here. Lean manufacturing is a great idea if you have the back up machinery to do it.*

A major aspect of lean manufacturing is streamlining—simplifying processes to reduce waste and increase efficiency. Senior leaders and employees talked about streamlining in various ways. Senior leader Travis talked about *"mapping out the process;"* Ann talked about making *"the product with minimal work in process;"* and Bob talked about the need to tie all the processes, customers, and suppliers *"together electronically"* to share information. Employees also talked about streamlining in their own words. For example, Jerome, an employee, talked about *"putting things in closer proximity in order to get the job done"* more efficiently.

These various explanations of lean manufacturing support the VP's explanation: *"Lean gives you a comprehensive agenda"* to streamline processes by reducing waste and improving efficiency. All of the participants described a streamlining of the production process using words that were relevant to how they understood the process.

Pay for Skills

Although pay for skills was a newly implemented change that some employees said they did not know enough about to answer the questions in the interview, responses from those employees who could talk about it provided another example of how participants at all levels of the organization offered similar understandings of the three key changes. Susan, the VP

explained, *"pay for skills is another HR tool that balances the good of the individual with the good of the business."* Travis, a senior leader, explained pay for skills as the *"reinforcement of people being a learner, and more adaptive, and more flexible."*

Curtis, an employee, concurred with the VP and senior leaders. He said,

> *Pay for skills is not…automatic increase … in salaries...everything went to pay for skills which I think…helps the employee to be aware of their job and learn their job a little bit better so that they can get the raise. In other words, everybody right now knows the raise is not automatic; we don't even have cost of living raises here anymore. Everything is pay for skills. You have to earn it, you have to learn the job, you have to qualify for the job, you have to go through some interviews and go to a behavior safety class before you can qualify*.

Curtis' statements reflect the mental model through which he views pay for skills. Several of the hourly employees who participated in this study did not have much to say about it since it was a newly implemented program. For instance, Sherman stated: *"I don't know that much about pay for skills, they just came out and told us about it this week,"* and David said: *"we had a thing on that today and I am not decided about that yet."*

Based on the prior discussion, the data showed a surprising level of consistency among the co-owners, senior leaders, and hourly employees. Each of the three groups was able to define the key changes in a consistent manner while using their own words.

Similar Understanding of Intent Behind Implementation of Key Changes

Just as there was similarity in understanding the key changes at a conceptual level, so too was there a similar understanding of why the changes were implemented. Figure 12 shows what each group (co-owners, senior leaders, and hourly employees) understood to be the intent behind

the implementation of the three key changes: (a) gainsharing, (b) lean manufacturing, and (c) pay for skills. In the column representing employee perception, issues are divided into two sections, those that were similar to an intent expressed by either co-owners or senior leaders and those that were different. Some perceptions identified as "different" may seem more different in language than in meaning. The distinctions were based, however, on context found in the data. This will be discussed in the section that follows. Numbers in parenthesis represent the number of participants expressing that intent or perception.

Gainsharing

Susan, the VP of Culture, responded to questions about the intent behind implementing gainsharing by tying the intent to an issue that surfaced in an organizational culture survey that was conducted in 2000: employees' desire for an improved compensation program. She said, *"everyone desired improvement in their pay and benefits. When you have a factory that is practically bankrupt…clearly there is no pool of money to just give everybody a raise."* An employee, Gena, also indicated that she believed the reason for gainsharing was a *"way of getting a raise…*[as a] *cost of living* [raise] *is not in our contract. Gainsharing is it."* In all, six employees expressed their belief that the reason gainsharing was implemented was to provide a financial incentive and benefit to the employees for their work. Jerome put it this way: *"I think it was an incentive to get people to work and do a better job…the pay off would be getting a gainsharing check every month."*

Key Change	Co-Owners' Intent	Senior Leaders' Intent	Employees' Perception
Gainsharing	• Way to honor employees' desire for improvements in compensation when there is no money • Generate better cash flow • Create a better bottom line • Develop an earning mentality	• Get everyone aligned with organization goals (2) • Help everyone see how they contribute to the big picture • Repair damaged culture • Provide "universal motivator" (money) to accomplish the above (2)	*Similar* • To give employees opportunity to get raise (6) • Help employees understand organizational issues/big picture • Increase productivity • Motivate employees (5) *Different* • Avoid giving raises (3)
Lean Manufacturing	• Get rid of waste • Follow lead of successful businesses in the industry • Belief that "the future belongs to those who can frequently reorganize…around the needs of changing processes"	• Increase productivity • Reduce cycle time (3) • Increase % of value added steps • Decrease costs/improve cash flow (3) • Reduce inventory(3) • Streamline (3) • Follow lead of successful businesses in the industry	*Similar* • Increase productivity (2) • Reduce cycle time • Decrease costs/improve cash flow (4) • Reduce inventory (2) • Streamline (2) • Decrease waste *Different* • Make jobs easier/keep people happier • Organization aware of what materials they have and what they need • Decrease the number of employees needed
Pay for Skills	• Create "cost neutral" opportunity to increase pay • Create earning mentality • Create flexible workforce • Balance what's good for employees with what's good for business	• Replace an entitlement mentality with an earning mentality • Create flexible workers – more generalists, less specialists • Motivate employees to want to learn new jobs (i.e. to become flexible)	*Similar* • Create an earning mentality • Create flexible workers (6) • To provide incentive or motivation to learn new jobs (3) • Bring employees to certain pay level (so they will stay) *Different* • Keep employees (3) • Reduce overtime (2)

Figure 12. Comparison of intent for implanting key changes and perception of intent.

Susan, the VP, further indicated that the desired outcome for implementing gainsharing was to have *"better cash flow, better bottom line,* [and] *an earning mentality replacing an entitlement mentality."* Similarly, two senior leaders and five employees talked about the intent being to motivate employees. The implication is that employees would be motivated to work harder to achieve the organization's goals—or improve cash flow and the bottom line, as suggested by the VP. Ann and Travis (senior leaders) also expressed that motivation was an intent behind the implementation of gainsharing: *"to make people care."* Travis described money as a *"universal motivator"* implying that the intent was to motivate employees to work toward the business goals. Sandy, an employee, similarly stated that she believed gainsharing was implemented because it *"motivates people…*[to] *produce more,* [create] *less waste,* …[improve] *attendance…."* Another employee, Jerome, had similar beliefs. He thought gainsharing was implemented as *"an incentive to get people to work and do a better job."*

A senior leader, Ann, indicated another intent behind implementing gainsharing was so employees could understand how they fit into the big picture. Similarly, Travis, a senior leader, indicated the intent was to get everyone aligned with the goals of the business. Although the VP did not indicate this was the intent, Danny, a senior leader, stated:

> *[the co-owners] brought the idea in that we all needed to be better aligned on what the organizational goals were…[the co-owners] were pretty convincing that it just made sense that we needed not only clearer measures, but common measures throughout.*

An employee, Benny, similarly expressed that his perception of why gainsharing was implemented was to help employees understand the big picture. Benny explained gainsharing was implemented *"to make people think, 'Hey, you know, the better I do the better the company does, and* [that means] *more money.'…* [It is] *that simple…and…not just more money, but…to*

keep your job." In the employee's own way, he was expressing that gainsharing was a way to help employees see how they contributed to the big picture and goals of the organization.

Another intent expressed by a senior leader (Ann) was that gainsharing was an attempt to *"repair a culture that is damaged"* from years of poor management. The entitlement culture that the co-owners had described may also relate to a "damaged" culture. Employees did not explicitly mention culture, however, many of their beliefs about why gainsharing was implemented (e.g. raises, increased productivity, motivation, etc.) are aspects of organization culture which influence employee commitment and desire to produce for the organization. Susan (the VP) said she and Nate wanted to foster a culture that has an earning mentality, which would entail enacting elements within the culture to change how the culture is perceived by employees. Issues, such as raises and motivation mentioned by the senior leaders and employees are all contributing factors.

While most employees expressed their understanding of why gainsharing was implemented in a manner similar to the senior leaders or co-owners, three employees had a very different perception of why gainsharing was implemented: *"to avoid giving employees raises."* Mary simply stated it was, *"to avoid giving us a raise"* and Martha said it was, *"so they can keep some money in their pocket."* Gena (an employee) stated, that gainsharing was implemented, *"so we couldn't get no raises every year, that was our way of getting a raise."* She went on to explain that gainsharing was the only way for employees to earn more money. She and others expressed concern that this money was not guaranteed as an annual raise. This was expressed in the context of gainsharing payouts being inconsistent in contrast to a cost of living increase or annual raise that was predictable.

As indicated in Figure 12, three themes were common across two groups: (a) desire to provide financial benefit was common between a co-owner and six employees, (b) alignment and fit with the big picture was common between three senior leaders and an employee, and (c) to motivate employees was common between two senior leaders and five employees. This demonstrates the degree of understanding across groups.

Lean Manufacturing

Once again, as can be seen in Figure 12, there was consistency in how people from the different groups (co-owners, senior leaders, and employees) explained the intent behind the implementation of the changes. Susan, the VP, suggested two intentions for implementing lean manufacturing—to get rid of waste and to be more competitive. While none of the senior leaders or employees mentioned "competitiveness," all of the reasons given contribute to being competitive. One employee, Curtis, said he thought lean manufacturing was implemented to reduce waste. He said there was *"too much scrap, [they were] throwing away too much material…."*

Senior leaders and employees agreed that reasons for implementing lean manufacturing included an increase in productivity, a decrease in cycle time, a reduction of costs and an improved cash flow, a reduction of inventory, and a streamlining of processes. Bob, a senior leader, said, *"one of the things we needed to do is change the amount of cash necessary to drive the business, and to reduce the cycle time."* Bob, continued: *"the immediate need was cash, and that was the primary driver."*

Three senior leaders indicated an intent behind the implementation of lean manufacturing was reduction of inventory. Senior leader Ann puts it like this: *"…we had a 25% increase in material costs…and there is only one way to cover that…you have got to get your inventory*

out…." Bob, a senior leader, described the desired outcome of implementing lean and reducing inventory: *"…that is the real payoff…all of that warehousing goes away"* which is a reduction in costs and labor. Two employees also believed the intent behind implementing lean manufacturing was to reduce inventory. Gena said, *"…they didn't want the inventory in the plant. They want to make 'em and ship 'em."* Another employee, Sandy, said she thought lean manufacturing was implemented so that*"…there is not a lot of material just sitting out there…waiting to be used."* Gena similarly stated that she believed the intent behind lean manufacturing was,

> *to make it more of an even flow, where everything starts kind of matching up instead of…you are making [parts] well over here on one side of the plant and they are going to another side of the plant. It is just so everything…kind of goes together.*

Employees understood the cost cutting benefit of going lean. Carl, an employee, thought lean manufacturing was implemented because it was *"…more productive, maybe to cut expenses, it would be a lot…less expense…."* Employees Sandy and Sherman agreed:

Sandy: "*Because it saves a lot of money…."*

Sherman: "*It cuts down on costs, makes it a more productive factory."*

As these quotes demonstrate, employees seem to make the connection between materials (whether inventory or scrap) and wasted money.

As with gainsharing, there were a few employee perceptions that did differ from the senior leaders and co-owners. For example, Carl (an employee) offers a rationale by means of definition. He talks about the job getting done with less people:

> *Lean manufacturing is generally people. It is doing, or performing, the job with less people. And they have implemented that. We've seen that and in areas it works. And in areas it puts a lot of, a stressful situation to try to meet the goals.*

Billy (an employee) says lean manufacturing was implemented to, *"to make your job easy, I mean, you want to keep your employees happy…."* Finally, Martha (an employee) offers that lean manufacturing was implemented, *"so they can be aware of what materials they have, what they need…."*

Figure 13 shows the number of people from each group (co-owners, senior leaders, and employees) that stated each intent or perception regarding the implementation of lean manufacturing. Although some of the perceptions look similar, they cannot be combined. The language chosen is important in understanding mental models. A subtle difference in word choice can make a difference in how the person is making meaning of the change. For example, on the surface, *reduce inventory* and *aware of inventory levels* may look like they are referring to the same issue. Further inquiry, however, shows that these are actually referring to opposite conditions. Individuals who spoke of reducing inventory were considering the cost benefit of doing so. For example, when Gena (an employee) said: *"…they didn't want the inventory in the plant."* She followed it up with: *"…they feel like that is wasted money, just sitting around."* However when Martha (an employee) said lean manufacturing was implemented, *"so they can be aware of what materials they have, what they need…,"* she was referring more to tracking inventory so that they did not run out of materials. Later in the interview, she said, *"…they are going to make sure that we are not going to stock out of any material…."* In spite of the few unique responses at the bottom of Figure 13, there is a general consensus about why lean manufacturing was implemented.

Intents/Perceptions for Implementation of Lean Manufacturing	# of Co-Owners	# of Senior Leaders	# of Employees
Reducing Waste	1		1
Remain Competitive	1	1	
Increase Productivity		1	1
Reduce Cycle Time		3	1
Increase Cash Flow		3	4
Reduce Inventory		3	2
Streamlining		3	2
Increase Value Added Steps		1	
Make Jobs Easier/Keep People Happy			1
Decrease # employees needed			1
Aware of Inventory Levels			1

Figure 13. Number of Individuals Expressing Each Intent or Perception for the Implementation of Lean Manufacturing.

Pay for Skills

Turning to the third key change, pay for skills, provided another opportunity to examine how co-owners, senior leaders, and hourly employees viewed the same change in their organization. Although employees had less to comment on in regards to pay for skills, what the various groups of employees did share was similar. Susan, the VP, offered four reasons (or intents) behind implementing the pay for skills program. First, she said pay for skills was a,

> *cost neutral* [way] *for employees to increase their compensation...*[the previous owners] *had instituted a gap between entry level pay years ago vs. more recent new hires, causing*

> *a significant gap in pay between employees doing essentially the same job. We wanted…to close this gap.*

While no senior leader or employee mentioned the cost neutral benefit, one employee, Jerome, did talk about closing the gap in pay. He indicated that pay for skills was implemented to *"get the majority of people up to a certain pay level."*

The second intent stated by the VP was to create an earning mentality. She stated, *"We wanted an earning mentality for the overall culture as well* [as] *to improve individual skills and improve performance…."* A senior leader and an employee also talked about creating an earning culture. Ann, a senior leader, framed it as

> *[Nate, the CEO] would answer that question, that we needed and earning mentality here and we did not have one. We had an entitlement mentality here and you can't make a successful company on that, you have to have an earning mentality….*

The employee, Curtis, said, *"They did some research at some other companies and they found out that the program* [pay for skills] *works better than just* [an] *automatic pay raise…."*

The third intent for implementing pay for skills offered by the VP was to create a more flexible work staff. This was also common across senior leaders and employees. The co-owner stated the intent was to create *"more flexibly skilled employees who can do multiple jobs and move according to the need of changing processes."* Travis, a senior leader, talked about this flexibility as a solution to the issue of needing more generalists and fewer specialists. He said, *"…the organization doesn't need specialists anymore, we need generalists. So this* [pay for skills] *is one way to encourage people to learn and use other skills."* Six employees said they believed pay for skills was implemented to create a more flexible workforce. Linda, for instance, offered that pay for skills was implemented,

to get people interested in moving, or not just sitting in one place forever and ever…if you go learn this, you know, that would be more money…I am going to try this, whereas before, I wouldn't even think about going.

Martha, an hourly employee, understood the intent of pay for skills: *"…if my area is slow…I can go somewhere else."* Mary, Benny, and Sherman all talked about how flexible employees helped with the organization's attendance problem. Mary, another hourly employee said, *"…they* [were] *having problems with attendance…if I got two people…out…and you know how to do this job, I can come take you off this job and put you over there…."* Mary and Martha were in sync with others, making it clear that employees had a general understanding of at least this one reason pay for skills was implemented.

The VP, Susan, stated the fourth intent for implementing pay for skills was to *"balance the good of the individual with the good of the business…."* In other words, pay for skills was a way to motivate employees in a manner that created a win-win situation. This, too, was common across senior leaders and employees. A senior leader, Travis, talked about *"money* [being] *a strong reinforcer in this culture….* [He said] *it is giving our people what they want for doing what is right for the organization."* Three employees described their belief that the intent behind implementing pay for skills was to motivate them to learn new skills and become more flexible in their contributions to the business. Linda's comment about *"getting people more interested"* also referred to motivating employees to learn new skills. Two other employees, Carl and Gena, both talked about pay for skills as an incentive to keep employees satisfied:

Carl: *"They would have the opportunity to earn more money and not be attracted to go get another* [job]*… that would be something that would be a plus for the company."*

Gena: *"They did that to help them top out* [on the pay scale] *more quickly…they are trying to do something to keep the ones that* [are] *here satisfied."*

Employees also expressed beliefs about why pay for skills was implemented that were different from the co-owners or senior leaders. Three employees (Gena, David, and Carl) thought the intent was to retain employees by keeping them happy. This belief relates to the belief that it was implemented as a motivator. Two employees (Benny and Billy) thought it was to reduce overtime. This finding relates to creating a flexible workforce. Having the ability to move employees where the work is, reduces the need for overtime as work can get done as it is created. Benny explains, *"…rather than call somebody else* [in for overtime], *we will just move around."*

The dialogue around pay for skills reflected a quite high degree of consistency across the three groups (co-owners, senior leaders, and employees). The fact that pay for skills was discussed at the January all-employee meeting, which occurred shortly after the senior leader interviews and immediately before the employee interviews may have influenced this. Three understandings of intent were common across all three groups: (a) create an earning mentality, (b) create a flexible workforce, and (c) motivate employees in a way that is good for the employee and the organization. One theme was common across two groups—create an opportunity to improve employee compensation was common between a co-owner and an employee. There were two themes that were unique to the employee group. Three employees believed the intent was to keep employees happy so that they will stay with the organization and two employees believed the intent was to reduce overtime. These perceptions, however, tie back into the overall intent of pay for skills expressed by the VP—to meet employees' desire for improved compensation and the organization's need for a more flexible workforce to accommodate the organization's goals. So, although a few hourly employees expressed

perceptions that were slightly different than the co-owners' or senior leaders' expressed intents, those perceptions seem to be related to the leaders' intents.

Finding Three: How Employees Made Sense of the Changes They Experienced

As has been evidenced, hourly employees could espouse the definition of and reason for implementation of the key changes. However, one of the most interesting findings that emerged in the data was that employees only had a high level understanding of these changes. When asked how each change impacted their day-to-day job, employees for the most part expressed general changes in mindset rather than what they did differently in their functional responsibilities to contribute to the success of the change. Each of the key changes will be explored in regards to how employees believed it impacted their jobs.

Gainsharing

When asked how gainsharing impacted their day-to-day jobs, employees expressed varying degrees of understanding the connection. Five employees indicated gainsharing did not have a direct impact on their day-to-day job, yet they agreed they paid a little more attention to what they were doing because they wanted the bonus at the end of the month. Martha explained, *"it could be like [a] psychological thing…."* Along these lines, Curtis said gainsharing, *"made me pay attention, do a better job…and not letting any defect go down the line…."* Gena said it gave her,

> *something to look forward to and it is why I tried to get that little extra. If I see an area that needs sweeping, if I have the time, I will sweep it up just to keep the area looking good so when they come to check everything…it will be nice….*

Carl said gainsharing was, in part, to minimize occurrences (in order to get a gainsharing payout, the organization had to keep the number of absences below an established number for the

month). Linda said in the past they came to work and did their job, but had no metric, nothing to strive for:

> *Well I don't do nothing different, I just try to do more...like before…I am just working, okay? I know I got to do this so I am doing it, but now…like we have a number. Before I didn't think nothing of, our number goal is…our load is like 320 say. We didn't care about getting 320, we just do it because we know somebody on the next shift is going to come in and pick up. So now like out there where we are now, we try to at least do a 170 on our shift, 150-170. So we know we just got one more shift and we want to make sure they can get the rest of it out.*

While she stated nothing changed in her job, knowing the possibility of getting the gainsharing check pushed her to work harder.

Four employees said gainsharing did not affect their day-to-day job at all. David said, gainsharing did not affect his job *"in repair…see the way I look at it, it has got to come off the end of the line…I don't really have a part in the line…"* Jerome said it did not affect his job because he was *"always conscious of doing a good job…whether I get a gainsharing check or not. I am just quality conscious. I was trained that way."*

One employee, Sherman, indicated that gainsharing did have a direct impact on his job. He said, *"…now our defects do count too,"* but, still, he did not indicate how things might change in his job to prevent those defects. Another employee, Benny, started out answering that gainsharing did not affect his job, but as he thought about it he stated,

> *…people in the paint line can't actually be credited with making defects…so…other than trying to do the best we can, get it done in the least amount of time, in the least amount of*

overtime…that can save money, which in the long run will be cost per unit…[which] helps make the gainshare.

Generally, the implementation of gainsharing seemed to motivate employees to work just a bit harder and think about work a little more consciously.

Lean Manufacturing

In regard to how lean manufacturing impacts employees' day-to-day jobs, three employees specifically expressed that lean manufacturing did not affect their day-to-day job. Billy, summed it up saying, *"I don't think it has affected anyone's job, if it did, hopefully it made your job easier."* Additionally, two employees said they did not know enough about what lean manufacturing was to know whether it impacted their jobs or not. Linda tried to explain:

Well (long pause) it is kind of hard to explain because like I said it is just not something I deal with really everyday, you know. Like I hear about it in the monthly meeting every now and then… I just hear them talk about it, you know, I don't understand whether it applies to my job, you know?

These comments were interesting given that lean manufacturing was the change most often cited as significant by the senior leaders. If employees did not understand how lean manufacturing affected their job, it does not seem likely they would make intentional changes in their jobs that would contribute to converting the organization to a lean manufacturing facility.

Two employees offered generalities about lean manufacturing, such as it *"made life a little better,"* but they could not say how it specifically made their jobs better. Five employees said lean manufacturing did have a direct impact on their job. Carl, for instance, said, *"…I handle material, whereas…in the past you had someone to stock the bin."* Carl also addressed changes to his job as a result of removing the overhead conveyors: *"We were a little more*

automated…because we don't have the overhead conveyors, everything is ground level, and that has been a big change…." David said that because lean aims for a balance of quality and speed, he has been told to overlook miniscule defects in the paint and only repair those that meet a certain size standard: *"…they got me looking for the big ones" which* produces less reportable defects. Jerome, an hourly employee who works in "repair," said that he gets more defects coming his way. When asked if more defects were being produced, he replied, *"I wouldn't say they are being produced. I think they are just being siphoned to me."* This is a reflection of streamlining the processes. Curtis said that lean manufacturing has affected his job in that he is now "*saving material I would normally throw away. [If you] have a slight problem with it…[I] try to use it again and see if it would work the second time…."* While lean manufacturing was the most often cited change by senior leaders, it was surprising most of the employees interviewed, with the exception of Curtis, were not making a direct connection between the concept of lean manufacturing and their functional roles within the organization.

Pay for Skills

Pay for skills was so newly implemented that employees seemed to find it hard to address how it impacted their jobs. Only two employees were participating in the program at the time of the interviews. When asked how it affected their day-to-day jobs, these employees talked about the requirements they had to meet for the pay for skills program. Billy said, *"It hasn't affected my day-to-day job, it is just thinking about what can I do…what kind of team can I start…to get to the next level…"* Curtis said it affected his job,

> *…because of the qualification and the study…it makes you pay more attention to your job and learn your job better…*[before] *why should I try to learn the job if I am going to get the raise anyway. It was selfish….*

Employees who indicated they were not participating in pay for skills were asked if their jobs had been impacted by the employees going through the program, as the program requires employees to learn skills in different parts of the plant. Being that pay for skills was in its initial stages, any impact of the program had not been widely experienced by hourly employees who were not directly participating in it.

In the considering the previous discussion about how employees made meaning about the three key changes, nine employees felt that at least one of these key changes—gainsharing, lean manufacturing, or pay for skills—had an impact on them, although most of the impact was indirect or *"psychological,"* as Martha suggested. The count of nine includes the two employees involved in the pay for skills program. Six employees said neither gainsharing nor lean manufacturing directly affected their jobs. Pay for skills was not included in this calculation, as participants did not have enough exposure to this newly implemented program to grasp the impact. In regards to gainsharing, five employees did express non-technical changes, those of a more psychological nature that caused them to go the extra mile. Regarding lean manufacturing, one employee indicated that she was unsure whether or not it impacted her.

It was interesting that employees could talk about the three key changes and the reasons (intents) the changes were implemented at high level, yet about half of them could not relate the changes to their day-to-day job. While the organization has made some large-scale changes, employees did not have an understanding of how they could change their jobs to contribute to the success of the changes.

Other Changes Deemed Significant by Employees

As seen in Figure 11, employees identified significant changes as those that had a more direct or immediate impact on them. The most frequently cited changes were the occurrence

policy, communication, and leadership. How employees made meaning of these changes will be discussed in this section. As there is much crossover in the discussions of communication and leadership indicating a relationship between these issues, they will be discussed together.

Occurrence Policy

According to employees, they can accrue occurrences for being late, missing work, or refusing overtime. The policy was introduced under the previous owners; however, the employees expressed three points of contention with changes to this policy.

First, the number of occurrences allowed before the disciplinary process resulted in termination had dramatically decreased since the current owners took over. Employees had differing impressions of the number of allowable occurrences under the previous owners. Some employees said they could get 12 occurrences; others believed it was ten. All agreed that the number of allowable occurrences has decreased multiple times under the new owners.

According to the training director, the discipline process in regard to occurrences is as follows: (a) two occurrences, the employee receives counseling; (b) three occurrences, the employee receives an oral warning; (c) four occurrences, the employee receives a letter of warning; (d) five occurrences, the employee receives a 1-day suspension; and (e) with six occurrences, the employee is terminated. Along with the tightening of this policy was the addition of personal days and a reduced time period before a reduction in occurrences could be earned. These policy changes were intended to make the occurrence policy more manageable for employees that did not have a history of occurrence problems and, at the same time, more stringent for those that did.

The second point of contention with the occurrence policy was that it was a *"no fault"* policy. Benny explained this,

means it doesn't matter why you are out...Well now if you got days, sick days or vacation days, it doesn't count, but if you are out, flat tire or…I am just so sick today I can't work, it is all the same, you know….

Employees did not think it was a fair policy because they believed some reasons for being late were unavoidable, such as a flat tire or having an accident on their way to work.

Third, while employees acknowledged that some people did not care about coming to work, they believed it was not fair for the stricter, no fault policy to apply to employees that have not exhibited problem behavior in the past. Jerome summed this up by saying:

Well you have people that abuse the system and rather than dealing with the individual that is doing that, I think they deal with everybody in the same way because sometimes they will make statements like, "okay we know who the abusers are." Okay that is fine, deal with the abuser, if I am the abuser deal with me, but if I am not, then deal with the person that is causing the problem.

While the occurrence policy was very significant in the eyes of the employees, it did not register as a significant change for senior leaders.

Communication and Leadership Changes

Seven employees identified communication as a significant change and six employees identified leadership changes as significant. Five of these employees identified both leadership and communication. Each of these issues was explored independently; however, there was a lot of overlap in the responses. As a result of the overlap, these changes will be discussed together in this section.

Several hourly employees were positive about changes in communication and leadership. Benny and Carl said that the new owners listened better and that there was more communication

now. This was echoed by Sandy and Mary who said better communication was one way the co-owners showed they cared about the employees. When asked about other ways the co-owners showed they cared, Sandy said,

> *Well I know [Susan, the VP] has worked third shift…like I think when we first came back this year, she actually worked part of third shift the first week back to try to see how the start up process of the plant is and [Nate, the CEO] you see him walking through the plant and they are always, you know, feel like it is an open door policy if you need to talk to them…go through and if there is stuff that is not working, they definitely…want you to come to them.*

By being visible, working on the floor of the plant, and being accessible, some employees felt the new owners demonstrated that they cared about them.

On the other hand, there were some hourly employees who were not as trusting about these changes. For example, Martha said that the co-owners presented themselves one way when they took over the plant:

> *[Susan and Nate, the co-owners] presented themselves as being honest people and they are going to be open people and this and that and another. I mean they always, just every meeting, "we are open and we are going to tell you everything" and this and that and the other. And in turn, it is backfiring on us….*

Martha further explained: "*they are not going to tell you everything of what is going on….*" Even though she feels that these changes "*backfired*" she does express the slightest glimmer of hope:

> *…I can commend [Susan and Nate, the co-owners]*[because] *I can talk with them, whether it does any good or not, I can talk, I can reach them, I see them in the plant, you*

know. With past histories I wouldn't know who a plant manager was. That is… really the only good thing I really can say for right now.

In regards to changes to the leadership structure, several employees expressed they did not understand the newly designed organization chart that eliminated the supervisor role and created the positions of leads and coaches. Martha put it like this:

They have created this position called coaches which they put some management people in, which I think is a hoax because I have never seen them do anything since they created those jobs, I haven't seen them do anything.

Linda agreed and said they have the wrong people in charge. When questioned about this, Linda said,

Well because you go and pass a test don't mean you [are] *the right person* [to be a lead] *though. Even though you might be smarter than me on paper or in books, but still out there on the job…you don't really know what you are doing, so that don't mean nothing.*

With these newly created positions of lead and coach, there was a feeling that the new chain of command was not effective. Jerome offered:

Before, if you had a problem with something that is going to cause a lack of quality in your production, okay, you could go to your supervisor, or your area manager, and talk with them about it. And right away they would start implementing something to make sure that it gets taken care of. Now, I mean you can take it to your lead person, but really there is nothing they can do about it, and it might take forever to get a coach or a manager involved, and by then, maybe the customer has already gotten some of the [products] and then you get a nasty letter back from them and then all of a sudden the operator is the cause.

David expressed similar feelings about this new chain of command and Linda shared that two weeks earlier, she had gone *"to a coach and asked her for some ink to put on my stamp, she didn't know where it was or how to get it or what to do about it…"* She still had not received the ink for her stamp, which was critical to do her job effectively.

These three changes (the occurrence policy, communication, and leadership) were the most significant changes to employees (based on the number of employees who identified them as significant). Employees talked about these changes and what they meant more passionately than they did the three key changes.

Chapter Summary

This chapter discussed three findings that surfaced in the search for an answer to the research question: How do employees' perceptions compare to senior leaders' intent? In summation, the most frequently identified changes by senior leaders were lean manufacturing, gainsharing, and pay for skills. These three changes were used as the basis to explore leaders' intentions and employees' perceptions. The findings were:

1. Co-owners, senior leaders, and hourly employees did not identify the same changes as significant.
    a. The co-owners, who set the direction for the organization, had very different responses from one another.
    b. There was little overlap within the group of senior leaders.
    c. There was some overlap within the group of hourly employees, but there was a wide array of responses.

    d. Looking at the most frequently mentioned responses from each group, co-owners, senior leaders, and employees identified different issues as significant.

2. When asked about the three most frequently cited changes (as identified by senior leaders), there was a surprising level of consistency across the three groups:
    a. All three groups had a similar conceptual understanding of each change.
    b. Hourly employees' perceptions of why the changes were implemented were consistent with senior leaders' expressed intent.
3. Even though employees could describe the three changes and the reasons for their implementation, they were not able to explain what they had to do different in their specific job to contribute to the success of the change.

In general, it seems that the organization has effectively communicated the message of "what" the changes were and the "why" of the changes. What appears to be missing is the "how" to implement the changes on a local or personal level. While employees are focused on issues that are more personal in nature, like the occurrence policy, they are not seemingly able to focus on the more global changes such as gainsharing, lean manufacturing, and pay for skills to the degree that they can then translate the messages they receive about them into actions. Chapter Five will explore the implications of these findings, as well as their implications for practice and research.

CHAPTER 5

CONCLUSION

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. While this phenomenon can occur in many types of interactions, this study focused on differences and similarities in intents and perceptions occurring in the context of organizational change. In particular, this study surfaced the mental models held by leaders and hourly employees regarding specific changes that have been made. The purpose was addressed by the following research questions:

1. According to leaders, what key changes have been implemented since May 2003?
2. According to hourly employees, what key changes have been implemented since May 2003?
3. According to the leaders, what was the intention of each of the changes identified?
4. How do implemented changes compare to the intentions of leaders?
5. For each of the key changes identified by the leaders, what was the employees' perception of the leaders' intent for initiating the change?

Findings

The data collected in this study revealed interesting findings regarding the nature of communication and mental models in the change process. The findings were:

1. Co-owners, senior leaders, and hourly employees did not identify the same changes as significant.
    a. The co-owners, who set the direction for the organization, had quite different responses from one another.
    b. There was little overlap within the group of senior leaders.
    c. There was some overlap within the group of hourly employees, but there was a wide array of responses.
    d. Co-owners, senior leaders, and employees identified different issues as significant.
2. When asked about the three most frequently cited changes (as identified by senior leaders), there was a surprising level of consistency across the three groups.
    a. All three groups had a similar conceptual understanding of each change.
    b. Hourly employees' perceptions of why the changes were implemented were consistent with senior leaders' expressed intent.
3. Even though employees could describe the three changes and the reasons for their implementation, they were not able to explain what they had to do differently in their specific job to contribute to the success of the change.

The findings from the data point to four key conclusions worthy of further discussion.

Four Conclusions

The findings led to four conclusions. The first conclusion is that different ideas regarding what is significant can impact how employees act within the organization. This will be explored in terms of the mental model literature and psychology/organizational development literature related to individual and organizational needs. The second conclusion is that a balance of

transformational and transactional leadership is necessary. This will be discussed in the context of the leadership literature and the research site. The third conclusion is that individuals go through a process of developing an understanding of specific changes and need to be supported in this process. And, finally, the "what" of change does not equate with the "how" of change. The last two conclusions are situated in the context of human resource development and psychology literature. Following these discussions, implications for practice and research are presented. The chapter concludes with a discussion of the limitations of this study.

Conclusion One: Different Ideas Regarding What Is Significant Can Impact How Employees Act in the Organization

The data revealed that the different groups of employees (and employees within each group) deemed different changes as significant. Senior leaders identified lean manufacturing, gainsharing, and pay for skills most frequently as significant changes implemented in the organization since the new owners took over. These are related to profitability and efficiency. The co-owners responses also related to profitability and efficiency, however, by design the senior leaders' responses were the primary responses to which employees' responses were compared. In contrast to the co-owners and senior leaders who identified changes that were intended to improve the organization, employees identified changes to the occurrence policy, communication systems, and leadership to be the most significant from their perspective. These were changes that have a much more direct impact on them as individuals.

This finding reinforces a concept that has been discussed in the literature and focuses on how each person in an organization approaches organizational life from a different perspective. This perspective, or mental model (Chermack, 2003; de Geus, 1992; Senge, 1990; Senge et al., 1994), is influenced by many factors including a person's past experiences. More recent studies

(Taylor, 1999; Walston & Chadwick, 2003) have provided evidence that a person's position within an organization is also a critical reason that different groups of employees view things differently. Individuals' mental models guide how they understand and react to information, people, and situations. Knowing this helps us understand why, in this study, leaders and hourly employees identified different changes as significant.

Mental models provide a filter through which individuals evaluate the world around them. Participants identified as significant the things that were most pressing or relevant to them based on their mental models. It was interesting that what the co-owners and senior leaders identified as significant (gainsharing, lean manufacturing, and pay for skills) dealt with ways to improve the organization, while employees emphasized things that had a more direct or immediate impact on them personally or the personal impact organizational changes had on them. For example, employees identified the occurrence policy as significant. More specifically, they were concerned that it was an extremely punitive and unfair policy. In follow up interviews, when specifically asked about the occurrence policy co-owners and senior leaders gave organizational rationales such as the need for *"more predictable attendance."* This difference in perspective regarding the occurrence policy demonstrates the influence of mental models on understanding changes. Employees were concerned with the immediate impact of this change on their day-to-day life, whereas leaders were looking at it from a global, organizational perspective of survival (i.e., to keep customers happy and keep money flowing into the organization, they need to have employees at work).

Co-owners and senior leaders identified changes that were directly connected to improving the organization (and for the co-owners, protecting their investment), such as gainsharing and pay for skills. Employees interpreted these changes according to how they

impacted them on a personal level. They critiqued gainsharing, for example, in terms of the amount of money they could earn compared to the previous cost of living raises. Some saw this as an opportunity to earn more money, while others felt they were losing money. These findings support the literature which shows that people at different hierarchical levels of the organization have access to and focus on different details (Walston & Chadwick, 2003) which provides one explanation for this difference in what was deemed significant.

However, the findings of this study show that employees weren't just focused on different details randomly. They were all focused on issues of self-preservation, yet their position in the organization dictated how this played out. Hourly employees were more focused on things that had a direct bearing on their daily life, while the co-owners, for example, where concerned about their financial investment (i.e., the organization). Although both were concerned about their own survival, the sense of survival is defined differently based on where a person is positioned in the organization and looks very different based on their mental models. Getting employees to focus on the same things the leadership is focused on requires attention to employees' needs and concerns. This will be discussed in terms of Aon Consulting's Performance Pyramid (Stum, 2001) and Hall and Hord's (1987) Stages of Concern.

Aon Consulting's Performance Pyramid

Maslow (1954) taught us that individuals need to have their lower level needs met before progressing on to higher level concerns/needs. A recent adaptation of Maslow's work is Aon Consulting's Performance Pyramid (Stum, 2001), which is based on Maslow's Hierarchy of Needs (1954). Stum conducted numerous studies that translate Maslow's work on human motivation to motivations in the workplace. Aon Consulting's Performance Pyramid (Figure 14) was created based on patterns found in their research data. The hierarchy of needs in this

pyramid is safety/security, rewards, affiliation, growth, and work/life harmony. Using this model to examine the situation at Presto, it is evident that the leaders have taken strides to meet these employee needs, but it appears as though the strategies have been hit and miss.

Figure 14. Aon Consulting's Performance Pyramid (Stum, 2001).

The first level in Aon Consulting's Performance Pyramid (Stum, 2001) pertains to safety and security needs, or the need to "feel physically and psychologically safe" (p. 6). This is the first level of need that must be satisfied in order for a sense of commitment to the organization to be possible. Although a repeated mantra at Presto is "safety first" and steps have been taken to improve the safety of the workplace, it is evident that some employees in the organization being studied did not feel secure. Instead, we see evidence of pressure and stress. Regarding lean manufacturing and an employee's belief that it means working with less people is one example of this stress: "*We've seen that and in areas it works. And in areas it puts a lot of, a stressful*

situation to try to meet the goals." Similarly, in regards to the occurrence policy, Jerome (an hourly employee) talked about this stress saying:

> *…they will make statements like, "okay we know who the abusers are." Okay that is fine, deal with the abuser, if I am the abuser deal with me, but if I am not, then deal with the person that is causing the problem.*

Looking at an earlier study (Lehner, 2004) conducted at the same research site approximately eight months earlier, it is evident that this is a consistent concern. At that time, the fact that things were continually changing seemed to be a stressor. One employee specifically talked about the constantly changing (from their perspective) occurrence policy. He stated that it started out that employees could earn ten occurrences before termination, then it changed to eight, and he questioned whether it was going to drop yet again to six. This employee was truly concerned about not knowing what to expect when he came into work. He was not secure in his job due to his sense of constant change.

The next level of the hierarchy of needs is "rewards." Stum (2001) states, "extrinsic rewards in compensation and benefits are the next need that must be met…" (p. 6). Gainsharing is one reward system in place at Presto. Attitudes about whether gainsharing was positive or negative varied from employee to employee. Some employees including Curtis and Linda saw gainsharing as a *"bonus check."* Others such as Mary and Martha saw it as a way for the organization to avoid giving raises; they viewed it as punitive. Viewed punitively, gainsharing will not motivate employees in the desired direction (i.e., to a higher level of commitment to the organization). It is also questionable as to whether or not a gainsharing check is sufficient to motivate a change in behavior.

The third level of the hierarchy is affiliation or "being in the know" (Stum, 2001, p. 7). Here again, the organization has made great attempts by improving communication systems, involving employees on teams, and by the co-owners being visible. This was expressed by several employees as they described that these actions demonstrated a sense of caring. Sandy for example said, *"they* [the co-owners] *actually come out on the floor and they will ask you questions, so it is just more of a closer feeling to people…because they care."* Other employees did not express a sense of affiliation. They indicated that they did not understand why things were changing with statements such as *"beats me"* and *"I don't know…"*

The highest two levels in the performance pyramid are growth and work/life harmony. Growth includes opportunities for both individuals to grow and for the organization to "grow and change in its work processes, its products and its ability to satisfy customers" (Stum, 2001, p. 7). Work/life harmony is about the ability to balance work and life responsibilities. Presto leadership seemed to be primarily focused on organizational growth. By looking at the key changes identified by senior leaders—gainsharing, lean manufacturing, and pay for skills—it is evident that growth in this sense was a priority. This is where the organization may find it is in conflict with the needs of its employees. Trying to achieve overarching goals/programs such as these while employees were struggling with lower levels of the needs hierarchy appeared to have an impact on the employees' ability to focus on and attain those goals.

In regard to work/life balance, employees cycled all the way back to the most basic need of security. Referring to gainsharing, for instance, Benny said it was not just about getting a check: *"And well not just more money, but stay…and keep your job…."* Employees' concerns regarding the occurrence policy included factors such as the fact that it was a "no fault" policy, which left them no room for family or personal emergencies. As in the earlier

study cited (Lehner, 2004), employees in the current study overwhelmingly (8 out of 12) identified the occurrence policy (attendance policy) as significant, indicating the stress the policy put on them. The changes to the occurrence policy meant that it took fewer absences (or other incidents that resulted in occurrences) to enter the discipline process and be terminated. Even self proclaimed "good employees," those who indicated they did not have an attendance problem, felt added stress and pressure. Carl explained:

> *Yeah, it has affected me… especially since the occurrences, you know, I don't want to be late. I went to a perfect attendance luncheon yesterday, with 112 other people. I missed…a half a day last year, I think, a day year before last, I have had at times perfect attendance, but that is very hard to do, I mean, anything can happen. I have two trucks, ...and one morning I was coming to work, got out there and it wouldn't crank, what am I going to do? I jump in another one, if I hadn't had another one, you see, I would have been late. I would have had an occurrence…so that has changed… I think that it has added some stress.*

This stress resulted from the organization not fulfilling the employees' need for security. Although the organization has taken great strides to make the organization and even the employees safe (physically and emotionally), employees did not feel that their employment was secure. Until this need for security is satisfied, it will be difficult (or perhaps impossible) for employees to truly buy into the bigger picture changes identified by the leaders.

In addition to the fact that the employees' concerns were more directly related to their day-to-day lives, it is also critically important to highlight that the issues they talked about and how they talked about them were rather negative. For example, when they were discussing changes in the leadership, recall that Martha said: "*They have created this position called*

coaches which they put some management people in, which I think is a hoax because I have never seen them do anything since they created those jobs, I haven't seen them do anything." Similarly, Linda said:

> *Well because you go and pass a test don't mean you* [are] *the right person* [to be a lead] *though. Even though you might be smarter than me on paper or in books, but still out there on the job…you don't really know what you are doing, so that don't mean nothing.*

Meanwhile, the co-owners and senior leaders had only positive comments to make about these changes. For example the VP said:

> *We gave the Lead Persons…twenty-four hours of accountability training to help them cope with the role. They are still hourly workers, but they take care of communicating, for example, goals and so on. Being a good role model, a teacher for safety, and things like that. And that was a change in leadership.*

Linda's comment and the VP's comment were about the same change. Once again, this finding of different perspectives is aligned with Walston and Chadwick's (2003) finding that "individuals become increasingly negative about outcomes [of changes] as one moves down organizational hierarchies from the top" (p. 1596).

In addition to Aon Consulting's Performance Pyramid (Stum, 2001) there is another compelling theory that can help explain why people see the same things (i.e., the same organization) and understand them differently. Hall and Hord's (1987) Stages of Concern model proposes that individuals have different concerns at different times throughout the implementation process of a change.

Stages of Concern

Hall and Hord's (1987) Stages of Concern model suggests seven sequential steps that a person goes through in accepting and adopting a change. Each step is defined by concerns employees have related to the change. Their definition of a concern is: "The composite representation of the feelings, preoccupation, thought, and consideration given to a particular issue…" (pp. 58-59). They say this is influenced by "personal make-up, knowledge, and experience" (p. 59) or an individual's mental models.

The seven stages of concern in this model are: (a) Stage 0 - awareness, (b) Stage 1 - informational, (c) Stage 2 - personal, (d) Stage 3 - management, (e) Stage 4 - consequence, (f) Stage 5 - collaboration, and (g) Stage 6 - re-focusing. The first three stages (awareness, informational, and personal) describe concerns of a non-user (a person who has not yet adopted the change) and are focused on concerns or needs of self. The next stage, management, is focused on efficiently implementing the tasks and processes related to the change. The final stages of concern (consequence, collaboration, and re-focusing) deal with concerns of impact. Once the change has been adopted, Stage 3, movement through the remainder of the stages parallels the differences in single, double, and triple loop learning.

Stage 3 equates with single loop learning which Argyris and Schön (1996) say is to, "achieve existing goals and objectives, keeping … performance within the range specified by existing values and norms" (p. 22). Stage 4 and Stage 5 equate to double loop learning, in which there is a questioning of underlying beliefs and assumptions that govern theories-in-use. Stage 6 equates triple loop learning which requires one to understand the implications of the change and understand the change in context.

Many hourly employees that participated in this study fell between the concerns of self and the task related concern, management. According to Argyris and Schön (1996), this would mean the majority of the learning was of a single loop nature. If we were to look at several employees from the current study, we could see that they are at various stages of concern. For example, looking at David, we can see someone who is likely at Stage 0 (awareness). Hall and Hord (1987) say in this stage there is very little involvement with the change. Comments such as *"in repair…see the way I look at it, it has got to come off the end of the line…I don't really have a part in the line…"* reflect this lack of engagement. Other employees such as Benny are dealing with higher level concerns. Benny explained gainsharing was implemented *"to make people think, 'Hey, you know, the better I do the better the company does, and* [that means] *more money.'…* [It is] *that simple…and…not just more money, but…to keep your job."* Benny is likely to be somewhere between the Stage 1 (informational) and Stage 2 (personal) in that he is beginning to connect how the change fits into the bigger picture. Although Benny may be at a higher stage of concern than others, all of the employees interviewed are in the lowest tier of concerns and did not evidence movement towards higher concerns—or a more complete adoption of the changes.

Examining these two models, Aon Consulting's Performance Pyramid (Stum, 2001) and Hall and Hord's (1987) Stages of Concern, can provide yet another possible explanation for why hourly employees and leaders focus on different issues. On the Performance Pyramid, leaders, being salaried, may be more financially secure and possibly feel they have more job security than hourly employees. Therefore, it is quite likely that they do not need to worry about the types of individual-level concerns that that the employees raised since their needs for security, rewards, and affiliation are better taken care of. Within the Stages of Concern model, leaders are going to

be at higher stages as they are the initiators of the changes and have had more time and exposure to each change than the hourly employees. This would result in them being focused on different concerns regarding the changes.

In an ideal situation, all employees would be working toward common organizational goals. Yet the literature reviewed (Hall & Hord, 1987; Maslow, 1954; Stum, 2001) and the findings from this study emphasize the importance of ensuring that employees' lower level needs are met. Until employees get those needs met, they will likely not be able to cognitively deal with higher level needs/issues. The key is to acknowledge the fact that differences exist and address the differences rather than ignore them. Addressing the differences will serve multiple purposes. At the most basic level, employees want to feel validated and respected. By taking the time to acknowledge employees' concerns they will feel appreciated and perhaps more satisfied with their job and about their significance to the organization. In turn, if employees feel respected, they may be more willing to try things that may be different or challenging to them. From a cognitive perspective, if employees' concerns are addressed, they will cognitively be able to face more complex personal and organizational issues, such as those described in the example of Aon Consulting's Performance Pyramid. Taking the time to pay attention and address employee concerns can have a great payoff in terms of both employee commitment and retention.

Conclusion Two: Organizations Need Transformational and Transactional Leadership

One of the most paradoxical insights from this study is that the co-owners, being change consultants with strong beliefs about transformational leadership (Bass, 1990b; Northouse, 2004; Seltzer & Bass, 1990), were, at times, transactional (Bass, 1990b; Bass, Jung, Avolio, & Berson, 2003; Northouse, 2004; Pearce et al., 2003; Seltzer & Bass, 1990). This leads to the question of

whether all situations are suitable for transformational leadership. Or, perhaps leaders must present a more clear burning platform of change in situations that require an immediate call to action. Could the environment of the workplace demand a certain style of leadership? Is it possible that changing circumstances require varying leadership styles?

The co-owners and senior leaders espoused beliefs related to transformational leadership including employee empowerment, teams, well-developed two way communication systems, and even the eventual employee ownership of the organization. Yet, many of their actions appeared to be transactional in nature. While this discrepancy between espoused theory and theory-in-use (Argyris & Schön, 1974, 1996) may have been forced by the circumstances of the organization, Denis, Langley, and Cazale (1996) conclude that there must be fluidity between these roles for change to be successful. The ways in which the leaders emulated the two styles of leadership are described in the following sections.

While the three key changes identified by the leaders can be interpreted as ways of gaining control over the organization, and therefore transactional, the co-owners (particularly the Vice President) talk from a philosophical stance of leadership (Bennis, 1989; Gardner, 1990; Kotter, 1990; Mintzberg, 2001; Northouse, 2004; Tichy & Devanna, 1986)—or the desire to be transformational. They talk of employee involvement, having open doors for communication to flow in two directions, sharing organizational information, etc. The VP emphasized win-win situations, committee structures, and communication mechanisms to facilitate their role as "leaders." At the same time the CEO made a strong statement indicative of a transactional style:

> *An unfortunate reality in most change processes, and turn around in particular is that not everybody gets on the bus quickly enough, and we do a lot to try to help people find roles*

that they can be successful in, in the change, but at the end of the day, some folks by their own choice, some folks by our choice, don't work out.

By this statement he is talking about the reality and necessity of firing employees who do not work towards the organizational goals.

As was seen in Chapter 4, senior leaders made comments such as: *"Well certainly [the co-owners] were very convincing…"* and *"It was driven straight from the top…"* These comments about how the changes were initiated from the co-owners indicate a sense of control felt by the senior leaders. It is evident, however, that the co-owners were transformational in their approach such that the senior leaders were able to adopt the changes as their own. This was seen in how senior leaders used the term "we" when they talked about the changes. This juxtaposition is another example of the fluidity of roles between management and leadership.

Employees also described this fluidity when discussing different situations, some which speak to the role of the co-owners and senior leaders as controlling (i.e., being transactional) and some in which they emphasize the leadership or transformational qualities. They describe the co-owners and senior leaders as being transactional when they talk about the occurrence policy, complications in the communication system due to the new hierarchical structure, and some of the structural changes (e.g., elimination of the overhead conveyor, reduction of number of machines, etc.). These can be perceived as issues of control.

On the other hand, employees also described actions taken by the co-owners and senior leaders that more closely resembled the descriptions of transformational leadership in the literature. Employees described actions that demonstrated to them that the co-owners cared about them such as working third shift, walking around the plant, having all-employee meetings to

share information, etc. These actions are attempts to build relationships, help employees understand the organizational goals, and earn credibility in the eyes of the employees.

Culture of Crisis

This organization has a unique history and was in a financial crisis when the co-owners took over. Harsh financial times called for an immediate change in culture and could have been an impetus to resort to transactional leadership. Under new, local ownership the financial concerns became a reality. The new owners did not have the same kind of financial security as the previous owners (large corporations) and in order to stay "alive" they had to make changes in how the organization did business. Ironically, transactional leadership often results only in incremental (single loop) changes; not pervasive culture changes.

Burning Platform of Change

Another potential explanation for resorting to transactional leadership could be that the leaders did not create a strong enough burning platform (Tichy & Charan, 1995) for employees to feel the fire. Bossidy (Tichy & Charan, 1995) said that people will only respond if they can see the flames. In other words, they have to see and feel the reasons the organization is changing and it is the leaders' role to make them see it.

Previously owned by large corporations with deep pockets, employees could not sense how poorly the organization was fairing financially in the past and it is likely that employees did not have a frame of reference (mental models) to grasp how desperate the financial situation was now. It was the leaders' responsibility, therefore, to build the burning platform. Building an effective burning platform, can support transformational leadership; however when the burning platform is not built in a way employees can feel the heat, leaders may be forced to resort to transactional leadership.

Presto's owners were direct with employees about the changes that needed to be made and that the financial situation had to be turned around. This was discussed with employees as rationale for the changes as they were introduced. As was seen in Chapter 4, some employees did not really understand the depth of the financial situation. In the January 2005 all-employee meeting, just before the employees were interviewed for this study, the point was made very directly. The CEO had presented an analogy of the organization as a person in cardiac arrest and the limited funding that had been secured was like using the defibrillator paddles to resuscitate the person. He continued, saying in order to keep the organization alive, things were going to have to be different. While the message seems poignant and direct, when an employee who mentioned the bankruptcy was asked what it meant he replied:

> *to get up in front of all the employees and announce that they are bankrupt, I guess that is telling everybody to get ready and go look for another job, yeah (long pause) I guess that is what it meant…*

This employee did not get the message that things were going to have to be done differently. The burning platform was not presented such that this employee, and probably others, could relate to it and get on board with the necessary changes. If employees do not relate and therefore do not react, leaders may be forced to be transactional to try and achieve certain goals.

Another Perspective—The Impact of Embedded Mental Models Regarding Leadership

It is possible that no matter how much a leader espouses belief in being transformational, embedded mental models regarding leadership being top-down and transactional will surface in desperate times. If a situation is bad enough, leaders may feel they have to take control of the situation and therefore act in a manner that is more transactional in nature. Transactional leadership often results in single loop learning (Argyris & Schön, 1996). While there may be an

immediate change when single loop learning occurs, it is relatively superficial in that employees are making changes as they are directed to without giving in-depth thought about the reason behind the changes.

If leaders have the ability to be transformational in their style, the outcome may be that double loop (Argyris & Schön, 1996) or even triple loop (Hargrove, 2002) learning occurs. Double loop learning is what allows an individual or organization to change fundamental beliefs. In addition to reframing and seeing things a new way as in double loop learning, triple loop learning takes things a step deeper in that individuals also are able to consider how the change fits with the "big picture" and make adjustments accordingly, much like someone who has reached Stage 6—Refocusing of the Stages of Concern model (Hall & Hord, 1987).

A Balancing Act

Leaders in this organization demonstrated both transformational and transactional leadership in different situations. This duality, which was expressed by co-owners, senior leaders, and employees, is a reflection of the fluidity of roles described by Denis, Langley, and Cazale (1996). Successful leadership can be enhanced by creating this balance and leaders should be explicit in communicating about this duality of roles. Being clear regarding the balance of transformational and transactional leadership will facilitate the alignment of leaders' theories-in-use and espoused theories. In this organization, the financial constraints may have influenced the leadership style of the co-owners. This provides one rationale for the inconsistency in their espoused theories (transformational) and their theory in use (transactional).

Neither approach can be successful without attention to the other (Kotter, 1990). If fluidity is a requisite for change to be successful, it appears that this organization has achieved an

appropriate balance between control and influence—at least enough of a balance to keep a struggling organization afloat for the 18 months since the co-owners took over.

Conclusion Three: Individuals Go Through a Process of Developing an Understanding of Changes and Need To Be Supported in This Process

Although the three groups interviewed for this study identified different changes as most significant to them, the design of this study mandated that all participants were asked to focus on and explore the three key changes that senior leadership deemed most significant (lean manufacturing, gainsharing, and pay for skills). When specifically asked about those three key changes, hourly employees had a good conceptual understanding of the changes and that understanding was aligned with that of the co-owners and senior leaders. They also had (with only a few exceptions) a clear sense of why the changes were implemented.

This was interesting because, as was discussed earlier in this chapter, the mental model and schemata literature predict that individuals tend to have different understandings of the same issues. There were two themes that emerged from these findings that help to explain this contradiction.

The Development of How Changes are Understood

One of the subtle themes that emerged from this study was that it was evident that the ideas for specific changes came from the co-owners (i.e., *"from the top"*) and that their consistent messages influenced the senior leaders' understandings of the changes. Each of the senior leaders mentioned this influence at least once in the course of their interview. The questions asked during the interviews did not reveal the nature of the process of making meaning in regard to the three key changes. However, what did surface was, in at least the case of one of the senior leaders, that there *was* some process of meaning making occurring. Bob made a

statement that demonstrated how the leadership team's understanding developed and changed over time. He said:

> *We never had a real clear understanding of what that* [lean manufacturing] *meant and what we were trying to do, and it has been quite a few months trying to develop a plan, and understanding at the grass roots level what that really means, and what we have to do to get there…*

With appropriate support in addressing employees' needs and concerns (Hall & Hord, 1987; Stum, 2001) this development of understanding may be seen within the hourly employee group. This development of understanding a change can be seen to some degree in the response by Benny, who works on the paint line. Benny said:

> *…people in the paint line can't actually be credited with making defects…so…other than trying to do the best we can, get it done in the least amount of time, in the least amount of overtime…that can save money, which in the long run will be cost per unit…[which] helps make the gainshare.*

Within the time it took Benny to formulate his response, he began to recognize or better understand how he can contribute to the success of gainsharing.

Chermack (2003) suggests mental models are constantly changing as individuals interact with their environment. As the environment in the organization changes and employees are continually confronted with intentional changes (via communication methods and the physical changes) their mental models may shift to accept (or reject) the changes. Walston and Chadwick (2003) also found that mental models change over time. Therefore, anticipating how a person might respond to a change is rather complicated. For a given change, where an individual happens to be in their own development of understanding may impact their reaction to it.

Hall and Hord's (1987) Stages of Concern model suggests that there is a general scheme of development of understanding changes, which can help a change agent anticipate what a person might need at a given time. While all employees at Presto were introduced to the key changes at the same time, as previously described, their responses indicated they were at different stages of accepting each change. Hall and Hord state that the stages of concern are fairly predictable and that appropriate interventions can be planned to assist people in adopting the change by addressing the concerns they are dealing with. Just as in Maslow's (1954) hierarchy of needs, if lower level needs/concerns are not resolved, a person likely does not have the energy or drive to tackle higher levels/stages.

How Changes Are Communicated

Although individuals expressed different degrees of acceptance of the changes, they did share similar understandings of what the changes were and why they were implemented. One of the key forces that may explain the apparent alignment of understanding and perception may stem from the organization's communication strategies. As described in Chapter 4, once the leadership of the organization developed their plan, they used multiple methods for communicating information to employees. All-employee meetings, posted notices, monitors with scrolling messages, and a monthly newsletter all provided opportunities for employees to hear consistent messages about what changes were being made and why. Additionally, leads (hourly employees with additional responsibilities) were required to hold five-minute meetings at the start of each shift to convey both organization-wide information and functional area specific information. This resulted in employees who generally understood specific changes and why they were being implemented. Employees were able to describe the three key changes in a manner very similar to the way leaders did.

Ford and Ford (1995) propose "change is a phenomenon that occurs in communication" (p. 542). Clearly, the organizational leaders in this research study used multiple communication methods to generate and share information that would help employees apply their own mental models to these three key changes.

Conclusion Four: The "What" of Change Does Not Equate to The "How" of Change

This conclusion is about the nature of understanding (mechanical versus integrated) and its impact on the implementation of changes. The multi-tiered communication approach this organization implemented was effective to a certain point. Employees could express a general understanding of the key changes in much the same way the leaders were able to, yet translation of these changes to behavioral changes in day-to-day jobs was missing. For example, when asked what lean manufacturing was, Sandy said,

> *Lean manufacturing…is…*[working]… *with the least amount of inventory and just the easiest way to get everything out…without a lot of inventory and even after the [products] are made, they don't sit out in the parking lot, they are ready as soon as we make them, they are ready to go on a truck.*

She understood that lean manufacturing had to do with reducing extra inventory and streamlining processes, yet when asked how it affected her day-to-day job, she replied in general terms: *"I feel like it is getting better because we are not running out, we are not stocked out of stuff like we used to be…."* She did not (could not?) be specific regarding how lean manufacturing affected the way she did her job.

Sandy's experience seemed to parallel others interviewed for this study. Although the employees were able to describe the changes that the leaders identified as significant when they were prompted, they could not say, specifically, how these changes impacted their jobs. Many of

them indicated that their jobs had, indeed, been affected. However, upon further probing the things that employees described were ambiguous, broad and more related to "just doing things better" in quite general terms. For instance, one employee identified the following general contribution:

> *…if I see an area that needs sweeping if I have the time I will sweep it up just to keep that area looking good, so when they come to check everything, do audits and so forth, it will be nice and it won't take* [gainsharing] *away from everyone…*

Another employee summed the changes up saying they were more *"like* [a] *psychological thing."*

These responses lead to the question: how much of an impact should changes have on front line employees' day to day experience? For change to be most effective, we would have expected employees to describe *specific* ways that their job had changed to support the organizational change. Presto's leaders also believed that the changes should be evident in the how employees approached their jobs as was evidenced by the many hours of training provided to employees. However, as the above examples indicate, this was not the case. In regards to what employees did differently to contribute to lean manufacturing, for instance, less than half of the hourly employees could say they were doing anything different in their jobs to contribute to the success of lean manufacturing, yet their general level of understanding lean manufacturing was relatively high.

To assess where employees are in regard to adopting various changes, Hall and Hord (1987) have proposed another model, Levels of Use, that can be used alongside the Stages of Concern model. While the Stages of Concern model addresses how people might be feeling about or towards a change, the Levels of Use model addresses "the behaviors that are or are not

taking place" (p. 81) related to the implementation of the changes. This model consists of seven levels beginning with Level 0—Nonuse in which the person has little or no awareness of the change. In Level 1—Orientation, the person is aware of the change and determining if they believe it is worthwhile. By Level 2—Preparation, the person is preparing to actually implement the change. In Level 3—Mechanical, the person is using the change in a very mechanical, technical way giving little time to reflecting on its application or effectiveness. Level 4A—Routine sees the person settling in to a comfortable usage of the change. In Level 4B—Refinement, the person begins to reflect on the change they have adopted and seek ways to make it more efficient. By the time they reach Level 5—Integration, the level of use is more collaborative. People are talking with other users and are finding ways to integrate the new change with other innovations. Finally, by Level 6—Renewal, the person has adopted the change, moved through the mechanical use of the change, and made minor refinements to it. At this level they are finding ways to significantly modify the change they have adopted to further improve its effectiveness in various situations. As with the Stages of Concern, the levels of use coincide with single, double, and triple loop learning.

In this study, Presto employees are at various levels of use. In other words, they have adopted the change to varying degrees. This variation can be seen in comments from the hourly employees. Linda's comments about the impact of lean manufacturing on her job exemplify someone in Level 1—Orientation:

> *Well (long pause) it is kind of hard to explain because like I said it is just not something I deal with really everyday, you know. Like I hear about it in the monthly meeting every now and then… I just hear them talk about it, you know, I don't understand whether it applies to my job, you know?*

David's comment: *"…they got me looking for the big ones"* is characteristic of Level 3—Mechanical Use. Based on this comment, David is implementing the change, but not yet reflecting on ways to refine it. This would be an example of single loop learning (Argyris & Schön, 1996). Examining Linda and David's comments show how two employees have progressed along the Levels of Use model. In general, employee level of use varied from Level 0—Nonuse to Level 3—Mechanical Use.

What is clear in the findings from this study is that while the organization was doing a good job in conveying the "what" of the changes, they needed to go further and help employees get a better understanding of the "how" of the changes in order to foster employees' movement to the higher levels of use (Hall & Hord, 1987). In other words, they need to take additional steps to hardwire the changes into the organization's processes and into people's jobs. This is consistent with change models that are based on Lewin's 1947 model of change, which requires three processes: (a) unfreezing, (b) moving, and (c) refreezing. Hardwiring the changes into the organization is the refreezing process and will help ensure the changes are lasting.

Bolman and Deal (2003) state, "Progressive organizations implement a variety of 'high-involvement' strategies for improving human resource management…Success typically requires a comprehensive strategy under girded by a long term human resource management philosophy" (p. 159). A comprehensive strategy would include specific alterations to daily job tasks that would help hardwire the changes so that employees' job roles and responsibilities would be modified in such a way that the employees would recognize the changes and, ultimately, so that they could contribute significantly to attaining the organization's goals. Hall and Hord (1987) describe incident interventions in which the change agent continually provides support and feedback in both face to face interactions and through other communication methods. At Presto,

it is the role of the coach and lead to provide these interventions. In this research study, although the jobs of coach and lead were in place, there was little evidence that this level of feedback was occurring. Leads and coaches were not helping employees make direct connections that would propel them to further adopt the changes.

There are several possible bases of literature that we can draw on to understand why the employees interviewed for this study were unable express how they could do their job tasks differently in order to contribute to the overall success of the changes. The next sections will focus on the HRD and psychology literature.

Managing performance. A large segment of the literature in HRD focuses on how to manage and improve performance. There are multiple models and frameworks that help to operationalizae the performance system (Gilbert,1978; Robinson & Robinson, (1996); Rothwell, Hohne, & King, 2000; Rummler & Brache, 1995; Swanson, 1996). An analysis of many of them point to the importance of aligning key factors of the organization in order to achieve goals. One model by Rummler and Brache (1995) effectively describes these factors. In their model, Rummler & Brache outline nine performance variables that must be considered for performance improvement. The nine variables consist of three levels of performance (organizational, process, and job/performer) and three performance needs as seen in Figure 15.

		The Three Performance Needs		
		Goals	Design	Management
The Three Levels of Performance	Organization Level	Organization Goals	Organization Design	Organization Management
	Process Level	Process Goals	Process Design	Process Management
	Job/Performer Level	Job/Performer Goals	Job/Performer Design	Job/Performer Management

Figure 15. Rummler and Brache's (1995) Nine Performance Variables.

Analyzing the situation at Presto through this framework, there are some areas that have been addressed very well and others that still need attention. For example at the organization level, Presto has set some clear goals. Primarily, they want to turn the financial tides and be a viable organization. They have also made progress in organizational design and management by changing the organizational chart and restructuring communication systems, including employee involvement on teams.

Presto has also done well with process level goals. They have identified several processes, including the three key changes identified in this study (lean manufacturing, gainsharing, and pay for skills), that they believe will help the organization reach the organizational goals. They have also spent a lot of time mapping processes and reconfiguring process maps to determine where the value added steps could be found and to reduce time and resources spent on non-value added steps. Some steps have been taken, such as the use of scorecards and the five minute start of shift meetings, to continually engage in process management.

Presto appears to be the weakest in the individual or job/performer level. While goals have been established (e.g., gainsharing metrics) for the job/performer, it is at this point that there appears to be a breakdown. Employees know the goals, but the job/performer design—or the hardwiring—is not complete. Looking at lean manufacturing, for example, employees described aspects of streamlining processes, but when asked what they do different in their job, they were mostly unable to specify how they do things differently than before lean manufacturing was implemented. Responses such as *"I don't think it has affected anyone's job, if it did, hopefully it made your job easier,"* indicates that the job design process is not complete. Additionally, Rummler and Brache (1995) offer six areas that need attention in managing the

job/performer. These are: (a) performance specifications, (b) task support, (c) consequences, (d) feedback, (e) skills and knowledge, and (f) individual capacity.

At Presto, the employees have clear performance specifications in regard to what they are expected to produce. They have a target number as well as a ratio for what types of products they are expected to produce during each shift. They do not have a high degree of task support. Again, they understand what they are expected to produce and the standards they are held to, however they do not appear to have procedural support in meeting these tasks. The jobs have not been reconfigured to align with the new processes and goals. Consequences also are not specific enough to the individual. The consequences are tied to the gainsharing checks. If, as an organization, they meet the metrics, they receive money back. For example, between November 2003 and December 2004 there were 10 months in which employees received payouts. All employees received payouts unless they had more than the allowed absences for the month. Payouts averaged $81.50 per employee per payout, or averaged out over the course of 12 months to $67.92 per employee per month. For employees with seniority this is higher than the 2% raise they received in 2000 and 2001, but slightly less than the 3% raise they received in 2002. For new hires, whose starting salary is lower, the gainsharing payout was nearly double the 2% and 3% increases in 2000, 2001, and 2002. So, while there is potential for higher payouts if all the metrics are met or exceeded, the reality is that each payout is likely to be a portion of this amount. Not only is this a variable amount (contrasted with a specific percentage like cost of living increases), it is not directly tied to the performance of the individual. It is instead contingent on the overall performance of the employees as an organization.

The findings of this study emphasize the importance of focusing on an integrated performance system that especially focuses on the job/performer level. While Presto has done

well at the organizational level and process level, they have yet to adequately focus on the three performance variables at the job/performer level. Rummler and Brache's (1990) framework help us to understand one of the reasons the employees of this study have not integrated the key changes into their way of working.

Psychology. The psychology literature around selective perception also provides an explanation for why messages may not be translated to action. Using selective perception, perceivers determine what to focus on (Knapp, 1984). Selective perception allows perceivers to choose what information to focus on to fulfill their own "needs, desires, or temporary emotional states" (p. 125).

Harrington et al. (2003) state, "If a message meets the individual's level of need for stimulation, then action will occur" (p.17). That is if it the perceiver deems the message relevant, they will pay attention and act on it. If the message does not meet the individual where they are, action (behavior change) will not occur. Reflecting on Linda's comment about not dealing with lean manufacturing on a regular basis, selective perception theory would say that when she would hear about it in meeting or read about it in a newsletter, she may gloss over it and not absorb the message because she does not think it pertains to her. It is critical that messages are tailored to the people to whom they are targeted. As discussed earlier, organizations have several tools to assist them in assessing individuals' needs (Hall & Hord, 1987; Maslow, 1954; Stum, 2001).

The four conclusions: (a) different ideas regarding what is significant can impact how employees act within the organization, (b) a balance of transformational and transactional leadership is necessary, (c) individuals go through a process in developing an understanding of specific changes and need to be supported in this process, and (d) the "what" of change does not

equate to the “how” of change, all have implications for both practice and research. The next section will outline these implications.

Implications for Practice

In regard to implications for practice, practitioners are defined as change agents. Change agents may be internal to the organization (formal or informal leaders, including human resource development consultants) or external to the organization. The implications that follow offer guidance for any change agent (internal or external) charged with implementing organizational changes; human resource development consultants may have additional responsibilities for educating leaders on the theories (see Chapter 2) that support these guidelines.

This study leads to four implications for practitioners. These relate to mental models, multi-tiered communication, hardwiring performance management systems, and balancing transformational and transactional leadership styles.

Mental Models

Understanding that employees approach change from their own personal mental models is an important starting point for change agents. Recognizing and exploring differences in mental models may facilitate the adoption of changes. In order to mediate differences in mental models, leaders need to approach change in a different way. Rather than just force feeding leaders’ mental models on employees, Hanover and Royal Dutch/Shell (Senge, 1990) demonstrated how surfacing mental models and engaging in dialogue helped individuals assess various mental models before determining the best course of action. Several examples of how this can be done can be found in *The Fifth Discipline Fieldbook* (Senge et al., 1994). One suggestion is to use the ladder of inference (as described in Chapter 2) and making individuals’ thoughts at each rung of the ladder tacit for others to examine. Another suggestion is an exercise called the Left Hand

Column. On the right hand side of a piece of paper, a person records what was said in a conversation or observed. On the left hand side of the paper, the person records what they were thinking as they experienced what is written in the right hand column. Although there are techniques such as these available to change agents, surfacing mental models will only be helpful if managers believe mental models affect how people act, are willing to address their own mental models, and are open to having these mental models challenged (Senge, 1990). Senge says that leaders who do this can "produce results that people truly care about" (p. 341).

Related to mental models, it is important to understand "where" employees are in dealing with specific changes. There are multiple considerations. On one level, it is important to understand employees' personal needs (e.g. Maslow, 1954 or Stum, 2001) which contribute to their degree of commitment to the organization as a whole. On another level, change agents also need to consider what concerns employees have regarding specific changes (Hall & Hord, 1987). It's not only a matter of understanding the level of needs or concerns, organizational leaders also have to do something about it. They should understand how employees feel about working in the organization by talking with them to assess whether they feel their basic needs are being met. Based on these conversations, accommodations to help employees feel safe and secure should be implemented. This would allow the greatest opportunity for employees to be motivated to strive to have higher needs met. Given these considerations, leaders, then must determine whether their communication systems are such that employees can internalize the message and act on it in a way that produces results.

Multi-tiered Communication Systems

Another lesson from Presto is that multi-tiered communication seems to be a very effective means of ensuring employees at all hierarchical levels are given the same information.

Multiple methods increase the frequency in which the message is distributed which further ensures that employees will receive the message in one or more ways. It is important that the multiple messages be consistent in their content so that each new message reinforces the previous message and the recipients become familiar with such content.

Hardwiring Changes

Not only do needs have to be met and messages consistent, but attention needs to be paid to the individual/performer level aspects of performance such as those described by Rummler and Brache (1995) including (a) performance specifications, (b) task support, (c) consequences, (d) feedback, (e) skills and knowledge, and (f) individual capacity as described above. Formalizing this aspect of performance management demonstrates to employees a direct connection between the message and the behaviors desired. Without this hardwiring, application of the message is left to chance.

Transformational and Transactional Leadership

A final consideration for organization leaders is to consider the degree to which they are being transformational versus transactional and whether the beliefs they espouse are their theories-in-use. This study supported the literature in demonstrating the need for fluidity between these roles, and emphasized the importance of aligning espoused theories and theories-in-use.

In summary, it is recommended that organization leaders (a) assess employees' readiness to work towards organizational goals by determining how satisfied they are with the organization in regard to having their basic needs met, (b) assess their communication mechanisms to ensure consistency, (c) hardwire job performance improvement systems into the implementation of the changes, and (d) examine their balance of transformational and transactional leadership.

Attention to these areas will strengthen the organization's ability to change in the desired direction.

Implications for Future Research

"Organization development literature and cognitive change literature have remained largely separate" (Bartunek & Moch, 1990, pp. 12-13). This study has contributed to bridging this gap with new understandings and points us towards additional research studies that need to be done.

In order to better understand the needs (Stum, 2001) that employees at different levels of the organizational hierarchy have, a study could be conducted that focuses solely on the needs identified in Aon Consulting's Performance Pyramid. Whereas this study considered how hourly employees perceived their needs being met at each level, it would be interesting to see how leaders' felt their needs were being met and perhaps displaying parallel pyramids for different level employees.

To further explore how multi-tiered communication affects mental models, this study could be replicated in other organizations with varying amounts of communication to see if the amount and type of communication affects mental models. Other considerations would include the type of organization and general education level of employees.

Further research is also necessary to determine if a global understanding (gained through multi-tiered methods of communication) will develop into a practical understanding resulting in changes in job tasks or whether organization leaders must explicitly make the changes. Other considerations for study include the employees' ability to think critically in making the translation from message to action, degree of autonomy employees' have in adjusting their individual jobs, and a longitudinal perspective to determine what happens over time.

Another interesting study would be to ask senior leaders (as they tend to be the ones driving change in many organizations) what changes employees would say were significant and comparing these responses to those of employees. The study could further examine whether action is being taken on these items deemed significant by employees, and if so what impact this has on employees' attitudes toward and commitment to the workplace.

The study could also be replicated to determine if the findings hold true in settings other than factories. Factors to vary may include size of sample, education level of employees, different hierarchical levels, and age span of participants. All of these factors could potentially affect the similarities or differences in understanding a common issue. Other situations of interpersonal communication could also be studied, such as how a leader and an employee interpret the communication that transpires during an employee appraisal meeting.

Limitations

As in all studies, this study had limitations that may have affected the findings and conclusions. At the most basic level, by the nature of this being a qualitative study, there were limitations to the generalizability of the findings and conclusions. Glesne (1998), however, states, "Qualitative inquirers look to the specific, both to understand it in particular and to understand something of the world in general…the particular case…is likely to contribute to an understanding of similar cases…" (p. 153).

More specific limitations fell into three main categories: (a) situational, (b) methodological, and (c) researcher bias. There were several situational limitations. One such limitation was related to timing. Hourly employees were notified about the opportunity to participate in the study just days before the organization closed for Christmas 2004. The letter they received asked them to contact the researcher by phone by December 31st. Only five

employees had responded by the time the organization re-opened in January. The timing of the letter could have affected the response rate in that employees could have easily forgotten about the request in the rush of the holidays and, as they were not at work, reminders were not given via the organization's many communication channels. Once the organization re-opened, I contacted leaders throughout the organization and asked them to solicit volunteers. This resulted in one area of the organization being heavily represented due to the persuasion of the leaders in that area and other areas not being represented at all. Considering this limitation, it is important to note that there was a balance of attitudes represented in the data and that this did not appear to affect the representation of the range of views existing in the organization. While representation is not a key criteria in qualitative research, it is helpful to acknowledge who the participants are so that the reader can better determine if the findings may be applicable to their particular situation.

Another timing factor that could be a limitation was that one month passed between the senior leader interviews and the hourly employee interviews. During that month there was an all-employee meeting in which employees were told the "plant had died" financially at the end of 2004. Not only could this have an unknown amount of influence on employee attitudes towards changes occurring in the plant, it could also have shifted employees' focus regarding what was significant. Had the interview occurred before this meeting, it is possible their responses would have been different.

Still another timing factor related to the interview with one of the co-owners. On the day the CEO was interviewed, he was waiting for a call regarding a non-traditional financing opportunity that would allow the organization to "live" a little longer. Coincidentally, all but one of the changes identified as significant by the CEO were related to money and financial issues. It

is unknown whether this same focus would have been as prevalent if the timing of the interview were different.

Another situational limitation was the nature of the organization itself. As described throughout this study, this organization has several unique characteristics that must be considered when determining the applicability of these findings to other settings. This organization had been struggling financially for many years and had two previous owners, both large corporations. The current owners purchased this organization and have limited financial backing. This casts a different light on the financial situation than the organization may have felt in the past. Additionally, the background of the owners contributes to the uniqueness of this organization. The co-owners, being change consultants, not only had experience in change management, but they had been consultants to this organization for a number of years prior to purchasing it. Finally, change takes time and the co-owners had only been in their roles as leaders for 18 months at the time of this study.

Methodological limitations were also present. This study examined intent and perceptions of intent regarding changes in an organization. In other words trying to look at the front end of change: why was this change implemented? By asking employees to recall thoughts and understandings from the past, there is a risk of revisionism occurring. Participants may recreate the past in a way that makes sense in the present. While there is no way to ensure this did not occur, efforts were taken to remind participants that there was not a correct answer and that I was interested in what they thought.

Finally, there was researcher bias. Based on my own experience and the literature on mental models, personal constructs, schemata, etc. I approached the study believing there would be differences in how hourly employees, senior leaders, and the co-owners understood the same

issues. I was surprised at the responses I was getting from employees when they were asked about the key changes and had to look for reasons why the responses might have been so similar. These limitations must be considered along with the context of the study, the findings, and the conclusions in determining the applicability of this study to other contexts.

Chapter Summary

The purpose of this study was to discover differences and similarities in the intent behind the actions of leaders and the perceptions of those actions as perceived by hourly employees. This chapter summarized the findings and presented four primary conclusions based on these findings. First, recognizing and addressing employee concerns is a crucial role for change agents. A lack of understanding of these needs can lead to a mismatch between intent and perception, whereas a recognition of employees needs can contributes to an environment conducive to satisfied, and therefore productive, employees who are more likely to act in the organization's best interest. Second, the roles of leadership and management are both necessary and should be fluid in nature. This fluidity allows leaders to take on different roles in different situations in order to be clear in their intent. Third, understanding is a developmental process and can be fostered through a multi-tiered communication system. This multi-tiered communication system is a critical factor in insuring that what employees perceive and leaders intend is similar. And, finally, there is a distinction between the "what" of change and the "how" of change. The "what" of change can be conveyed in various ways and can result in a similar understanding of changes across all employees, but the "how" or the integrated level of use requires the support of a comprehensive performance improvement plan. Changes need to be hardwired into the organization to produce changes in performance in order to convert rhetoric to action. Following

an explanation of these conclusions, implications for both practice and future research were discussed. The chapter concluded with the limitations encountered in conducting the research.

Change fails at staggering rates (Bolman & Deal,1999; Jaffe, 2000; St-Amour, 2001; Stebel, 1996) for a variety of reasons. This study provides evidence as to how to effectively communicate change using a multi-tiered approach. This study also demonstrates the necessity of going beyond communication and "hardwiring" the changes into the organization using a comprehensive performance improvement system such as that of Rummler and Brache (1995).

Organizations face many crossroads when dealing with change. Determining the best direction can be challenging even for the most experienced change agent given the multitude of variables and alternatives. Considering all the factors that were surfaced in this study demonstrates how critical it is to pay attention to the details and drive initiatives all the way through the organization. Supporting the need for change at the organizational level and drawing up plans that include goals and design features is not sufficient. Attention to details at the individual/job performer level, such as performance specifications, task support, consequences, and feedback, can put assist organizations in navigating the crossroads encountered in the process of change.

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APPENDIX A

INVITATION TO PARTICIPATE—EMPLOYEES

Dear Presto* Employee:

My name is Rachelle Lehner and I am a student at the University of Georgia. Many of you probably saw me around the plant earlier this year when I conducted the first phase of my research on organizational change. I am asking again for your help in this research on the perceptions of key changes that have occurred in the organization since May 2003.

You are receiving this invitation to participate in this study because you have worked here at least since May 2003. It is my hope that if you agree to participate you are planning to remain employed here at least through December 2005. The only other requirement is that you are willing to talk to me for about 45-60 minutes, and then at a later date, review my notes and thoughts about our interview.

During the interview you will be asked questions about specific changes that have occurred since May 2003. What I am interested in learning from you is what you thought about those changes when they occurred. I will be comparing your thoughts with the thoughts of other people to evaluate to what extent people understand the same situations in the same way or in different ways. There are no right or wrong answers; I just want you to think back to the time and give me as honest an answer as you can. The interview will be audiotaped.

If you agree to participate in this study, you will have to sign a form that indicates that there is little to no risk involved in participating. Your interview will be confidential, and you will be assigned a code name so that no one (other than I) will know what you said in the interview. And, just to let you know, Nate and Susan have approved this study.

You can volunteer to participate by calling me directly at (***) ***-**** by December 31st. If you volunteer, you will be entered in a drawing for a $15 gift certificate to Wal-Mart. From the list of volunteers I will select 15 employees, based on demographic information (shift, department, etc.), to interview. If you are selected and participate in an interview, your name will go in a drawing for a $40 Wal-Mart gift certificate!

If you have any questions, don't hesitate to call me. My number, again, is (***) ***-****.

Rachelle Lehner
Doctoral Student
University of Georgia

**In preparing this document for publication pseudonyms have been substituted throughout the appendices where necessary.*

APPENDIX B

INVITATION TO PARTICIPATE—SENIOR LEADERS

Dear Presto Leader:

My name is Rachelle Lehner and I am a student at the University of Georgia. Many of you probably saw me around the plant earlier this year when I conducted the first phase of my research on organizational change. I am asking again for your help in this research on the perceptions of key changes that have occurred in the organization since May 2003.

You are receiving this invitation to participate in this study because you have worked here at least since May 2003. It is my hope that if you agree to participate, you are planning to remain employed here at least through December 2005. The only other requirement is that you are willing to talk to me for about 45-60 minutes, and then at a later date, review my notes and thoughts about our interview.

During the interview you will be asked questions about specific changes that have occurred since May 2003. What I am interested in learning from you is what you thought about those changes when they occurred. I will be comparing your thoughts with the thoughts of other people to evaluate to what extent people understand the same situations in the same way or in different ways. There are no right or wrong answers; I just want you to think back to the time and give me as honest an answer as you can. The interview will be audiotaped.

If you agree to participate in this study, you will have to sign a form that indicates that there is little to no risk involved in participating. Your interview will be confidential, and you will be assigned a code name so that no one (other than I) will know what you said in the interview. And, just to let you know, Nate and Susan have approved this study.

You can volunteer to participate by calling me directly at (***) ***-**** by December 6th. In return for your participation, you will be entered in a drawing for a $40 gift certificate to Wal-Mart – just in time for the holidays!

If you have any questions, don't hesitate to call me. My number, again, is (***) ***-****.

Rachelle Lehner
Doctoral Student
University of Georgia

APPENDIX C

INFORMED CONSENT

Your participation in this research study, entitled "Surfacing the Differences: What Leaders Intend and What Employees Perceive," will provide insight into perceptions of key changes that have occurred in the organization since May 2003. I will be analyzing and publishing the data in such a way that your identity will not be known. I, Rachelle Lehner, a University of Georgia doctoral student in Human Resource and Organization Development (***) ***-**** , am conducting this study under the supervision of Dr. Wendy Ruona, in the University of Georgia Department of Adult Education (***) ***-****.

The purpose of this study is to compare your thoughts with the thoughts of other people to see to what extent people understand the same situations slightly differently. No risks are foreseen. The interviews will be confidential. All reporting of the findings will be presented back in such a way that no individual can be linked to the findings. While there is no direct benefit to you, your organization and I will better understand how different employees make meaning of the same actions.

Participation in this study is entirely voluntary. You may discontinue participation in the study at any time, without penalty. You may also elect not to answer any questions that you may be uncomfortable answering.

If you agree to participate in the study you will be asked to:

1) participate in up to two, forty five - sixty minute tape-recorded interviews;
2) review the interview transcripts and/or initial analysis for accuracy and to add any additional thoughts on the topic; and
3) return the corrected transcripts to the researcher.

I will label the interview tapes with a made-up name of your choosing and keep them secure for a period of two years beyond the completion of the research, and then I will destroy them. All written transcripts will use the made-up name, as well.

If further question or issues of concern arise while you are participating in this study, you can discuss them with Dr. Ruona or me now or at a later date.

Your assistance is greatly appreciated.

Rachelle Lehner
Department of Adult Education
University of Georgia
Rivers Crossing
Athens, GA 30602
(***) ***-****
rdlehner@uga.edu

Dr. Wendy Ruona
Department of Adult Education
University of Georgia
Rivers Crossing
Athens, GA 30602
(***) ***-****
wruona@uga.edu

My signature below indicates that the researchers have answered all my questions to my satisfaction and that I consent to volunteer for this study. I have been given a copy of this form.

Rachelle Lehner	_____	_____
Name of Researcher	*Signature*	*Date*
_____	_____	_____
Name of Participant	**Signature**	**Date**

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to Chris A. Joseph, Ph.D. Human Subjects Office, University of Georgia, 612 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX D

PARTICIPANT VOLUNTEER DATA COLLECTION FORM

	Name	Phone	Dept	M/F	Shift	Title	Years of service
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
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19							
20							

APPENDIX E

INTERVIEW PROTOCOL—SENIOR LEADERS

The research question that guides this study is:

How do employees' perceptions compare to co-owners' and senior leaders' intent?

This question will be informed by exploring the following areas:

a. According to co-owners and senior leaders, what key changes have been implemented since May 2003?
b. According to hourly employees, what key changes have been implemented since May 2003?
c. According to the co-owners and senior leaders, what was the intention of each of the changes identified?
d. How do implemented changes compare to the intentions of co-owners and senior leaders?
e. For each of the key changes identified by the senior leaders, what was the employees' perception of the leaders' intent for initiating the change?

Definition: Key Change - This term is used to refer to the most significant changes leading to the end result. In the case of this study, key changes are identified by senior leadership.

What would you say were the key planned, strategic changes made in this organization since May 2003? (i.e., not those that were forced as a result of material shortages)

For each change identified:

1. What were the indicators that this change was needed?

2. What led you to believe that _____ was the right approach?

3. Describe the individuals involved in the decision making process, and what was their role and level of involvement?

4. What is the status of this change? (Is the change process complete, etc.).
    a. Is there any documentation that would help me understand this change?

5. What do you believe is/was the desired outcome?

6. Who in the organization is impacted by this change? In what ways? (Probe for hourly employees if not mentioned, for sake of comparison in analysis).

7. Do you believe the change has been effective? Why or why not?

APPENDIX F

INTERVIEW PROTOCOL—EMPLOYEES

The research question that guides this study is:

How do employees' perceptions compare to co-owners' and senior leaders' intent?

This question will be informed by exploring the following areas:

a. According to co-owners and senior leaders, what key changes have been implemented since May 2003?
b. According to hourly employees, what key changes have been implemented since May 2003?
c. According to the co-owners and senior leaders, what was the intention of each of the changes identified?
d. How do implemented changes compare to the intentions of co-owners and senior leaders?
e. For each of the key changes identified by the senior leaders, what was the employees' perception of the leaders' intent for initiating the change?

Definition: Key Change - This term is used to refer to the most significant changes leading to the end result. In the case of this study, key changes are identified by senior leadership.

1. Tell me some of the planned changes that you have noticed here at Presto since May 2003.

2. These are some of the other planned, strategic changes that I have been told about, in other interviews. *Note to researcher— If they don't identify the ones identified these, bring to their attention:*
   1)
   2)
   3)
   4)

For each of the changes:

a. What specifically has changed?

   i. Do you believe the change worked?
   ii. Why or why not?

b. Why do you think the company implemented this change?

   i. How do you know?

c. What do you think was supposed to be different as a result of this change?

d. Has this change affected your day-to-day job? If so, in what way?

APPENDIX G

STATEMENT OF SUBJECTIVITY

There is often an implied meaning in our actions. Do others interpret our actions the way in which we intend? This has been an interest of mine for quite a while. While I worked at a mid-size rural hospital where patient satisfaction was highly valued, administrators were surprised to receive average scores on one particular question on the patient satisfaction survey: “Staff were concerned for my privacy.” How could patients only rate them as average in this category? Staff routinely closed curtains and doors to give patients privacy. A closer examination revealed that patients, who sometimes disliked being closed in, did not interpret the actions of the staff the way staff intended. While it was the staff’s intent to give the patient privacy by closing doors, patients often felt ignored or closed in by the action. When they filled out the patient satisfaction survey and came to the question about “staff concern for my privacy” they did not associate the action of closing doors/curtains with concern for privacy. Once staff began telling patients why they were closing the door/curtain, not only did this reassure the patient that they weren’t being closed off, in an out-of-sight, out-of-mind way, but that staff were generally concerned for their privacy. When these patients completed the patient satisfaction survey and came to the question about staff concern for privacy, they could confidently answer they strongly agree. While attention was focused on staff stating their intentions, the scores on the patient satisfaction survey increased. As the organization shifted its emphasis to other things, the scores returned to the previous levels.

This phenomenon can occur anytime two or more people are in a social setting and it has to do with the experiences they bring to the table (their mental models). In the example above, the intent was there on the part of the employee, but the patient did not have the experience (or

was too sick to think clearly) to interpret the behavior in the way it was intended. Escalate this to a boardroom where multi-million dollar deals are at stake…or an emergency situation where lives are at stake…or the cockpit of an airplane…. The implications for understanding why it is that people can observe the same behavior, yet have different understandings of what the behavior means and what to do about it are limitless.

I became interested in this research site due to my familiarity with the new owners. I had met the owners, who were change consultants and was intrigued that they would purchase an organization that was failing financially. Through conversations, I learned they had been consulting with the organization for a number of years and that they had faith in the employees. They believed the management had not carried out their recommendations and that the employees were like "caged tigers" just waiting for appropriate leadership and guidance. Upon learning of the owners' desire to change the culture of the organization, I asked if I could conduct some research with the organization. Over the next two years I conducted several studies on the culture change, including a culture typology inventory and a pilot interview study, culminating with the research contained in this document.

Looking at the demographics of the selected research site, as a white, educated woman, I am in the minority in many ways. Women, particularly white women are in the minority in this facility. Of 485 employees, there are 155 women and only 32 white women. The fact that one of the owners is a white, educated woman who appears to have good rapport with the hourly employees will work in my favor as I conduct my interviews. In my pilot study, I found that employees seemed to respect and appreciate her. This may ease my path in building rapport with the predominantly male population (330 of 485 total employees).

Another potential obstacle is background. The hourly employees I will interview are blue-collar, working class, with mostly small town, rural backgrounds. Many of them have lived in the area and have worked for this facility for many years. They have a true sense of roots, both in their hometown and within the company, which has allowed them to continue working at this facility even when they would not recommend it to others. My background is very different than this. I was raised in a white-collar, middle class household. Growing up, I moved around every couple of years due to my father's job. In his field, retail sales management, relocating was part of the process of continually improving your status and future prospects, so we moved—a lot. As a result, I have not experienced the sense of hometown pride and company loyalty that many of these employees feel.

Additionally, I was privileged in that I was able to succeed in school and grew up knowing a college education was in my future. My parents had high expectations for what I would achieve in life and this transferred to my own expectations and ambitions as I got older. The primary role this information has in regard to my study is that I find that I need to be careful in how I ask questions and craft written material for my participants. I need to carefully gauge the language I choose so that it is understandable, but not overly simplistic, so that I am not talking above or beneath the participants' comprehension. The reverse is also true. Since I have no previous exposure to factory settings, I sometimes have a difficult time understanding what employees' are trying to tell me. I find myself having to ask clarifying questions, both of specific words and work processes.

As for my beliefs about issues related to this study, I truly believe our mental models impact how we respond to our world. I see it in action all around me. For example, on a visit home my 97 year old great uncle found himself in a quandary. Unbeknownst to him (or anyone

else at the time) differing mental models was the cause of his dilemma. Getting up from the table, he asked if anyone else wanted a glass of water. My father replied affirmatively, so my uncle took the two glasses over to other side of the kitchen and just stood there. After a minute or so passed, I inquired if everything was all right. After a hesitation, the story came out. He did not know whether to get water from the sink or from the refrigerator and was really contemplating hard what to do. Further probing revealed mental models at work. My uncle was a doctor and is very germ conscious. When he moved in with my parents, he noticed that my father drank water from the refrigerator door, so he followed suit. Shortly thereafter, he noticed my father stopped drinking the water from the refrigerator and began drinking bottled water. In his mind the reason for my father's change of behavior was because he (my uncle) started using the refrigerator and thereby added germs to the water lever. So now, here he was, getting water for my father and he did not know how to proceed. My father laughed at this revelation. The reason he had been drinking bottled water had nothing to do with germs. There was a large supply of bottled water left over from my brother's wedding, so he was drinking it. This is just an example of the effect unexamined mental models can have on social interactions because at that moment I realized that my uncle and my father had each been operating under their own sense of reality which did not always align. The fact that it is not something that is readily recognized or discussed leads to stress and frustration. This experience just fed my curiosity about surfacing mental models in the work place and all the potential problems that could be solved or avoided.

As far as my beliefs about change, I believe that if someone is going to be successful in their attempts at change, their mental models must change (i.e., they must learn a new way of seeing the situation). If there is not a shift in a person's mental models, I do not believe a change

can be sustained over the long haul. This relates to organizations in that I believe that organizations learn when individuals, collectively, learn.